CIT653: Introduction to the Internet

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CONTENTS

CONTENTS

COURSE GUIDE

Introduction

Introduction to Internet is a 100 level Post-Graduate Diploma in Information Technololgy. This course introduces you to the most important new technology of recent history i.e. the Internet.

This course consists of 30 units, which not only explains how to participate in this internet world but also enables you to develop the skills necessary to make your use of internet effective and efficient. At the end of this course, you will be able to use, the components of the internet and discover further information through the Internet to help you develop your skills.

The course is practical oriented and requires the use of the Internet, so you will need a computer and have access to the internet. There are no compulsory pre-requisites to it, although you are expected to have a basic knowledge of operating a computer and access to the Internet.

This Course Guide is the starting point for this course. It tells you briefly what the course is about, what course materials you will be using and how you can work your way through these materials. It also gives you some guidance on your tutor-marked assignments as well as describes what you need to do in order to pass this course.

What You Will Learn in this Course

The overall aim of introduction to internet is to show you how to participate in the Internet world. In the course of your studying, you will learn about the various components of the Internet and how to use them. Two most commonly used browsers, the Internet Explorer and Netscape Navigator will be taught, how to develop and publish your own web page using two different programmes i.e. HTML and Microsoft Front page will be explained. You will also be taught how to effectively search the Internet.

Using the Internet involves a large amount of file transfer. The speed at which you download and send information is highly dependent on the data transmission system of your Internet Service Provider (ISP), hence we will be discussing the various transmission systems.

Course Aims

The aim of this course is to give you an understanding of the Internet, its use and application. This will be achieved by aiming to:

- Introduce you to what the internet is and what it consists oE
- Explain to you the basic tools and technology underlying the internet;
- Teach you how to use the Internet for information collection, distribution and retrieval;
- Enable you understand the structure and content of the Internet;
- Teach you how to use your browser and Outlook Express to manage your files on the Internet;
- Enable you understand the various data transmission Systems;
- Teach you how to use HTML and Microsoft Front Page to design and publish your web page;
- Explain to you how virus work and how to protect your computer;
- Explain the Internet protocols.

Course Objectives

To achieve the aims set out above, the course sets overall objectives. In addition, each unit also has specific objectives. The unit objectives are always included at the beginning of a unit. You may want to refer to them during the study to check on your progress.

Below are the wider objectives of the course as a whole. On successful completion of this course, you should be able to:

- Explain the main components of the Internet
- Effectively use Internet Explorer and Netscape browser.
- Read, organise and sort your mails using Outlook Express
- Incorporate an image and attach a file to an e-mail
- Control the downloading of files
- Access your e-mail from other systems
- Design and publish your web page
- Locate information on the WWW
- Choose an ISP that will provide you the best services
- Identify the danger of virus and how to prevent them
- Explain the Internet protocols

Working through this Course

To complete this course, you are required to read the study units, and other related materials you find on the Internet. You will also need to undertake practical exercises for which you need access to a computer running Windows 98, 2000 or XP. Each unit contains self-assessment exercises, and at a point in the course, you are required to submit assignments for assessment purposes. At the end of this course is a final examination. The course should take you about 15 weeks in total to complete. Below, you will find listed all the components of the course, what you have to do and how you should allocate your time to each unit in order to complete the course successfully on time.

Course Materials

Major components of the course are:

1. Course Guide
2. Study Units
3. Assignment File

This course material assumes that you have access to a suitable computer system, some experience with using windows operating systems and access to the Internet.

Study Units

There are thirty study units in this course, as follows:

Unit 1: Network and the Internet
Unit 2: History and Development of the Internet
Unit 3: The World Wide Web (WWW)
Unit 4: Internet E-mail
Unit 5: Newsgroups
Unit 6: Internet Explorer — Window and Buttons
Unit 7: Internet Explorer — Viewing Web Page
Unit 8: Internet Explorer — Management of Favorites and History
Unit 9: Internet Explorer — Saving and Downloading Files from the Web
Unit 10: Internet Explorer — Security
Unit II: Netscape Browser — Introduction
Unit 12: Netscape Browser — Bookmark, History and Web Browsing

Unit 13: Outlook Express — Toolbars and Composing Messages
Unit 14: Outlook Express — Sending, Queuing Messages and Attachment
Unit 15: Outlook Express — Using the Address Book
Unit 16: Outlook Express — Managing E-Mail Accounts
Unit 17: FrontPage — Creating, Importing Web Page and Image Formatting
Unit 18: FrontPage — Image Fromatting
Unit 19: FrontPage — Tables
Unit 20: FrontPage — Theme, Marquee and Dynamic Html
Unit 21: FrontPage — Adding Date and Time, Spell Check and Web Publishing
Unit 22: Html — File Format and Structure
Unit 23: Html — Tags
Unit 24: Html — Text Formatting Properties
Unit 25: Html — Creating Links to Other Pages
Unit 26: Html — Manipulating Images
Unit 27: Effective Internet Searching Techniques: Search Tools
Unit 28: Effective Internet Searching Techniques: Search Feature
Unit 29: Data Transmission Systems, ISP and Virus
Unit 30: Protocols

The first five units concentrate on basic theory of the internet and its components. The next seven units address the two most popular and widely used browsers. The next unit discusses an e-mail software while the next units treat web page design and publishing. Effective Internet search was treated in the two units and finally, the last two units treat the various data transmission and Internet Protocol.

Each study unit includes specific objectives, references for further reading and summaries of key issues and ideas. The units direct you to work on exercises related to the required readings and to undertake practical computer exercises where appropriate. Each unit contains a number of self-tests. In general, these self-tests question you on the material you have just covered or require you to apply it in some way and thereby help you to gauge your progress and to reinforce your understanding of the material. Together with tutor-marked assignments, these exercises will assist you in achieving the stated learning objectives of the individual units and of the course.

Textbooks

There are no compulsory textbooks for this course.

Computer Software

Though you will be expected to undertake a substantial number of practical exercises, no specific software is compulsory but access to the Internet is compulsory.

Assignment File

The Assignment File will be made available to you in due course. In this file, you will find all the details of the work you must submit to your tutor for marking. The marks you obtain for these assignments will count towards the final mark you obtain for this course.

Assessment

There are two aspects to the assessment of this course. First is the tutor-marked assignment: second, is a written examination.

Tutor-Marked Assignments (TMAs)

Each unit has a TMA. You are expected to do four assignments Each assignment counts 10% towards your total course mark.

Assignment questions for the units in this course are contained in the Assignment File. You will be able to complete your assignments from the information and materials contained in your reading and study units and the Internet.

When you complete each assignment, send it, together with a TMA form, to your tutor. Make sure that each assignment reaches your tutor on or before the deadline given.

Final Examination and Grading

The final examinatioin for introduction to Internet will be three hours duration and have a value of 60% of the total course grade. The examination will consist of questions which reflect the type of self-testing, practice exercises and tutor-marked problems you have previously encountered. All areas of the course will be assessed.

You might find it useful to review your self-tests, tutor-marked assignments and comments on them before the examination.

Course Marking Scheme

The following table lays out how the actual course marking is broken down.

Assessment	Marks
Assignments 1 -4	Four assignments, 10 marks each = 40% of the course marks
Final examination	60% of the overall course marks
Total	100% of course marks

How To Get The Most From This Course

In distance learning, the study units replace the university lecturer. This is one of the great advantages of distance learning; you can read and work through specific design study materials at your own pace, and at a time and place that suit you best. Think of it as reading the lecture instead of listening to a lecturer. In the same way that a lecturer might give you an in-class exercise, your study units provide exercises for you to do at appropriate points.

Each of the study units follows a common format. The first item is an introduction to the subject matter of the unit. Next is a set of learning objectives. These objectives let you know what you should be able to do by the time you have completed the unit. You should use these objectives to guide your study. When you have finished the unit, you must go back and check whether you have achieved the objectives. If you make a habit of doing this, you will significantly improve your chances of passing this course.

The main body of the unit guides you through the required reading. Some units require you to undertake practical work on a computer. You will be directed when you need to use a computer and guided through the tasks you must do.

Self-tests are interspersed through the units, and answers are given at the end of units. Working through these tests will help you to achieve the objectives of the unit and prepare you for the assignments and examination. You should do each self-test as you come to it in the study unit. There will also be numerous examples given in the study units.

Tutors and Tutorials

There are 30 hours of tutorials (ten 2 hour sessions and ten 1 hour practical sessions) provided in support of this course. You will be notified of the dates, times and location of these tutorials, together with the name and phone number of your tutor, as soon as you are allocated a tutorial group.

Your tutor will mark and comment on your assignments, keep a close watch on your progress and on any difficulties you might encounter and provide assistance to you during the course. You must pass your tutor-marked assignments to your tutor well before the due date. They will be marked by your tutor and returned to you as soon as possible.

Do not hesitate to contact your tutor by telephone, e-mail, or discussion board if you need help. The following might be circumstances in which you would find help necessary. Contact your tutor if;

- You do not understand any part of the study units
- You have difficulty with the self-tests or exercises
- You have a question or problem with an assignment, with your tutor's comments on an assignment or with the grading of an assignment.

You should try your best to attend the tutorials. This is the only chance to have face to face contact with your tutor and to ask questions which are answered instantly. You can raise any problem encountered in the course of your study. To gain the maximum benefit from course tutorial, prepare question list before attending them. You will learn a lot from participating in discussions actively.

Summary

This course will introduce you to the Internet and how to participate in the Internet world. Upon completing this course, you will be equipped with basic knowledge of the Internet. You will be able to answer these questions.

- What are the main components of the Internet?
- How can we use Internet Explorer and Netscape browser to browse the Internet?
- How do you use Outlook Express to read, organise and sort your mail?
- How can we incorporate an image and attach a file on an e-mail?
- How can we download files from the Internet?
- How can you access your e-mail from other systems?
- How can you design and publish your web page?
- How can we locate information on the WWW?
- How can we prevent virus from our computers?

Of course the list of questions that you can answer is not limited to the above list.

We wish you success with the course and hope that you will find it both interesting and useful and wish you every success in your future.

UNIT 1: Network and the Internet

Table of Contents

1.0 Introduction

The Internet is an informal, global computer network connecting millions of computers across the world. It is a voluntary network in which many computers connected have chosen to do so in order to share and exchange information in a quick and effective manner. The Internet is one of the most unifying powers known to man, and you are now a part of it.

In this unit, you will learn about key concepts of the Internet. In order to have a good understanding of the Internet we will start by considering some network concepts.

2.0 Objectives

At the end of this unit, you should be able to:

- Explain the concept of the Internet;
- Understand the network concepts and it's advantages;
- Identify the various components of the Internet.

3.1 Background to the Internet

The Internet is a computer network made up of thousands of network worldwide. No one knows exactly how many computers are connected to the Internet. It is certain, however, that this number is in the millions and is increasing at a rapid rate.

No one is in charge of the Internet. There are organisations which develop technical aspects of this network and set standards for creating applications on it, but no governing body is in control. Private companies own the Internet backbone, through which Internet traffic flows.

All computers on the Internet communicate with one another using the Transmission Control Protocol/Internet Protocol suite, abbreviated to TCP/IP. Computers on the Internet use client/server architecture. This means that the remote server machine provides files and services to the user's local client machine. Software can be installed on a client's computer to take advantage of the latest access technology.

The Internet consists primarily of a variety of access protocols. Many of these protocols feature programmes that allow users to search for and retrieve material made available by the protocol.

Exercise 1

Who owns the Internet?

3.2 Network Concepts

A network is a set of autonomous computers or end users joined together with a communications link. End users include:

- People
- Devices
- Applications

Networks can be divided into two parts:

- The physical part is concerned both with the electricity which encodes and conveys information and with all the associated wiring, transmission devices and media.
- The logical part is concerned with the rules and formats for the exchange of information. The logical part of voice networking is in understanding telephone numbers and the physical routing options associated with a specific number. The logical part of data networking is in understanding addressing schemes and data delivery.

3.2.1 Advantages of Network

In the first place, data and resources (printers, CD-ROMs etc.) are shared. You can have access to common laser printers, databases and a lot of applications not present on your own computer. You can access many of these things as if they were at your desktop personal computer (PC), even if the physical location is on a different computer system or at a long distance.

The second reason is the use of internet. This is a worldwide computer network where you can find a lot of information and where you can communicate with other people all over the world. For example, you can look for articles in other libraries from your PC, and you can communicate with your fellow friends in other countries.

Communication and sharing data with other people is a lot easier. You can send and receive mail, and you can have access to common workgroup files. This is very handy if you are working on the same document with a team, or if the workgroup has a database some people are working on while at the same time others make queries. This kind of things cannot be done without a network.

Exercise 2

What are the advantages of networking a group of computers?

3.2.2 Hardware Components of a Network

- Desktop PCs — These are the access points of users to the network.
- Physical network— The function is bit transport. The physical network consists of cables and all kinds of devices to send the data to different segments of the network.
- One or more servers — Servers are the central points in a network. They provide the main network services which can be files and applications, or in some cases take over computing work. Servers can be specialized and don't give the same services. There are file servers, print servers, mail servers, WWW servers for Internet services. FTP servers are for file transfer to other systems, and so on. The available applications can differ per server. Sometimes a server is called a host.
- One or more network printers — Here the printing is done in a transparent way, as if the printer were local to the desktop PC.
- Peripheral devices — Examples are: Scanners. CD-ROMs etc.

To communicate with the network, you need special software. It consists of three parts:

- A driver to use the network interface card.
- Protocol stacks to send the data over the cabling system in a form the receiving system can handle. Fileserver and desktop PC must agree on a lot of details on how data are sent, for example, how to set up a dialog, how to address the machine where the data must be delivered, and how to transfer data to the application that needs them. All these things are specified in different protocols. A protocol stack is a set of accompanying protocols which make up a total specification of data transfer. Historically, each system has its own protocols. For example, a NOVELL network uses other protocols than UNIX or Apple networks.
- The network interface. This is needed to coordinate the operating system of the local desktop PC with that of the network server. An example is the Netware shell which caputres the networking commands that DOS does not understand and sends them to a Novell fileserver.

The network interface also provides coordination between the applications and the server.

Exercise 3

What do you understand by protocol?

3.3 Types of Networks

There are three types of networks you will use:

- LANs or Local Area Networks, which in most cases are confined to one building and have a size of I km. Typically, there are a few different systems present. In most cases, the connection between workstation and server is direct.
- MANs or Metropolitan Area Networks which have a size of <1 - 100 km. A MAN connects the networks of different locations.
- WANs or Wide Area Networks is that which can span the whole earth. Internet is the best known example. A WAN may be a complex conglomerate of many different systems which connect many networks connected into a large Internet working. Here too, the connections between desktop PC and server are indirect.

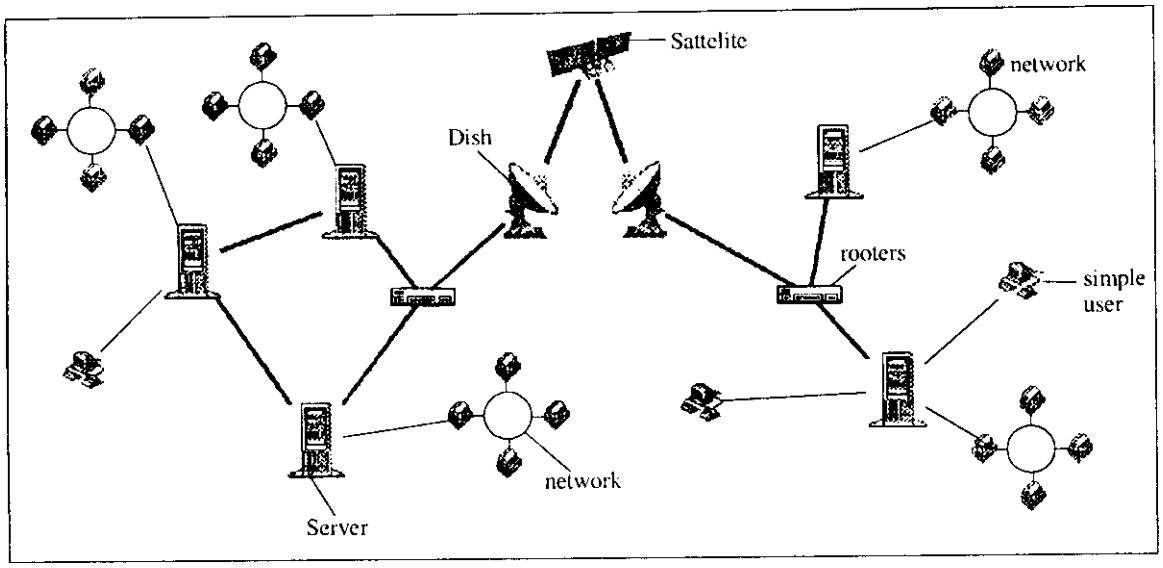

Fig.1.1: *The Physical Components of the Internet*

3.4 Components of the Internet

3.4.1 World Wide Web

The World Wide Web (abbreviated as the Web or WWW) is a system of Internet servers that supports hypertext to access several Internet protocols on a single interface. Almost every protocol type available on the Internet is accessible on the Web. This includes e-mail, FTP, Telnet, and Usenet News. In addition to these, the World Wide Web has its own protocol: HyperText Transfer Protocol (HTTP).

3.4.2 E Mail

Electronic mail, or e-mail, allows computer users locally and worldwide to exchange messages. Each user of e-mail has a mailbox address to which messages are sent. Messages sent through e-mail can arrive within a matter of seconds.

3.4.3 Telnet

Telnet is a programme that allows you to log into computers on the Internet and use online databases, library catalogs, chat services, and more. To Telnet to a computer, you must know its address. This can consist of words (locrs.loc.gov) or numbers (140.147.254.3). Some services require you to connect to a specific port on the remote computer.

Telnet is available on the World Wide Web. Probably the most common Web-based resources available through Telnet are library catalogs. A link to a Telnet resource may look like any other link, but it will launch a Telnet session to make the connection. A Telnet programme must be installed on your local computer and configured to your Web browser in order to work.

3.4.4 File Transfer Protocol (FTP)

This is both a programme and the method used to transfer files between computers. Anonymous FTP is an option that allows users to transfer files from thousands of host computers on the Internet to their personal computer account. FTP sites contain books, articles, software, games, images, sounds, multimedia, course work, data sets, and more.

3.4.5 E Mail Discussion Groups

One of the benefits of the Internet is the opportunity it offers to people worldwide to communicate via e-mail. The Internet is home to a large community of individuals who carry out active discussions organized around topic-oriented forums distributed by e-mail. Software programmes administer these. Probably the most common programme is the listserve.

A great variety of topics are covered by I istserve, many of them academic in nature. When you subscribe to a listserve, messages from other subscribers are automatically sent to your electronic mailbox. You subscribe to a I istserve by sending an e-mail message to a computer programme called a listserver. Listservers are located on computer networks throughout the world. This programme handles subscription information and distributes messages to and from subscribers. You must have an e-mail account to participate in a listserve discussion group.

3.4.6 Usenet News

Usenet News is a global electronic bulletin board system in which millions of computer users exchange information on a vast range of topics. The major difference between Usenet News and e-mail discussion groups is the fact that Usenet messages are stored on central computers, and users must connect to these computers to read or download the messages posted to these groups. This is distinct from e-mail distribution, in which messages arrive in the electronic mailboxes of each list member.

Usenet itself is a set of machines that exchanges messages, or articles, from Usenet discussion forums, called newsgroups. Usenet administrators control their own sites, and decide which (if any) newsgroups to sponsor and which remote newsgroups to allow into the system.

There are thousands of Usenet newsgroups in existence. While many are academic in nature, numerous newsgroups are organized around recreational topics. Much serious computer-related work takes place in Usenet discussions. A small number of e-mail discussion groups also exists as Usenet newsgroups.

The Usenet newsfeed can be read by a variety of newsreader software programmes. For example, the Netscape Communicator suite comes with a newsreader programme called Messenger. Newsreaders are also available as standalone products.

Exercise 4

Distinguish between Usenet News and E-Mail Discussion Groups.

Usenet messages are stored on central computers and users must connect to these computers to read or download the messages posted to these groups while e-mail messages arrive in the electronic mail boxes of each list member.

3.4.7 Chat and Instant Messaging

Chat programmes allow users on the Internet to communicate with each other by typing in real time. They are sometimes included as a feature of a Web site, where users can log into the "chat room" to exchange comments and information about the topics addressed on the site. Chat may take other, more wide-ranging forms. For example, America Online is well known for sponsoring a number of topical chat rooms.

Internet Relay Chat (1RC) is a service through which participants can communicate to each other on hundreds of channels. These channels are usually based on specific topics. While many topics are frivolous, substantive conversations are also taking place. To access 1RC, you must use an IRC software programme.

A variation of chat is the phenomenon of instant messenging. With instant messenging, a user on the Web can contact another user currently logged in and type a conversation. Most famous is America Online's Instant Messenger. ICQ is another commonly-used chat programme.

4.0 Conclusion

The Internet is a voluntary network in which many computers connected have chosen to do so in order to share and exchange information in a quick and effective manner. An Internet user has access to a wide variety of services: electronic mail, file transfer, vast information resources, interest group membership, interactive collaboration, multimedia displays, real-time broadcasting. shopping opportunities, breaking news, and much more.

5.0 Summary

In this unit, we were able to identify that the Internet is a computer network made up of thousands of network worldwide. The networking concept and its advantages were also considered as well as the wide variety of services provided by the Internet.

6.0 References and Suggestion for Further Reading

Open Content License (http:/www.opencontent.org/).
WWW Metrics (http:/www.wwwmetrics.com)
Med iametrix (http://www.inediametrix.com/data/thetop.jsp)

7.0 Tutor-Marked Assignment

Question

Discuss any four services provided by the Internet.

UNIT 2: History and Development of the Internet

Table of Contents

1.0 Introduction

The Internet originated out of a military research project and was initially used by the defence. The university community became involved with the Internet in the 1980s. The Internet is a network of networks (Local Area Networks, Metropolitan Area Networks and Wide Area Networks) across the world.

This unit overviews Internet history and how some of the components were developed. In addition, Internet size and growth statistics are discussed, along with information.

2.0 Objectives

At the end of this unit, you will be able to;

- Discuss the history of the Internet;
- Discuss the major Internet development events;
- State the services developed to make the network more useable.

3.1 Definitions of Terms

In this unit and subsequent units, you will encounter the following terms:

Advance Network and Services, Inc. (ANS) - An organisation made up of Merit. IBM, and MCI which was formed to manage the T-3, National Science Foundation backbone.

Advanced Research Projects Agency (ARPA) - The division of the United State Department of Defence that sponsored the first efforts to develop a computer network.

American Society for Computer Information Interchange (ASCII) -An electronic text format.

Defence Advanced Research Projects Agency (DARPA) - The new name of the Advanced Research Projects Agency implemented in 1973.

E-mail - Electronic mail made possible by the packet-handling protocols which were developed based on TCP/IP. They allow message sending and receipt, binary file attachment to e-mail messages, and mass mailings to lists and listservers.

File Transfer Protocol (FTP) -A specialized Internet tool that either places files on, or retrieves files from a remote computer.

HyperText Markup Language (IITML) - A simple tagging language used to create hypertext links.

HyperText Transfer Protocol (HTTP) - A protocol which provides links between related text information.

Protocol - A set of conventions that determines how data will be formatted and exchanged between different computer programmes and/or computers.

Telnet - A tool used to log on to a remote computer and use its applications.

Transmission Control Protocol/Internet Protocol (TCP/IP) - A system of protocols commonly used for wide area networking, which governs message transmission.

NVide Area Information Server (WATS) - An Internet tool that lets you access a special information server that uses natural language qaueries.

3.1.1 Internet History

The Internet was originally used to share information between researchers, defence contractors, and members of the military. Internet early history covers the years from 1969 to the end of 1992.

3.1.2 Network Development

In 1969, the Advanced Research Projects Agency **(ARPA),** a part of the Department of Defence (DOD), awarded a contract to the firm **of Bolt,** Beranec, and Newman to construct a computer

network. The network was used to link researchers at universities with defence contractors, scientists, and military contacts so that they could share information and resources. This network was called ARPANET. Between 1969 and 1983, minicomputers, mainframes, and supercomputers made up the networks.

At first, the network provided log on to a remote computer from a terminal or a Teletype(r) machine to run programmes. File transfer capabilities, electronic mail, and mailing lists were soon added to keep interested parties informed. These uses later developed into networking protocols.

Exercise 1

Have you used a computer on a network? If you have, what do you think is the major advantage of working on a network over a stand alone computer? If you have, then you would have noted that you can share your harddrive and printer with other people on the network.

3.1.2 Events that Led to the Development of Internet

In 1973, Advanced Research Projects Agency (ARPA) was changed to the Defence Advanced Research Agency (DARPA) and the resulting network was changed to DARPANET. An important task for this newly named agency was to begin a project called "The Intemetting Project," which would start the process of linking different networks together.
The principal goals of The Internetting Project were to:

- Move from Circuit Switching Network (ARPA) to Packet Switching Networks (DARPA)
- Link these packet networks together
- Overcome network specific protocols
- Study ways to pass traffic from one network to another
- Establish internet protocols and standards

Previous networking efforts used circuit switching which required two computers to be continuously connected in order to network. It was like having a railroad track on which only a single train could be used.

The pack switching system allowed the creation of a data highway that could handle large amounts of data including voice, text, video, etc. Each data packet was given the computer equivalent of a map and a time stamp so that it could be sent to the right destination and the reveiwer would know when the message started. At its destination, the message was reassembled from the packet parts so either machine or human could read it.

3.1.3 Networking Protocol Development

A Protocol is a set of conventions that determines how data will be formatted and exchanged between different computer programmes and/or computers.

Network protocols specify how to move messages and how to trap and handle errors. The primary network protocol of the Internet, Transmission Control Protocol/Internet Protocol (TCP/IP) was developed in 1974 by Robert Kahn, a Corporation for National Research Initiatives (CNRI). TCP/IP is a system of Protocols commonly used for wide area networking. Its success contributed to the viability of the Internet.

Using network protocols helps create standards that are not dependent on a particular operating system. These standards, once written, allow manufacturers to develop applications that conform to the standards and allow interoperability between computers.

These application protocols such as HTTP, FTP, and others have worked in conjunction with

TCP/IP, contributing to the growth of the Internet. The advantages of adopting TCP/IP as a networking standard are that from this time forward it would be possible to:

- Add more Gateways
- Connect more Networks
- Allow the Core Networks to Stay Intact

Exercise 2

Why are protocols important?

3.2 Services Development

Once packet-handling protocols were established, services could be developed to make the network more useable. Among these were the File Transfer Protocol (FTP), Telnet, Gopher, Wide Area Information Server (WAIS), and e-mail.

3.2.1 File Transfer Protocol (FT'P)

FTP is the earliest Internet command and the first use of the network. FTP is a specialized Internet service that either places files on, or retrieves files from, a remote computer. It is possible to log-on to a computer without establishing an account and to retrieve information from its public file area. This was one of the reasons for establishing anonymous log-on to these sites. The term anonymous FTP was used to describe these sites.

3.2.2 Telnet

Telnet was another early Internet service. Telnet is used to log on to a remote computer and use its applications. Telnet lets you work on the remote computer as if you had your keyboard and monitor hooked up to that machine. This tool has been a great benefit to the scientific community as it allows researchers using personal computers or dumb terminals to operate supercomputers over the Internet.

3.2.3 Gopher

Gopher is a service developed by the University of Minnesota. It permits you to find data that is archieved on servers called Gopher sites. This search engine does not require you to know where the data is stored or for what specific data you are searching. Using a browser that is menu driven, most people find Gopher friendly and straight forward to use.

3.2.4 WAIS

Wide Area Information Server (WAIS) is an Internet service that lets you access a special information server that uses natural language queries. In this manner you can search a remote database for words and phrases, not just keywords. The results are relevance ranked by percentage match with your search terms. You can actually enter, 'I would like to find Computer hardware.' WAIS will parse the input and find Computer hardware for you.

3.2.5 E.mail

E-mail (spelled e-mail when it doesn't begin a sentence) was and is still a primary justification for having Internet access. Packet-handling protocols were developed based on the TCP/IP that allow message sending and receipt, binary file attachment to e-mail messages, and mass mailings to lists and list servers. These uses will be discussed in the Internet components section later in this course.

Exercise 3

Which of these Internet services have you used before?

The most common service is the e-mail, which I guess you must have used. It is important to note that whatever service you have used - e-mail, WAIS, Telnet or FTP - they are all part of the www.

4.0 Conclusion

In 1985, the National Science Foundation chose to link its six supercomputer centers together. These centers, located all over the United States, became NSFNET, and a part of the larger scientific community. NSFNET operated under TCP/IP. In 1986, NSFNET expanded into a backbone that connected university and research networks to NSF supercomputers.

- 1985- NSFNET backbone consists of six 56-kilobits-per-second (Kbps) data circuits to connect the supercomputers.
- 1988 - NSFNET consisted of 13 nodes (1.5 Megabits-per-second).
- 1990 - NSFNET called upon three commercial companies to manage their backbone. These companies, Merit, IBM, and MCI, formed an entity known as Advance Network and Services, Inc. (ANS). ANS was allowed to maintain two networks. One was the continuation of the NSF research activities. The other supported commercial use of the Internet using the NSF backbone.Today ANS is not the only backbone in the United States for commercial traffic. NSFNET has become our national research and education network with interlinks to other government, private, science, and education networks.

5.0 Summary

In this unit, we were able to see how technological developments in the late 1960s and early 1970s enabled researchers and government officials to create the Internet. Later, commercial service was added. We were able to identify the timeline of the development of network computers into an Internet. We also identified what led to the formation of the internet and discussed the services that were developed with the Internet.

6.0 References and Suggestion for Further Reading

Ascolta Training Company, L LC, (1997) Internet/Intranet Fundamentals Revision 2.0 1-1.
http://www.lib.berkely.ed/Teach ingLib/Guides/Internet/Whatis.html
Microsoft http://www.microsoft.com/.
http://monroe.k[l]2.1a.us/mcs/district/cannon.html

7.0 Tutor-Marked Assignment

Question

What needs led to the formation of the Internet? How did the Internet meet these needs?

UNIT 3: **The World Wide Web**

Table of Contents

1.0 Introduction

The World Wide Web (WWW) is an invisible information network within the larger Internet network. It is a dynamic collection of millions of documents that contain text, graphics, sounds, and movies. The World Wide Web is often abbreviated as the Web or WWW. It is not a network of computers, but a network of information linked together in the style of a web.

2.0 Objectives

It is expected that by the end of this unit you will be able to:

- Identify the goals of the World Wide Web;
- Explain the importance of FlyperText;
- Identify the factors that led to the fast growth of the World Wide Web;
- State the historical development of the World Wide Web.

3.1 Background to World Wide Web (WWW)

The goals of the developers of the Web were to create a seamless network from which any data from any site could be accessed in a consistent fashion; to design a flexible system that allowed for the use of existing data on the Internet; and to make the system so easy to use, that an average person, not just a computer expert, could use it.

With these goals in mind, they created the HyperText Markup Language (HTML) as the coding for Web documents. HyperText and hypermedia documents contain links to other documents or sections within the same document. Links allow you to jump from one section of a document to another or to a different Web site that contains related information. The Web is the ultimate in 'point and click' access.

In order to access the information on the Web, a browser is needed. A browser is a software programme that can access and view HTML documents. It is also referred to as a WWW client.

The World Wide Web (WWW) enables users to view a wide variety of information, including magazines, archives, public and college library resources, and current world and business news. The connections to different sources of computers, or servers, on the network are made automatically without being seen by the users. The WWW was developed at the European Particle Physics Lab (CERN) in Switzerland by Tim Berners-Lee in 1989 to allow information-sharing among internationally dispersed teams of high-energy physics researcher. It's development spread beyond CERN, with a rapid number of developers and users increasing. In addition to hypertext, the web began to incorporate graphics, video, and sound. Today, the use of the web has reached global proportions.

The attractive thing about the Web is the ability of a user to access several other Internet services (E-mail. FTP, Telnet, and Usenet News) through their protocol (SMTP, Telnet Protocol, FTP, and NNTP) on a single interface. This is possible through the use of the web protocol: HyperText Transfer Protocol (HTTP). This creates a convenient and user-friendly environment, which makes it unnecessary for one to be conversant in the other protocols within separate, command level environments. The web gathers these protocols into one single system. It is for this reason and the web's ability to work with multimedia and advanced programming languages, which makes it the fastest-growing component of the Internet.

3.2 Events Leading to World Wide Web Development

In March 1989, a meeting was held by a group of European nuclear scientists at the 'Conseil European pour la Recherch Nucleaire (CERN).' The purpose of this meeting was to design an infra-system to

aid the scientific community in research document dissemination. The need for a World-Wide Web (WWW) was proposed by Tim Berners-Lee of CERN in late 1989.

The objectives of World Wide Web development were to:

- Implement a simple browser for the user's workstation;
- Allow the user to add new material; and
- Utilize several different servers of machine stored information at CERN.

3.2.1 VVVVVV HyperText

The operation of the Web relies primarily on hypertext as its means of information retrieval. Hyper Text is a document containing words that connect to other documents. These words are called links and are selectable by the user. A single hypertext document can contain links to many documents. In the context of the Web, words or graphics may serve as links to other documents, images, video, and sounds. Links may or may not follow a logical path, as each connection is programmed by the creator of the source document. Overall, the WWW contains a complex virtual web of connections among a vast number of documents, graphics, videos, and sounds.

Interactive documents were created using a simple tagging language called HyperText Markup Language (HTML). This language was in an electronic text format set up by the American Society for Computer Information Interchange (ASCII) and could be generated with any text editor or word processor.

The nature of the World Wide Web from its inception provided a way to interconnect computers running different operating systems. The transfer of HTML documents from machine to machine was established by using the HyperText Transfer Protocol (HTTP). Documents could display information created in a variety of media formats, including multimedia objects.

Because of the intuitive nature of HyperText, many inexperienced computer users were able to connect to the network. Computers could now be used by non-technical users for information exchange. HyperText provides a single user interface to:

- reports
- notes
- data bases
- computer documentation
- on-line help

Exercise 2

Clearly state the importance of the HyperText to the World Wide Web.

As listed above, the HyperText provides a single user interface to: reports, notes, database, computer documentation and an on-line help on the www.

CERN's policies toward the World Wide Web encouraged its growth. As soon as the basic outline of the www was completed and tested on the CERN servers, the source code was made public and available. CEFtN encouraged collaboration by academic and commercial parties from the onset of the project, involving millions of people in Web development. WWW users were encouraged to contribute to the expanding database of documents by setting up Web Pages.

3.3 Factors Contributing to the Growth of World Wide Web

Factors contributing to early www growth included:

- Open architecture, de facto open standards and freely published structure and code;
- Minimal system requirements;
- Administrators with limited funds could participate as information providers.

- Interoperability between different computer platforms which include:
  - Object Oriented Interface (001)
  - HyperText linking
  - Established Internet tools in the Imp such as File Transfer Protocol (FTP), Gopher, and Telnet
  - Utilize an interface that would serve both the computer novice and the computer power user
  - Address the needs of information storage and retrieval

The originators of the www wisely incorporated existing Internet formats for FTP, e-mail, and gopher. Gopher in itself was developing additional powerful search engines and strategies.

Exercise 3

What are the factors that led to the general acceptability of the WWW?

The general acceptability of the www is due to the minimal systems requirements, its interoperabi I ity between different platforms and its open architecture.

3.4 Pages on The Web

The World Wide Web consists of files, called pages or Web pages, containing information and links to resources throughout the Internet. Web pages can be created by user activity. For example, if you visit a Web search engine and enter keywords on the topic of your choice, a page will be created containing the results of your search. In fact, an increasing amount of information found on the Web today is served from databases, creating temporary Web pages 'on the fly' in response to user queries. Access to Web pages may be accomplished by:

- Entering an Internet address and retrieving a page directly;
- Browsing through pages and selecting links to move from one page to another;
- Searching through subject directories linked to organized collections of Web pages; and
- Entering a search statement at a search engine to retrieve pages on the topic of your choice.

3.5 Retrieving Documents on The Web: URL

UAL stands for Uniform Resource Locator. The URL specifies the Internet address of a file stored on a host computer connected to the Internet. Every file on the Internet, no matter what its access protocol, has a unique URL. Web software programmes use the UAL to retrieve the file from the host computer and the directory in which it resides. This file is then displayed on the monitor connected to the user's local machine.

URLs are translated into numeric addresses using the Internet Domain Name System (DNS). The numeric address is actually the "real" URL. Since numeric strings are difficult for humans to use, alphaneumeric addresses are employed by end users. Once the translation is made, the Web server can send the requested page to the user's Web browser.

3.5.1 Anatomy of a URL

This is the format of the URL

protocol://host/path/filename

For example, this is a UAL on the home page of Widernet Organisation:

http://www.widernet.org

This URL is typical of addresses hosted in domains in the United States Structure of this URL:

- Protocol: http

- Host computer name: www
- Second-level domain name: widernet
- Top-level domain name: org Note how much information about the content of the file

is present in this well-constructed URL.

Other examples:
telnet://opac.albany.edu the University at Albany library text-based catalog
lip://ftp.uu.net/graphics/picasso a file at an FTP site

3.6 Web Browsers

To access the World Wide Web, you must use a Web browser. A browser is a software programme that allows users to access and navigate the World Wide Web. There are two types of browsers:

I. Graphical: Text, images, audio, and video are retrievable through a graphical software programme such as Netscape Navigator and Internet Explorer. These browsers are available for both Windows-based and Macintosh computers. Navigation is accomplished by pointing and clicking with a mouse on highlighted words and graphics.

You can install a graphical browser such as Netscape Navigator in your Windows-based machine. Navigator is available for downloading on the Netscape Web site: http://home netscape.com/. Microsoft's Internet Explorer is available from the Microsoft Web site: hap:!! www.microsoft.com/. To use these programmes to access the Web, you need a connection to the Internet. This is accomplished through such means as an ethernet connection, a dialup connection known as a SLPP or PPP, or a cable modem.

2. Text: Lynx is a browser that provides access to the Web in text-only mode. Navigation is accomplished by highlighting emphasized words in the screen with the arrow up and down keys, and then pressing the forward arrow (or Enter) key to follow the link.

4.0 Conclusion

The current foundation on which the WWW functions is Hypertext using HTML. This is what provides highlighted links to other documents on the Web and it is this feature which is unique and revolutionary about the Web. With the development of the HTTP, which makes it unnecessary for one to be conversant in other protocols within separate, command level environments, users can access several other Internet Services (E-mail, FTP, Telnet, and Usenet News) through their protocol (SMTP, Telnet Protocol, FTP, and NNTP) on a single interface. Every file on the Internet, no matter what its access protocol, has a unique URL. Web browser uses the URL to retrieve the file from the host computer and the directory in which it resides. The browsers also allowed inline graphics to be interspersed with body text. Now a report could be viewed, downloaded, or printed with its accompanying charts, tables, illustrations and pictures.

5.0 Summary

In this unit, we looked at the WWW which incorporates all of the Internet services through their protocol. When you log on to the Internet using any browser, you are viewing documents on the World Wide Web. The development of the HTTP and the web's ability to work with multimedia and advanced programming languages, makes it the fastest-growing component of the Internet.

6.0 References and Suggestion for Further Reading

Internet Guide
ktp://www.li b.berkely.ed/Teach ngLib/Gu ides/I ifternet/Whatis.html
Microsoft http://monroe.k I 2. la.us/mcs/d istrict/cannon .html

7.0 Tutor-Marked Assignment

Question
What are the factors that lead to the general acceptability of the WWW?

UNIT 4: Internet E-mail

Table of Contents

1.0 Introduction

Electronic mail, or e-mail, is your personal one-to-one communication connection to the world o f the Internet. Most of the millions of people around the world who use the Internet have their own e-mail addresses. The basic concepts behind e-mail parallel those of regular mail, but e-mail has advantages over regular mail. The most obvious is speed. Instead of several days, your message can reach the other side of the world in hours, minutes, or maybe even seconds. E-mail is also convenient. You send your messages when it's convenient for you and your recipients respond at their conveniences.

2.0 Objectives

At the end of this unit you are expected to:

- Have an understanding of e-mail addresses;
- Identify the various e-mail Protocol;
- Explain the advantages of using e-mail;
- Explain the future of Internet e-Mai I;
- Identify the Internet e-mail programmes.

3.1 E-mail Addresses

In order to use e-mail over the Internet effectively, users need a certain amount of knowledge about addressing. All Internet e-mail addresses have a minimum of three parts: a user name (which may or may not be the same as the person's real name); an 'at' sign (i.e., @); and a domain address, (frequently the service provider's name). The domain name is followed by a period dot,' in Internet parlance) and a domain type, which specifies a domain's institution type. Although there has been much talk lately about adding domain types to prevent running out of Web addresses, so far these types generally fall into one of seven categories:

- com--business or commercial
- edu--educational (e.g. a college or university)
- mil--military
- net--network resource
- org--organisation (frequently nonprofit in nature)
- it--international organisations (such as NATO or the United Nations)

If the address ends in one of these types, it generally means the domain is located in the United States. However, since domains do not require a country specification in order to be registered, this is not a hard and fast rule. Usually, countries other than the U.S. tack on a country code to the end of the Internet address. Some of these codes are as fol

- au--Australia
- ca--Canada
- fr--France
- ie--Ireland
- is--Israel
- it--Italy
- nz--New Zealand
- ru--Russia
- uk--England
- us--United States
- za--Zaire

Exercise 1

What is your e-mail address?

3.2 Standards E-mail Protocol

As with every technology, e-mail has its own set of standards to ensure usability. Additionally, the Internet requires standards as well, enabling such capabilities as multimedia file attachments around the world.

3.2.1 Simple Mail Transfer Protocol (SMTP)

First established in 1982, this standard allows for mail messages that contain a single 'human readable' message, with several restrictions: the message must contain only ASCII characters; the message may not contain any line longer than 1,000 characters; and the message must not exceed a certain length.

3.2.2 Multipurpose Internet Mail Extension (MIME)

This standard for attaching non-text files to standard Internet mail messages extends the SMTP format by defining new formats, such as those for data other than text. Developed by the Internet Engineering Task Force with the purpose of handling new media types, it so far supports seven of them: plain text of any length (without word processor formatting), audio, video, still images, pointers to messages located elsewhere, multipart messages (even if each part consists of a different type), and application-specific data.

Exercise 2

State the major differences between Simple Mail Transfer Protocol and Multipurpose Internet Mail Extension.

In SMTP your message must not exceed a certain length and you cannot add attacthment to the mail unlike the MIME which you can attach not only text file but graphic images to your e-mail.

3.2.3 Post Office Protocol (POP)

Now in its third iteration (POP3), this standard supports downloading mail from any location without having to connect to a fixed server. In other words, it means that the server you connect to holds your mail until you log on and retrieve it. It is the standard supported by most mail clients on the Internet, but it is beginning to be superseded by IMAP.

3.2.4 Internet Mail Access Protocol (IMAP)

A client/server protocol now in its fourth version, IMAP4 takes POP a step further. Instead of requiring users to transfer a complete mail item to a client before beginning the message, IMAP lets users selectively download portions of a message. For example, users can download a text portion but retain the graphic file attachment on the server for later download. Additionally, it lets users pick up messages on a remote server, edit them on- or offline, and otherwise manipulate server-based folders.

Exercise 3

Distinguish between Post Office Protocol and Internet Mail Access Protocol.

In POP the server you connect to holds your mail until you log on and retrieve it while IMAP takes POP a step further by allowing the users selectively download portions of a message without transfering the complete mail item to a client.

3.3 Advantages of Using E-mail

Using Internet e-mail instead of conventional mail, overnight delivery services, the telephone, or a fax can often lead to tremendous cost savings. For example, the cost of sending a 100-page document to any part of the Lagos via e-mail (which, travelling at 28.8k bps, could arrive at its destination in about a minute) costs less than N50.00. Compare this to the cost of using any Courier service, N2000.00 or even regular postage, and the savings are clear. Furthermore, companies can save money by attaching files to e-mail and eliminating the costs of rekeying.

3.4 E-mail Privacy

Perhaps the biggest concern in sending Internet e-mail is the assurance that no one but the intended recipient will read it. To this end, a variety of options exist for ensuring e-mail privacy, comprising encryption algorithms and authentication methods. There are presently five separate encryption protocols, and any and all of them have the potential to become standards as time goes on.

3.4.1 Pretty Good Privacy (PGP)

Originally released as freeware in 1991 by its developer, Philip Zimmermann, this is widely used for mail encryption on the Internet. It cannot, however, encrypt multimedia data, so another version, called PGP/MIME, has recently been developed which will address this shortcoming.

3.4.2 Message Security Protocol (MSP)

This protocol is used in the Defence Message System. It offers a signed receipt capability that proves that a message got to its destination without modification. While its use so far is within the military, such a feature can be just as important in commercial environments.

3.4.3 Privacy Enhanced Mail (PEM)

This standard for secure e-mail outlines necessary security services including encryption, authentication, and certificate-based key management. Additionally, it defines the algorithms to be used. However, unlike MSP. PEM does not provide authentication of the recipient. This standard was never accepted widely and seems to have been replaced by MSP.

3.4.4 MIME Object Security Services (MOSS)

MOSS is actually derived from PEM and adds security services to MIME. It uses two cryptographic tech n iques--d igital signatures and encryption--and provides the capability to authenticate a message's origin, that it has not been altered on its way to its destination, and that only the intended recipients can read it.

Exercise 4

Explain the major difference between Privacy Enhanced Mail (PM E) and MIME Object Security Services.

As discussed earlier on, PEM does not provide authentication of the recipient while MIME provides additional security that authenticates a message's origin and only the intended recipient can read it.

3.4.5 Secure Multipurpose Internet Mail Extensions (S/MIME)

This encryption scheme was developed by a consortium headed by RSA Data Security and supported by Microsoft. It supports encryption of multimedia data types, as well as text, and a strong point is that it guarantees interoperability between any two implementations. Since it is, however, patented

technology, there has been some speculations as to whether it should be considered for approval as a standard. It is already part of both Netscape Navigator and Microsoft Internet Explorer.

3.5 The Future of Internet E-mail

As Internet technologies grow and mature, the Internet will become more important in our lives in a variety of ways. One of the ways will continue to be communications, and the primary method will continue to be e-mail, with better methods of security evolved, along with the ability to download e-mail from virtually any Internet-connected computer to meet the needs of a workforce that grows ever more mobile.

Along with the current explosion of e-mail comes another explosion: many of us have multiple e-mail addresses. Services now exist that will, for a fee, forward all of a user's e-mail to one 'universal' address. Soon, however, such features will be part of e-mail services in general, and users will not have to pay additional charges for these capabilities.

3.6 Internet E-Mail Programmes

Although conventional LAN e-mail packages support Internet use through gateways, some programmes are designed to directly support Internet protocols for sending and receiving e-mail through the Net. While this is not a comprehensive listing, it provides basic information about the most popular packages.

Programme	Web Address	Platform
Claris E-mailer	http://www.claris.com	Macintosh
Eudora Pro	http://www.eudora.com	Windows, Macintosh
Juno	http://www.juno.com	Windows
Outlook Express	http:www.microsoft.com	Windows
Messenger	http://www.netscape.com	Windows, Macintosh
Pegasus	http://www.pegasus.usa.com	Windows, OS/2
Pronto97	http://www.commtouch.com	Windows
QuickMail	http://www.cesoft.com	Windows, Macintosh

Web-Based Free E-Mail

HotMail	Hot mail, Inc. http://www.hotmail.com
MailCity	Who Where? Inc. http://mailcity.com
MailExcite	Excite, Inc. http://mail.excite.com
NetAddress	USA.NET, Inc. http:netaddress.usa.net
RocketMail Four	II Corp. http://www.rocketmail.com

4.0 Conclusion

With Internet e-mail, it is possible to send text messages across the street or across the world; to attach files to messages that can contain formatted text, pictures, graphics, sound, or video; to attach live hypertext links leading to Web sites, for example; to automatically send a message to a large mailing list with the clicking of a button; and to subscribe to mailing lists that will automatically send items of interest on a regular basis.

5.0 Summary

In this unit, we considered the parts of all Internet e-mail addresses which have a minimum of three parts: a user name; an 'at' sign i.e. @; and a domain address. A variety of options existing for ensuring e-mail privacy, comprising encryption algorithms and authentication methods were considerei and finally the future of e-mail was discussed.

6.0 References and Suggestion for Further Reading

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7.0 Tutor-Marked Assignment

Question
Discuss any four security protocols that ensure the privacy of e-mails.

UNIT 5: Newsgroups

Table of Contents

1.0 Introduction

Newsgroups are electronic bulletin boards with collections of messages which have a related theme. You can read messages posted by members on a large variety of topics, or you can post messages of your own. Newsgroup names start with one of a series of broad topic names. For example, newsgroups beginning with 'comp' are about particular computer-related topics. Other examples include: 'biz' for business, 'raise' for miscellaneous, 're& for games and recreation, `sci' for science, 'so& for social groups, 'ale for controversial or unusual topics, and many others that are too numerous to list To view a newsgroup, you must have a news viewer software programme installed on your computer.

2.0 Objectives

At the end of this unit you will be able to:

- Subscribe to a newsgroup;
- Cancel your subscription to a newsgroup;
- Send message to multiple newsgroups;
- Block messages from a sender or Domain.

3.1 Background to Newsgroups

You can find newsgroups on practically any subject. Although some newsgroups are moderated, most are not. Moderated newsgroups are "owned" by someone who reviews the postings, can answer questions, delete inappropriate messages, and so forth. Anyone can post messages to a newsgroup. Newsgroups do not require any kind of membership joining fees.

To use newsgroups in Microsoft (R) Outlook Express (R), your Internet Service Provider (ISP) must offer links to one or more news servers. After you set up an account for each server you want in Outlook Express, you can read and post messages in any of the newsgroups stored on that news server.

When you find a newsgroup you like, you can 'subscribe' to it so that it is displayed in your Outlook Express Folders list. Subscribing provides easy access to your favourite newsgroups, eliminating the need to scroll through the long list on the server each time you want to visit a favourite newsgroup.

Newsgroups can contain thousands of messages, which can be time-consuming to sort through. Outlook Express has a variety of features that make it easier to find the information you want in newsgroups.

You will need the following information from your Internet service provider (ISP) or local area network (LAN) administrator:

- For e-mail accounts, you'll need to know the type of e-mail server you use (POP3, IMAP, or HTTP), your account name and password, the name of the incoming e-mail server and, for POP3 and IMAP. the name of an outgoing e-mail server.
- For a newsgroup account, you'll need to know the name of the news server you want to connect to and, if required, your account name and password.

Exercise I

Explain why you will need to subscribe for newsgroup.

If you do not subscribe to a newsgroup you cannot have access to it.

3.2 Add an E-mail or Newsgroup Account

- On the **Tools menu,** click **Accounts**
- **In the Internet Accounts** dialog box, click **Add**

- Select either **Mail** or News to open the Internet Connection Wizard, and then follow the instructions

to establish a connection with an e-mail or news server.

Each user can create multiple e-mail or newsgroup accounts by repeating the procedure above for each account.

Exercise 2

List two major information you need before you can subscribe to a newsgroup and of what importance are the information?

The information you will need includes: Name of the news server you want to connect to and also the type of e-mail. server you are using. This is to establish a communication link between your e-mail account and the newsgroup server you are subscribing to.

3.3 Find Newsgroups of Interest

To find newsgroups of interest to you, you can search through a news server to find specific words in newsgroup names.

- In the Folders list, click a server name, and then click **Newsgroups**
- **In the Display newsgroups which contain** box, type the words you want to search for.

If you cannot find a specific newsgroup in the list, your news server might not carry that newsgroup.

3.4 To Subscribe to a Newsgroup

The benefit of subscribing is that the newsgroup is included in your Folders list for easy access. You can subscribe to a newsgroup in any of the following ways:

- When you add a news server, Outlook Express prompts you to subscribe to newsgroups on that server.
- Click a news server name in your Folders list, and then click **Newsgroups.** Select the newsgroup that you want to subscribe to and then click Subscribe. You can also unsubscribe here.
- When you double-click a name in the Newsgroup list, a subscription is automatically generated.

Exercise 3

Do you need an e-mail account to subscribe to a newsgroup?

Sure that is the only way they can post News to you.

3.4.1 Cancel Your Subscription to a Newsgroup

- When you view a newsgroup without subscribing to it, its name appears in your Folders list. Right-click the name and then click **Subscribe.**
- To view a newsgroup you subscribe to, click its name in the Folders list.
- To cancel your subscription to a newsgroup, click **Newsgroups,** click the **Subscribed** tab, select the group you want, and then click **Unsubscribe.** You can also right-click the newsgroup in your Folders list and then click **Unsubscribe.**

3.5 Read Newsgroup Messages

Go to a newsgroup and look through the message list for a message you want to read (you may need to scroll).

- To view the message in the preview pane, click the message once.
- To view the message in a separate window, double-click the message in the message list.

You may want to change the preview pane, by going to the View menu, click **Layout, and then** in the Preview pane area, select the options you want.

3.6 Post a Message to a Newsgroup

- In the Folders list, select the newsgroup you want to post a message to.
- On the toolbar, click New. **Post.**
- Type the Subject of your message. Outlook Express cannot post a message that does not contain a subject.
- Compose your message, and then click **Send.**

3.6.1 **Sending message to Multiple Newsgroups on the same News Server**

- In the New Message dialog box, click the **icon next to Newsgroups.**
- In the Pick Newsgroups dialog box, click **one or more newsgroups from the list** (hold down the CTRL key to select multiple newsgroups), and then click **Add.**
- You can choose from all newsgroups or only those you subscribe to by clicking **Show Only Subscribed Newsgroups.**

You can send a given message to more than one newsgroup at a time only if all the newsgroups are on the same news server. To post a message to newsgroups on other news servers, create a separate message for each news server.

You can cancel a message you have posted by selecting the message, clicking the Message menu, and then selecting **Cancel Message.** Cancelling a message does not remove it from a newsgroup user's computer if the user downloaded the message before it was cancelled. You can cancel only messages you have posted; you cannot cancel another person's message.

Exercise 4

Is it possible to send a message to multiple newsgroups on different serves at the same time? Why.

As earlier on discussed above, it is not possible to send a message to multiple newsgroups on different servers at the same time because they have different addresses.

3.7 Block Messages from a Sender or Domain

You can block messages from a particular sender or domain. The domain is the name following the @ symbol inane-mail address.

When you block a sender or domain, no e-mail or news message from that sender or domain will arrive in your Inbox or in the news messages you read. E-mail from blocked senders goes directly into your Delete folder. Newsgroup messages from blocked senders are not displayed.

- From your e-mail Inbox or the list of messages in a newsgroup, select a message from a sender you want to block.
- On the Message menu, click Block Sender.

Blocking a sender applies to standard POP e-mail only. It does not apply to HTTP e-mail or IMAP messages.

To remove a sender or domain from the blocked senders list, on the Tools menu, point to **Message Rules,** and then click **Blocked Senders List.** Select the sender or domain, and then click **Remove.**

Exercise 5

What is the implication of removing a domain from your newsgroup?

If you remove a domain from your newsgroup, you will not be receiving any message from the newsgroup server.

3.8 Lists and Listservs

An Internet List is an interest group in which any member may send a message to all other members of the list. List groups exist for a very large number of all types of topics. Messages exchanged can be discussion letters, professional papers, resource listings, conference and job announcements, technical queries and advice, etc. Joining a list is one way to keep up with happenings in a specific field of interest to you. It also gives you a network of other individuals with the same interest.

A listserv is an automated mailing list distribution system. It is a software that allows members of the list to communicate on the Internet.

Exercise 6

State one of the importance ofjoining a list group.

Joining a list group is one way to keep up with happenings in a specific field of interest to you.

4.0 Conclusion

A newsgroup is a collection of messages posted by individuals to a news server (a computer that can host thousands of newsgroups). When you find a newsgroup you like, you can 'subscribe' to it without paying any amount. All you need do is provide information on your e-mail account and also you'll need to know the name of the news server you are subscribing to. Listserv refers to both the software and the computer which runs the software, which is essentially an automated e-mail programme.

5.0 Summary

In this unit we looked at how you locate a newsgroup of your interest and subscribe and unsubscribe for newsgroup. We also considered how you can send any given message to more than one newsgroup at a time as well as block messages from a particular sender or domain.

6.0 References and Suggestion for Further Reading

Open Content License (http://www.opencontentorg/),
Widernet Project, http//www.widernetorg
Microsoft Windows http//www.Microsoft.com

7.0 Tutor-Marked Assignment

Question

State the procedure for finding and subscribing to a newsgroup.

UNIT 6: Internet Explorer — Window and Buttons

Table of Contents

1.0 Introduction

Internet explorer is one of the most popular web browsers. A web browser contains the basic software you need in order to find, retrieve, view, and send information over the Internet. They include software that lets you:

- Send and receive electronic-mail (or e-mail) messages worldwide nearly instantaneously.
- Read messages from newsgroups (or forums) about thousands of topics in which users share information and opinions.
- Browse the World Wide Web (or Web) where you can find a rich variety of text, graphics, and interactive information.

2.0 Objectives

- To identify the various components of the Browser Window;
- To identify the function of each button in the Microsoft Explorer Toolbar;
- Explain what a URL is and its function.

3.1 The Main Browser Window

When Internet Explorer is first opened up on your computer, the main screen of the programme will appear. This main window has many parts. These parts are described in detail below.

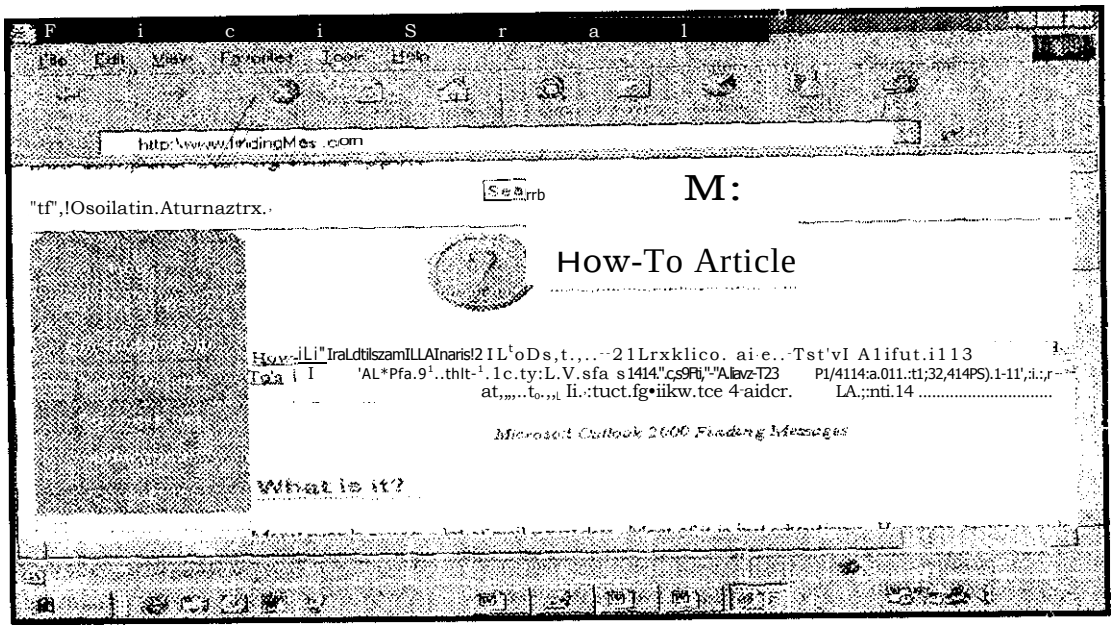


Fig. 6.1: *Microsoft Internet Explorer*

- The 'Title Bar' at the very top of the window tells you what the title of the page you are viewing is. The 'Title Bar' will also tell you what Internet Explorer application is currently active.
- Directly under the 'Title Bar' is the 'Main Menu Bar'. This bar has many different sub-menus which control all options, functions, and commands for the entire Internet Explorer programme. Some of the browsing controls can also be found in these sub-menus.
- Beneath this menu is the 'Internet Explorer Toolbar'. This toolbar contains all of the most frequently used commands and all of the browsing functions. (See the next section for more details).

- Under the toolbar is the 'Address bar'. This will tell you the exact HTTP/URL location of the page you are currently viewing. You can also type a Web address directly into this bar and then press enter to go to that site.
- Below the 'Address bar' is the 'Link Bar'. These buttons will take you to pages at Microsoft's Main home site where they have applications and information specifically designed for your easy use.
- Underneath the 'Link Bar' is the 'Main Browser Window'. This window will display all of the information that is located at the Web site you are currently located at. Any text, images, movies, animation, links, or any other application files will be shown in this window. The scroll bars located on the right side and on the bottom of this window allow you to continue viewing the page you are located at even when the page is too large to fit into your screen.
- The very bottom of the page is the 'Status Bar'. This bar tells you what the progress of the browser is while it downloads files to the page, where links go to when you move over them, whether or not a document is secure, and any other information that the programme feels is necessary for you to know.

Activity I

Click the internet explorer button and see if you can identify these various parts of the browser.

3.2 The Main Explorer Toolbar

The main toolbar is composed of eleven different buttons. Each of these buttons has a different function and purpose in Internet Explorer. The individual buttons will each be discussed in the following sections.

- The Back Button: This button will take you back to whatever document you were previously viewing. Pressing it immediately takes you back one document. If you have browsed many pages, or are well into a multi-page document, pressing it repeatedly will continue to back you up one page at a time. Once you reach your starting location, it will be greyed-out and unavailable.
- The Forward Button: This button will take you forward to the next document if you have previously browsed multiple documents and had then backed-up to the page you are currently viewing. Of you have not backed up at all, the forward button will be greyed-out). Pressing it repeatedly will continue to move you forward one page at a time. You can move forward until you reach the last page that you had browsed, at which time the forward button will be greyed-out.
- The Stop Button: The stop button stops ANY current operations by Internet Explorer. It will stop any type of file from loading. It can also be used to stop animations from continuing once a page is loaded. If you press it before a page has finished loading, the page will display everything it had finished loading before the stop button was pressed.
- The Home Button: This button will return you to the page you have selected as the default start-up page for Internet Explorer. It will not take you back to the beginning of your web browsing, it will just return you to your home location from where you are. If you press back after reaching your home page, you will go back to the page you left after you hit the Home button.

Exercise 1

What is the home page of your browser?

Except you have changed it, it should be that of your internet service provider.

- The Search Button: This button will take you to the page you have selected as the default Web

search page for Internet Explorer. If you have not selected a page, it will take you to Microsoft's default search page.

- **The Favorites Button:** This button will open up the Favorites menu. You can choose a favorite that you wish to go to from the list, add a favorite to the list, or organize your favorites from this menu.
- **The Print Button:** The print button will bring up a Print dialog box. In the box you can decide if you would like to print the contents of the page you are viewing, how many pages you will print, and also how many copies you will print. Keep in mind that if you try to print a page that is graphics intensive, you will need a printer that is capable of printing graphics. Also, the more graphics and pages a Web site has, the longer it will take to print.
- **The Front Button:** Pressing this button causes Internet Explorer to cycle through the available font sizes. This button is useful if the text is too small to be read, or too large to fit comfortably in the window.
- **The Main Button:** This button will open into a drop down menu from which you can select to read or send e-mail. You can also open up your newsgroups from this menu.
- **The Edit Button:** This button will ONLY be on your toolbar if you have a Windows system Web editor (such as Microsoft Frontpage or Microsoft Word) installed on your computer. If you press this button, it will launch that editor and open the document you are currently viewing in it.

Exercise 2

Explain the use of Refresh button.

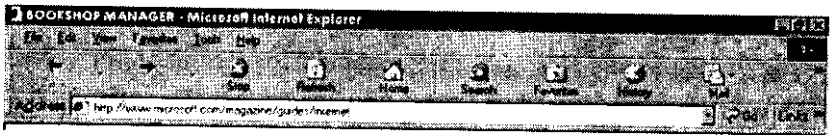
While viewing a web page and there is an error while downloading, the refresh button will reload the current page you are viewing.

3.3 Beginning Basic Browsing

You may have some difficulty the first time that you browse the web. Efficiently browsing the Web is just like any other complex task in life, it takes practice to be good at it. Internet Explorer has some built-in features which will help to make it easier for you to browse the web. The fastest way to get to a place that you can search from, is to click on the 'Search' button on the Internet Explorer main toolbar. This button will take you to a document within Microsoft's home site. On this document you will find a choice of categories to look through and a list of Search Engines to use. A Search Engine is application that will attempt to find any documents that contain the subject or phrase that you enter into the search parameters. You can also browse through the categories of Web sites that the search engines have already organized for you.

3.3.1 What is a Uniform Resource Locator (URL)?

If you know the Web address of a site, usually called URL (or Uniform Resource Locator) you don't need to use a search engine to find the page you wish to visit. Go up to the 'Address Bar' near the top of the page, and click on it. Now you can type in the Web address of the site you want, and then press enter. Internet Explorer will go to this site directly from whatever document you were currently viewing. This is much faster than going to a search engine and trying to locate the site you want in their directories, or searching for it with a query. (Address bar shown overleaf).



A URL (or uniform resource locator) is the address of an Internet file. Usually it consists of four parts: Protocol, server (or domain), path, and filename. Sometimes there's no path or filename. Here's an example: http:!/www.microsoft.conllwindows/default.asp

- http is the protocol
- www.microsoft.com is the server
- windows/ is the path
- default.asp is the filename

Exercise 3

State the importance of knowing the URL of a site.

Knowing the URL of a website enables you visit the site directly without having to use search engines to locate the address of the site.

4.0 Conclusion

Internet Explorer contains the basic software you need in order to find, retrieve, view, and send information over the Internet. The explorer is made up of a main window that has many parts with different buttons. Each of these buttons has a different function and purpose in Internet Explorer. The web address (URL) enables you access a web site to type in the Web address of the site you want, and then press enter. Internet Explorer will go to this site directly from whatever document you were currently browsing.

5.0 Summary

The different functions and purposes of the buttons of the Main Explorer Toolbar was intensively discussed. The use of 'Address Bar' to type in the URL of a site was explained.

6.0 References and Suggestion for Further Reading

Widernet Project, http//www.widemet.org
Microsoft Windows http//www.Microsoft.com

7.0 Tutor-Marked Assignment

Question:

State when you will need to use these buttons:
The Stop Button
The Refresh Button
The Home Button
The Back Button

UNIT 7: Internet Explorer — Viewing Web Page

Table of Contents

1.0 Introduction

Internet Explorer is capable of displaying HTML documents and images even if you are not connected to the Internet. Documents containing images affect the speed at which the computer display the document. But this speed can be improved in explorer. You can also instantly preview a Web page so that you can see how the page will look when you print a hard copy. You can add languages to your list of languages in Internet Explorer so that you can view these sites that are in different languages.

2.0 Objectives

At the end of this unit, you will be able to:

- Learn how to preview a Web page;
- Learn how to use Print Preview commands to customize your page preview;
- Speed up browsing;
- View Web pages in a different language.

3.1 Viewing Documents while not on the Web

Internet Explorer is capable of displaying HTML documents and images even if you are not connected to the Internet. Go to the file menu from the main menu bar. From this menu, select 'Open', the open dialog box will appear. (You can also press CTRL-0 from the main Explorer window to access this box). In this dialog box, you can type in a Web address to access a page on the Web. Since we are not on the Web, click the 'Browse' button to look at files on the hard drive. Select the type of file you want to open from the drop-down menu at the bottom of the box. After you have selected the file type, go to the directory that contains this file. Select the file and then click 'Open'. The document, image, movie, or sound file you have selected should now be viewable in Internet Explorer.

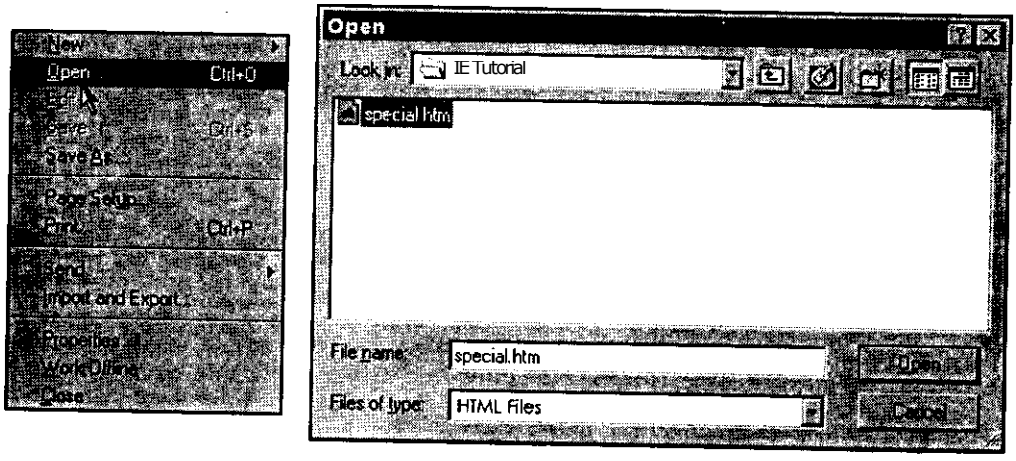


Fig. 7.1

Exercise 1

Is it possible to view a web page off-line?

You can always save a web page on your hard drive and view it later off-line at a more convenient time.

3.2 Previewing a Web Page

You can click Print Preview to instantly see how a Web page will look when you print it. Then you can use Print Preview commands to customize your page preview.

3.2.1 To preview the appearance of a printed Web page

1. On the File menu, click Print Preview or If you added the Print Preview button to your Internet Explorer toolbar, click the Print Preview button.
2. Choose from the following commands to customize your page preview. When your mouse pointer hovers on the Print Preview toolbar buttons, the command names and shortcut keys appear.

Click this button	To do this	Shortcut key
Print document	Set printing options and print the page	ALT+P
Page Setup	Change paper, headers and footers, orientation, and margins for this page	ALT+U
First Page	Display the first page to be printed	ALT+HOME
Previous Page	Type the number of the page you want to display	ALT+A
Next Page	Display the next page to be printed	ALT+RIGHT ARROW
Last Page	Display the last page to be printed	ALT+END
Zoom Out	Decrease the magnification	ALT+MINUS
Zoom In	Increase the magnification	ALT+PLUS
Zoom List	Display a list of zoom percentages	ALT+Z
Print Preview Help	Read help topics about Print Preview	ALT+ H

3.3 Printing Web Documents

If your computer is connected to a printer, you can print out any Web document that you wish whether you are viewing it on the Web, or just viewing it from your hard disk. Go to the file menu from the main menu bar. From this menu select 'Print', the Print dialog box will appear. (An easier way to open this box is to simply click the 'Print' button on the main toolbar or to press CTRL-P). In this dialog box you can decide how you would like to print the contents of the page you are viewing, how many pages you will print, and how many copies you will print. Keep in mind that if you try to print a page that is graphics intensive, you will need a printer that is capable of printing graphics. Also, the more graphics and pages a Web document has, the longer it will take to print.

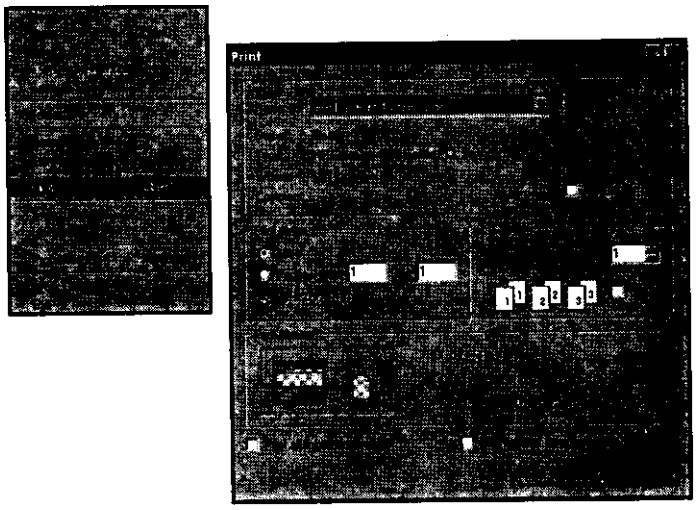


Fig. 7.2

Exercise 2

Do you really think you need hard copy of documents you find on the Internet? What is the reason for your answer?

Hard copies are another way of looking at a web page off-line, because studying a document on-line is expensive. You would need to print hard copies for reference and detail study at a more convenient time.

3.4 Speeding Up Your Browsing

There are many ways to make the browsing process much quicker and easier. One of the main ways that you can improve the speed of the computer when loading a document is to disable the automatic loading of images. Go to the main menu of Internet Explorer, and from the View sub-menu, select 'Options'. From the Options dialog box, select the 'Advance' folder tab at the top of the box. In the multimedia section you can select whether or not Internet Explorer loads an image, sound file, or movie. If you want a type of file to be automatically loaded, place a check mark in the appropriate box. If you want the images disabled, click to remove the check. Now whenever Internet Explorer loads a document that has images, a small icon will appear where each image is located on the page. If you wish to view the image at that location, right-click on the image area and then select 'View Image' from the menu.

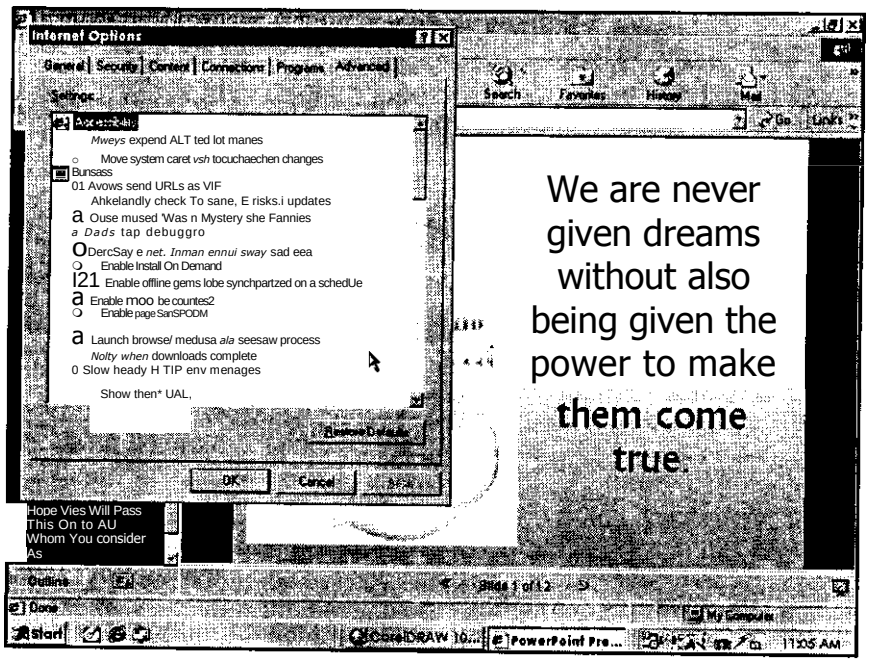


Fig. 7.3

3.5 View Web Pages in a Different Language

Some web sites offer their content in several languages. You can add languages to your list of languages in Internet Explorer so that you can view these sites in your preferred language. To view web pages written in a different language:

- On the Tools menu in the browser, click Internet Options
- On the General tab, click Languages
- CI ick Add
- Select the language you want to add.

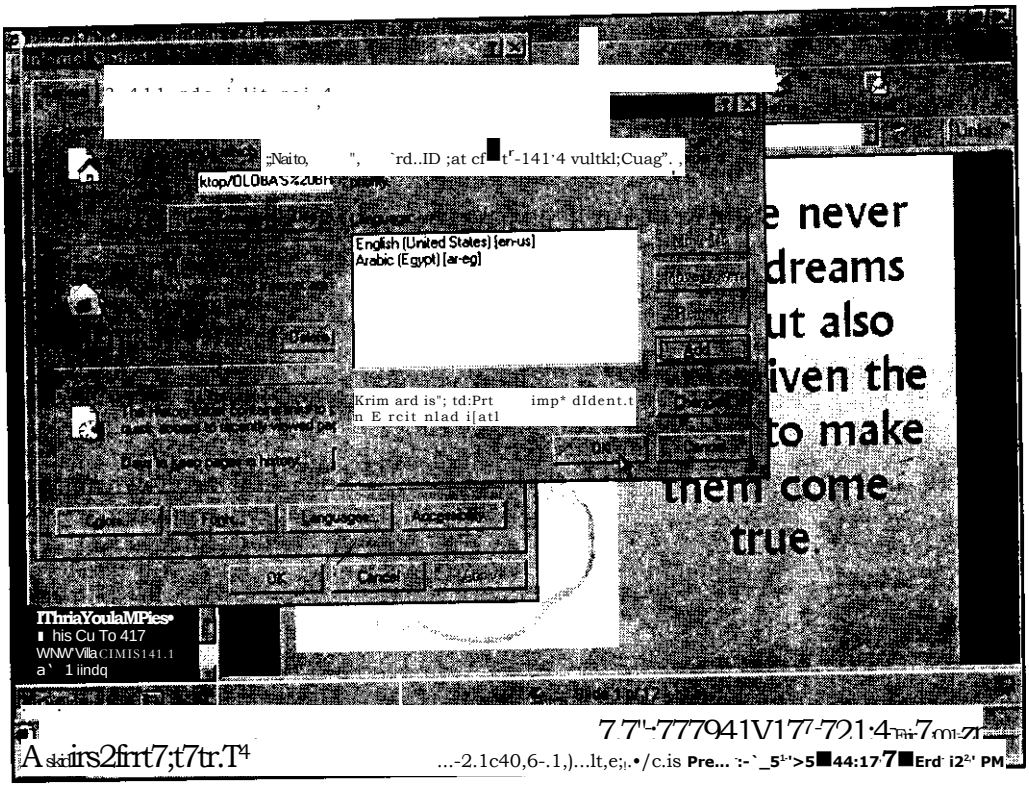


Fig. 7.4

Exercise 3

Suppose you can speak another International language, what is the advantage of adding that language in your preferred language of view?

Adding another international language in your Internet Explorer allows you to view sites in that language.

- If you speak several languages, you can arrange them in order of priority. If a web site offers multiple languages, it will supply content in the language with the highest priority.

Note that adding languages does not guarantee that you have a font that can display web pages in your preferred languages. You may need to download a multilanguage support pack to display pages in these languages.

Exercise 4

Does adding languages guarantee that you have a font that can display web pages in your preferred languages?

You may need to add a multilanguage support pack to display pages in these languages, so the answer is No.

4.0 Conclusion

Document, image, movies, or sound file can be viewed off line, while you can also use print preview to view how the document will look like when you print them. Loading a document that has images when image is disabled in your explorer will increase the speed at which the document is displayed. If you wish to view the image at that location, right-click on the image area and then select 'View Image' from the menu.

5.0 Summary

In this unit we discussed how you can preview your documents before printing. The importance of disabling the automatic loading of images and finally how you can view documents in other language were also discussed.

6.0 References and Suggestion for Further Reading

Widemet Project, http//www.widernet.org
Microsfot Windows http//www.Microsoft.com

7.0 Tutor-Marked Assignment

Question
Suppose in the process of viewing your web page the pictures are not showing, how would you solve the problem?

UNIT 8: Internet Explorer—Management of Favorites and History

Table of Contents

1.0 Introduction

Internet Explorer contains a system of marking frequently visited web sites, these are known as Favorites. The settings for your Favorites are located on the main menu bar of Internet Explorer. Apart from the use of Favorite, there are several ways to find web sites and pages you've viewed in the last few days, hours, or minutes.

2.0 Objectives

At the end of this unit you will be able to:

- Create a new Favorites folder;
- Manage your Favorites;
- Use history button to locate sites visited.

3.1 Locating the Favorites Folder

- Select the 'Favorites' sub-menu with your mouse, or press 'ALT—A'
- Now select 'Organize Favorites' from this menu. The Organize Favorites dialog box has now appeared.
- The Move button allows you to move your Favorites to another directory. The Rename button will let you change the name of the Favorite you selected. The Delete button will delete the Favorite you have selected.

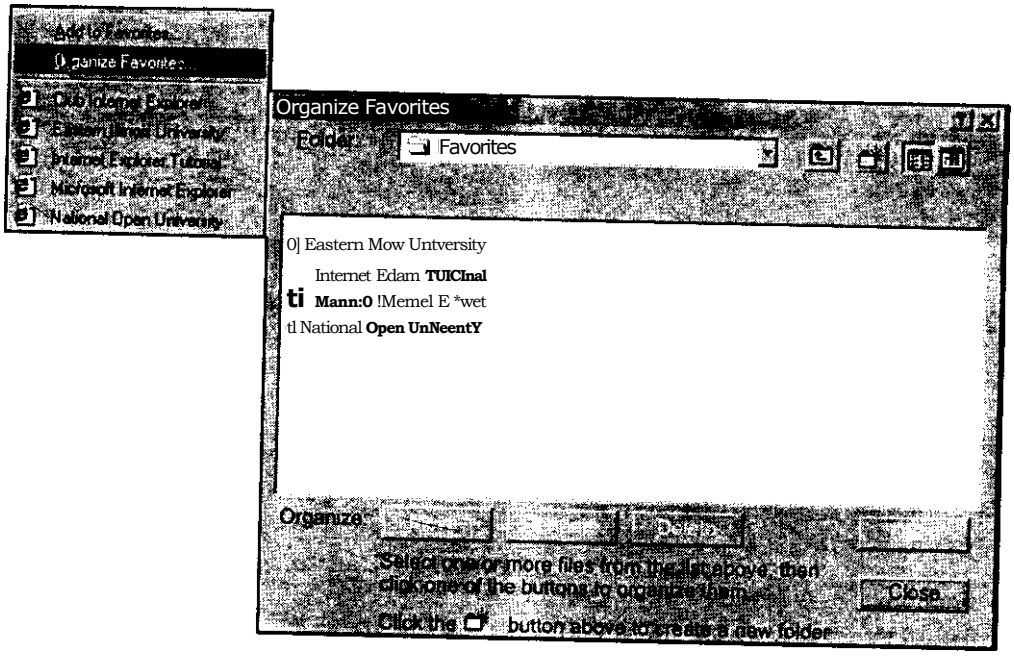


Fig. 8.1

3.2 Creating a New Favorites Folder

As your list of Favorites grows, you can keep it organized by creating folders. You might want to organize your pages by topic. For example, you could create a folder named Information Technology for storing information about Information Technology. This allows you to easily locate a Favorite page.

- To create a new folder for your favorites, go to the Organize Favorites dialog box again by clicking Favorites and then selecting "Organize Favorites".
- In this box, a button is located in the upper-right that will allow you to create a new folder (This button has been circled in red in the figure below). Click this button and a new folder will appear.
- The default name of this folder is "New Folder" . Change the name by typing a new name when the "New Folder" text is highlighted. You can always change a file or folder name by

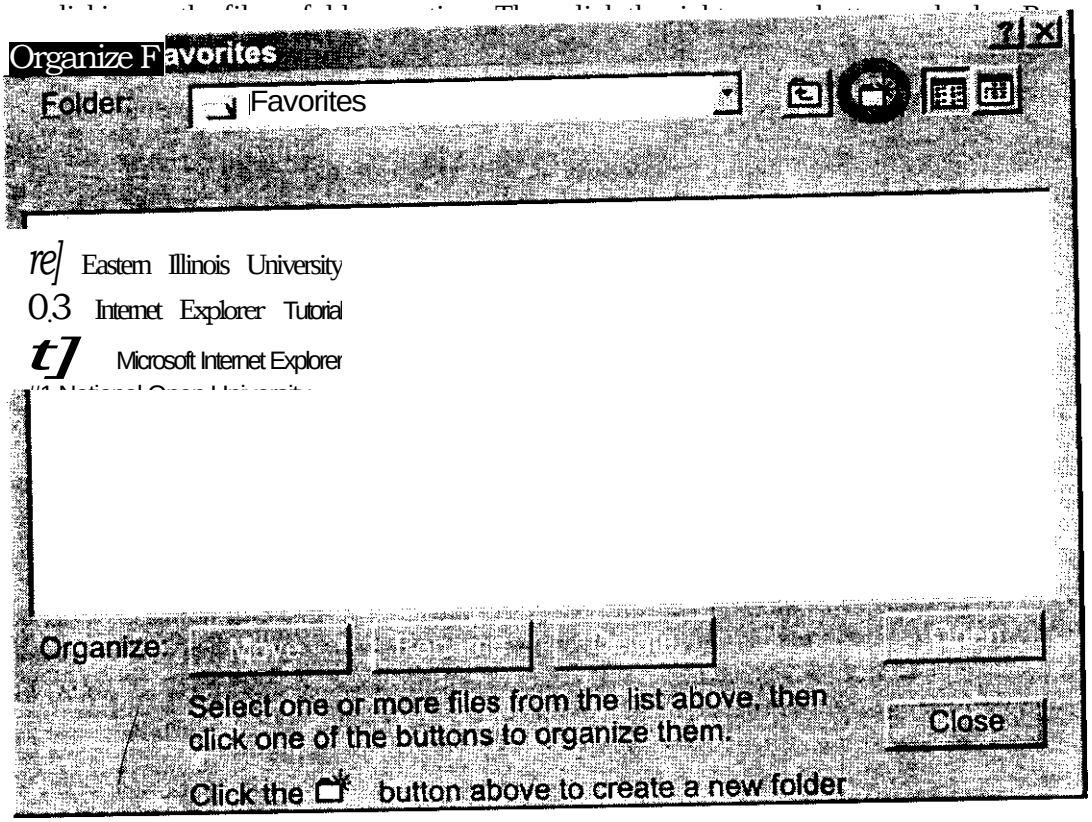


Fig. 8.2

Exercise 1

What will necessitate your adding a website in your Favorite folder?

If you pay frequent visit to a particular site you can add it in your Favorite folder. This will give you easy access to the site URL.

3.3 Adding To Favorites

1. When you are at a web site that you would like to add to your Favorites, go up to the "Favorites" menu item and click on "Add To Favorites". This will bring up a dialog box in which you can change the name of the Favorite.
2. Click "OK" and the Favorite is added to your current Favorites list. A shortcut to bring up the dialog box is to press and hold "ALT" and then press and hold "A". Hold both until the Add To Favorites dialog box appears.

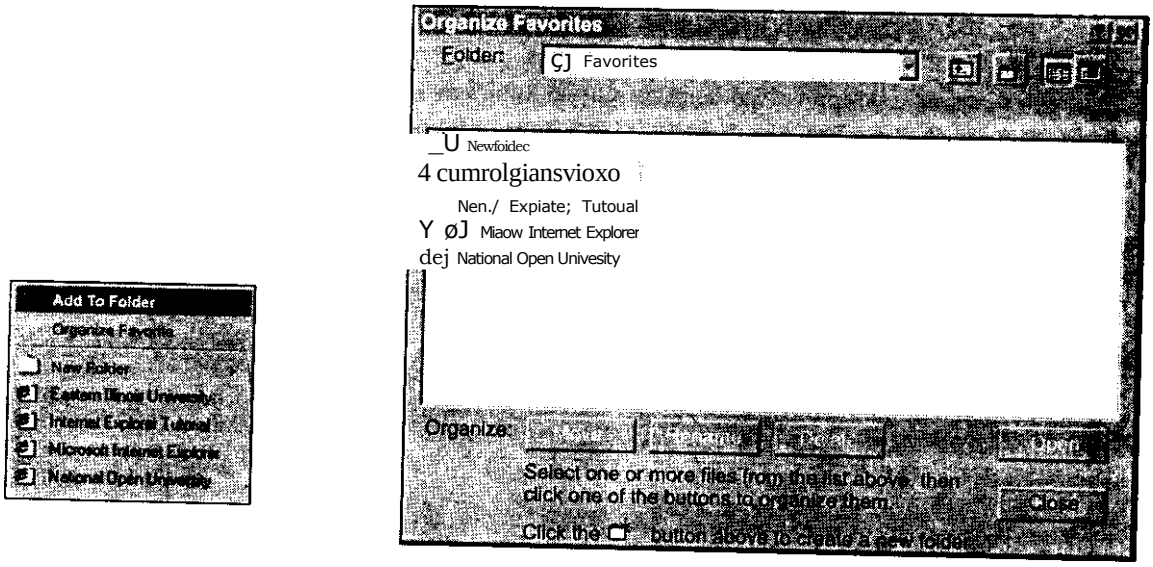


Fig. 8.3

3.4 Deleting Favorites

With time the folder containing your Favorites will contain so **many Favorites that locating a particular** one will take you quiet some time, hence once in a while, you will have to **do some cleaning up by** deleting Favorites that you no longer need from your Favorite folder. Follow the steps below to delete Favorites from your computer.

- From the Organize Favorites dialog box, select the Favorite that you wish to delete by **clicking** once on it. Now three buttons have lit up just below the listing of your Favorites.
- Click the Delete button and it will ask you to confirm whether or not you really want to delete it. Click Yes if you want to delete the Favorite you've selected.

Exercise 2

Why do you think it is important to delete some Favorites from your computer?

3.5 History Button

The History list shows where you've been — today, yesterday, or a few weeks ago. If you forget to add web pages to your Favorites or Links bar, click the **History button on the toolbar.** Click a name from the list to display the page. You can hide the History bar by clicking the **History button again.**

There are several ways to find web sites and pages you've viewed in the last few days, hours, or minutes.

3.5 .1 **To find a page you've seen in the last few days**

- On the toolbar, click the History button.
- The History bar appears, containing links for web sites and pages visited in previous days and weeks.
- In the History bar, click a week or day, click a web site folder to display individual pages, and then click the page icon to display the web page.
- To sort or search the History bar, click the arrow next to the **View button at the top of the** History bar.

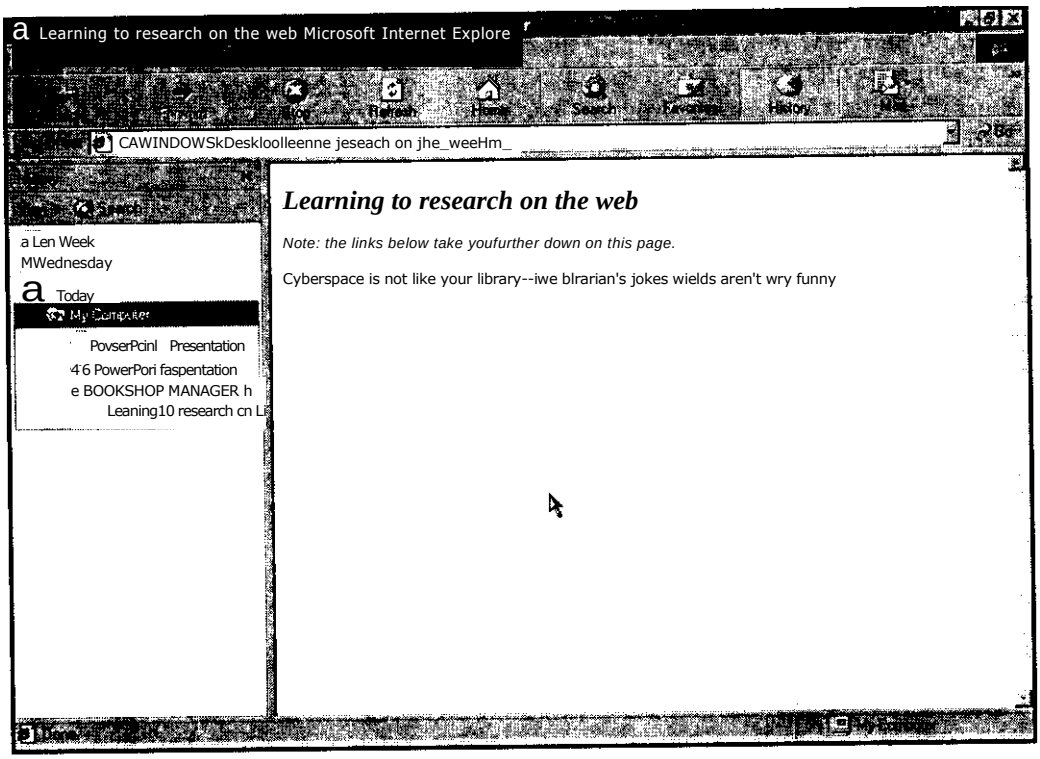


Fig. 8.4

Exercise

How do you locate a web page you forgot to add to your Favorite?

You can change the number of days that pages are saved in the History list. The more days you specify, the more disk space is used on your computer to save that information.

3.5.2 **To** specify how many pages are saved in the History list

- On the Tools menu in Internet Explorer, click **Internet Options.**
- Click the **General** tab
- In the **History** area, change the number of days that the History list keeps track of your pages.
- To empty the History folder, click Clear History. **This** will temporarily free up disk space on your computer.

4.0 Conclusion

Web page can be made available offline by adding it to your Favorites. You can add and remove folders, sort your favorites, and do anything else needed to manage Favorites. History button is used to sort sites visited by date visited, site name, number of visits, or order you visited today. Smart sorting also gives you the option of having History listed alphabetically.

5.0 Summary

In this unit, we have discussed how to organize your folder easily, create, move, rename, or delete folders or files from Favorites with the Right-click. We also discussed how to use the History button to sort sites visited.

6.0 References and Suggestion for Further Reading

Widernet Project, http//www.widernet.org
Microsoft Windows htt;//www. Microsoft.com

7.0 Tutor-Marked Assignment

Question

State some reasons for using your History button in your Internet Explorer and state the procedure for finding a web page you browse a week before.

UNIT 9: **Internet Explorer — Saving and Downloading Files from the Web**

Table of Contents

1.0 Introduction

This Unit will show you how to effectively use, the many resources the web has to offer. Microsoft Internet Explorer can download any type of file that you wish from a web site for use on your own personal computer at your convenient time. You can also customize your background and text color for your convenience.

2.0 Objectives

At the end of this unit you will be able to:

- Save files after viewing them;
- Download files from links;
- Customize your preferences;

31 Saving Files after Viewing them

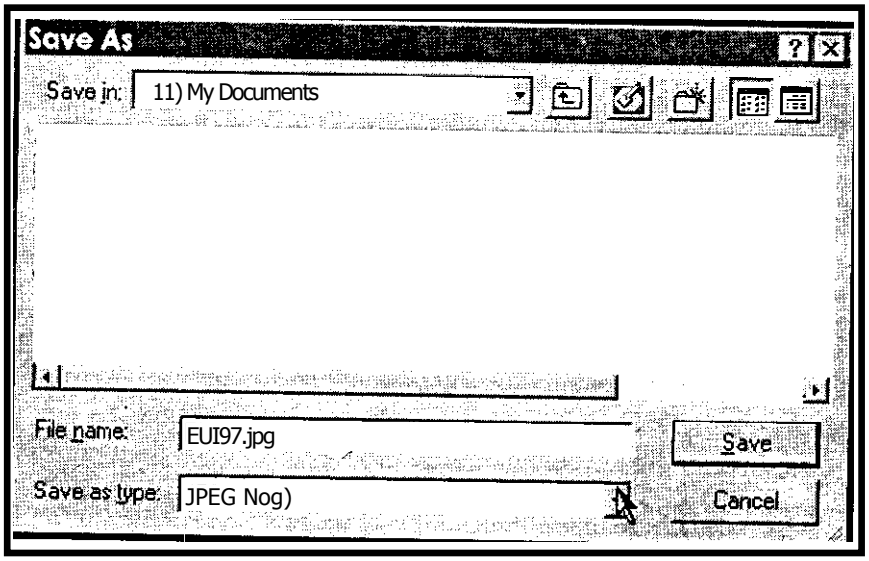
Frequently on a web page, you will find links that you can click on which will activate a selected file. Other times, the appropriate plug-in will be engaged when you click an application file. Once you have heard the sound, watched the video, or read the text, you may want to save the file on your computer for use off-line in future. Using the file off-line reduces the cost of working on-line.

- Most files available for viewing allow you to ¯Right-Click" on them which displays a menu box.
- From this box select ¯Save As". "Save Picture As", or whatever happens to fit the type of file you have just seen or heard.
- Choose where on your computer the file will be saved and give it a name.
- Click "Save" to begin saving the file. In the example below, the Eastern Illinois University logo was viewed. A "Right-Click" on it brought up a menu box. Finally, it will be saved to the hard drive.

Exercise 1

Why do you think you would want to save a web page after viewing it?

Saving a web page after viewing it allows you to view it off-line in future.



Fig,. 9..1

3.2 Downloading Files from Links

Many web pages have links to files that you can view such things as Images, Sounds, or Movies. Suppose that you don't want to look at them now, you can always download them directly from the links and view them at a later time.

I. "Right-Click" on the file that you want to download.

2. In the menu box that pops up, select "Save Target As".
3. A "Save As" dialog box will appear. You can select what name the file will have, and the location to where it will be downloaded. A shortcut to get to the "Save As" box is to hold "Shift" and "Left-Click" on the link you want to download. After you have selected the name and destination, click "Save". In the example below, suppose you would like to download the wave file called 'Door wave". First, a "Right-Click" on the file name will bring up the menu box. Next, choose "Save Target As" and select your desired location from the "Save As" dialog box. Finally click "save" and download the wave file.

Exercise 2

Download a file from the internet and see how much time it takes.

If the file does not contain images and it is not large, I am sure about 2-3 minutes will do.

3.3 Customizing Preferences

Explorer allows you to set the background color and text color for your browser for your convenience.

3.3.1 Changing the Background and Text Colors

=> From the Options dialog box, click on the "General" folder tab at the top of the box. You can set the background color from here. (The colors section is outlined in red for your convenience). If you want to set the background color at the windows default, click on the "Use windows Colors" box.

=> To select a custom background color and/or a custom text color, click the "Use Windows Colors" box so that it is NOT checked. Click on the colored box next to the box labelled "Text" or "Background". Now you have opened the color dialog box. You can choose your custom color from this palette by clicking on the desired color. When you are satisfied with your choice, click the "OK" button at the bottom of the color box. If you are done choosing options, click "apply" and then "OK" at the bottom of the Options box. See Fig. 9.2.

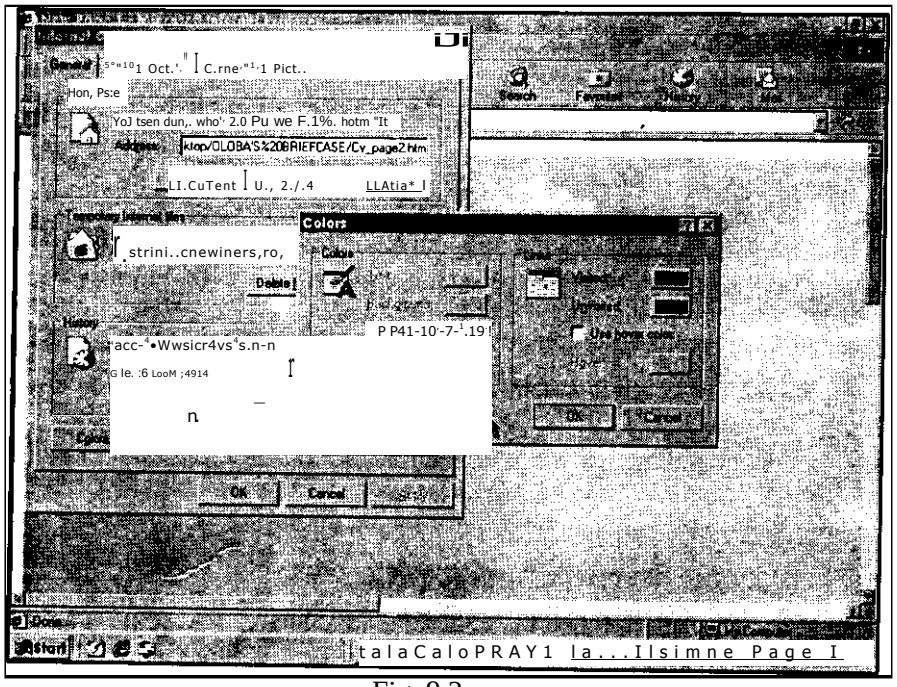


Fig. 9.2

3.3 **Changing the Link Colors**

ir> From the Options dialog box, click on the "General" folder tab at the top of the box. You can set the link colors from here. (The links section is outlined in red for your convenience).

To select a custom link colors click on the colored box next to the box labelled "Visited" or "Unvisited". Now you have opened the color dialog box. You can choose your custom color from this palette by clicking on the desired color. When you are satisfied with your choice, click the "OK" button at the bottom of the color box. If you are done choosing options, click "apply" and then "OK" at the bottom of the Options box.

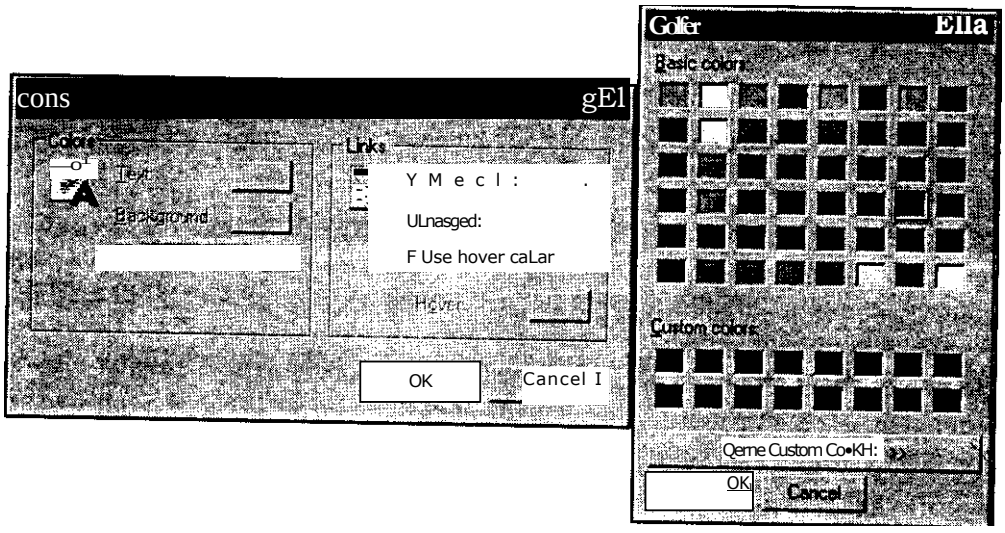


Fig. 9.4

3.4 Setting Your Default Start-Up Page

The "Start-Up" page is the Web site or document that Internet Explorer will open automatically every time that you start the programme. These steps will show you how you can change this page to whatever location you prefer.

* From the Options dialog box, click on the "General" folder tab at the top of the box. You can change the start-up page from here. Click on the Page drop-down box arrow to open a small menu.
* Click on the Address box.
* Type the address of the page you would like Internet Explorer to open each time you start the programme. If you are satisfied with your choice and are done setting options, click on "Apply" then "OK" at the bottom of the Options box.

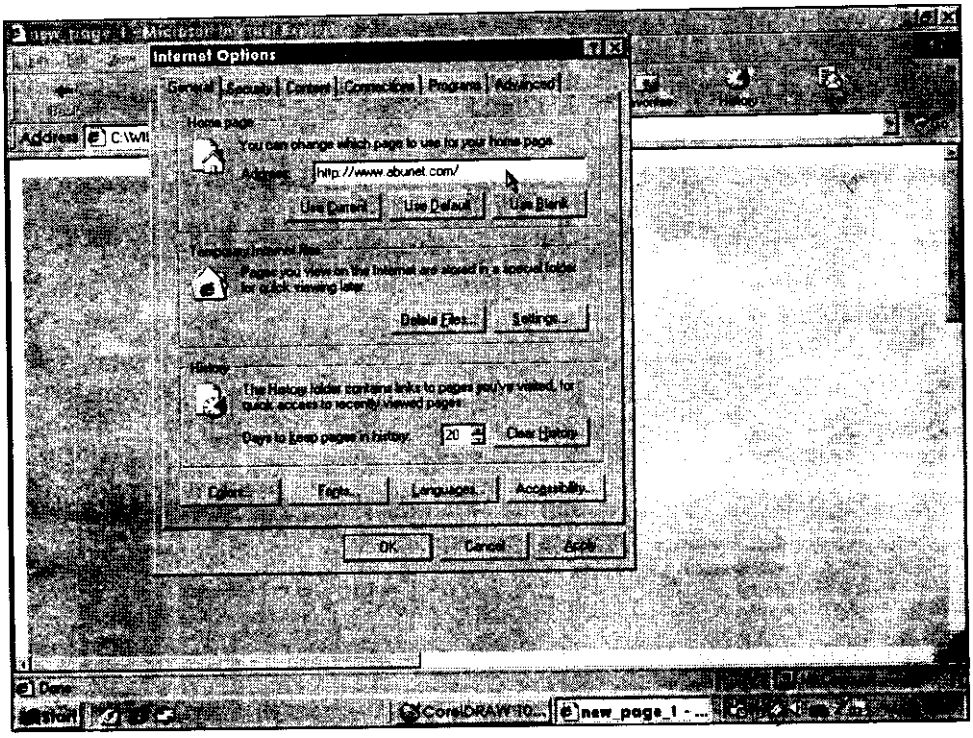


Fig. 9.2

Exercise 3

What would you like as your Start-Up Home Page? Why?

Sometimes your Favorite site can be set as your start-up home page so that you can visit the site before visiting other sites.

4.0 Conclusion

Once you have heard the sound, watched the video, or read the text, you can save the file on your computer for future use. You can also download them directly from the links and view them at a later time. The colors setting is for you to make settings that are convenient for your use. You can set your web site as your "Start-Up" page so that Internet Explorer will open it automatically every time that you start the programme.

5.0 **Summary**

In this Unit, we looked at how you can save and download a web page of interest for future use of viewing off-line. It is more continuance in terms of cost to save and use web page off-line. Internet Explorer also provides you with facilities to customize your preference in terms of background and text color.

6.0 **Reference and Suggestion for Further Reading**

Widernet Project, http//www.widemet.org
Microsoft Windows http//www. Microsoft.com

7.0 **Tutor-Marked Assignment**

Question

Explain why you would want to download a web page and state the procedure for doing it.

UNIT 10: **Internet Explorer: Security**

Table of Contents

1.0 Introduction

You can use security zones to easily provide the appropriate level of security for the various types of web content that you are likely to encounter. For example, because you can fully trust some sites, you probably want users to be able to run all types of active content from this location. To provide this capability, set the site zone to a low level of security. You might not feel as confident about some sites on the Internet, so you can assign a higher level of security to the entire Internet zone. This higher level prevents users from running active content and downloading code to their computers. However, if there are specific sites you trust, you can place individual URLs or entire domains in the Trusted sites zone. For other sites on the Internet that are known to be sources of potentially harmful web content, you can select the highest restrictions.

2.0 Objectives

At the end of this unit you will be able to:

- Configure Security Zones;
- Set Up the Internet Zone;
- Set Up the Trusted and Restricted Sites Zones;
- Set Up the Custom Level Settings.

3.1 Configuring Security Zones

The explorer provides you with a default security settings for each zone or yon can configure the settings based on your needs and its users.

You can configure security zones by using the following methods:

- In Internet Explorer, you can use the Security tab.
- You can use the Internet Explorer Customization Wizard to create custom browser packages that include security zone settings for your user groups. You can also lock down these settings to prevent users from changing them.
- After the browser is deployed, you can use the LEAK Profile. You can automatically push the updated security zone settings to each user's desktop computer, enabling you to manage security policy dynamically across all computers on the network.

Exercise 1

What is the default security settings of your computer?

Check and see or has someone adjusted it?

3.1.1 To configure security zone settings using Explorer

- On the Tools menu, click Internet Options, and then click the Security tab.
- Click a security zone to select it and view its current settings.
- As necessary, change the following settings:
- Security level. To change the security level for the selected zone to High, Medium, Medium-low, or low, move the slider. The on-screen description for each level can help you decide which level to select.
- Sites. To add or remove Web sites from the zone, click the sites button, and then click the Add or Remove button to customize your list of sites for the selected zone.
- Custom level. For more precise control of your security settings, click the Custom Level button, and then select the options you want. At any time, you can click Default Level on the Security tab to return to the original security level for the selected zone.

3.2 **Internet zone**

The Internet zone consists of all Web sites that are not included in the other zones. By default, the Internet zone is set to the Medium security level. If you are concerned about possible security problems when users browse the Internet, you might want to change the security level to High. If you raise the security level, Internet Explorer prevents some Web pages from performing certain potentially harmful operations. As a result, some pages might not function or be displayed properly. Rather than use the High security level, you might want to choose the Custom level so that you can control each individual security decision for the zone.

Exercise 2

What is the implication of raising the Setting Up of the Internet Zone to High?

Raising the security level of your internet zone to high will prevent some web pages from certain potentially harmful operations. And some pages might not function or be displayed properly.

3.3 **Local Intranet Zone**

To ensure a secure environment, you must set up the Local intranet zone in conjunction with your proxy servers and firewall. All sites in this zone should be inside the firewall, and the proxy servers should be configured so that an external Domain Name System (DNS) name cannot be resolved to this zone. Configuring the Local intranet zone requires that you have a detailed knowledge of your existing networks, proxy servers and firewalls.

By default, the Local intranet zone consists of local domain names in addition to any domain that is specified to bypass the proxy server. You should confirm that these settings are secured for your computer and adjust the settings as necessary. Follow **the** steps below to set up the Local Intranet Zone. I. On the Tools menu, click Internet **Options,** and then click the **Security tab.**

2. **Click the Local intranet** zone.
3. Click **Sites, and then** select the following check boxes that apply.

- **Include all local (intranet) sites not listed in other zones.**
  Intranet sites, such as http//local, have names that do not include dots. In contrast, a site name that does contain dots, such as http://www.microsoft.com, is not local. This site would be assigned to the Internet zone. The intranet site name rule applies to File URLs as well as HTTP URLs.
- **Include all sites that bypass the proxy server.** Typical intranet configurations use a proxy server to gain access to the Internet but have a direct connection to intranet servers. The setting uses this kind of configuration information to distinguish intranet from Internet content. If your proxy server is configured otherwise, you should clear this check box and then use other means to designate the Local intranet zone membership. For systems without a proxy server, this setting has no effect.
- **Include all network paths (UNCs).** Network paths (for example, \ \ servername \ sharename \ file.txt) are typically used for local network content that should be included in the Local intranet zone. If some of your network paths should not be in the Local intranet zone, clear this check box and then use other means to designate the Local intranet zone membership. In certain common Internet File system (CIF S) configurations, for example, it is possible for a network path to reference Internet content.
- Click **Advanced**
- Type the address of the site you want to include in this zone, and then click **Add**
- **To require** that server verification be used, select the **Required server verification (https:) for all sites in this zone** check box.

After the Local intranet zone is confirmed to be secured, consider changing the zone's security level to Low so that users can perform a wider range of operations. You can also adjust individual security settings by using the Custom level of security for this zone. If parts of your intranet are less secured or otherwise not trustworthy, you can exclude the sites from this zone by assigning them to the Restricted sites zones.

3.4 Trusted and Restricted Sites Zones

You can add trusted and untrusted Web sites to the trusted sites and restricted sites security zones. These two zones enable you to assign specific sites that you trust more or less than those in the Internet zone or the Local intranet zone. By default, the Trusted sites zone is assigned the Low security level. This zone is intended for highly trusted sites, such as the sites of trusted business partners.

If you assign a site to the Trusted sites zone, the site will be allowed to perform a wider range of operations. Also, Internet Explorer will prompt you to make fewer security decisions. You should add a site to this zone only if you trust all of its content never to perform any harmful operations on your computer. For the Trusted sites zone, Microsoft strongly recommends that you use the Hypertext Transmission Protocol Secure (HTTPS) protocol or otherwise ensure that connections to the site are completely secure.

By default, the Restricted sites zone is assigned the High security level. If you assign a site to the Restricted sites zone, it will be allowed to perform only minimal, very safe operations. This zone is for sites that you do not trust. Because of the need to ensure a high level of security for content that is not trusted, pages assigned to this zone might not function or be displayed properly.

Exercise 3

Distinguish between trusted and untrusted Zones.

Sites in the trusted zones are allowed to perform a wider range of operations while sites from untrusted zones are allowed to perform only minimal, and safe operations.

3.5 Domain Name Suffixes

You can address Web content by using either the DNS name or the Internet Protocol (IP) address. You should assign sites that use both types of addresses to the same zone. In some cases, the sites in the Local intranet zone are identifiable either by their local names or by IP addresses in the proxy bypass list. However, if you enter the DNS name but not the IP address for a site in the Trusted sites or Restricted sites zone and the site is accessed by using the IP address that site might be treated as part of the Internet zone.

To set up this capability, you must add the domain name suffix for TCP/IP properties to the domain suffix search order.

To add the domain name suffix for TCP/IP properties to the domain suffix search order in Microsofta Windows XPa and Windowsa 2000

- In Microsoft windows XP or Windows 2000, right-click the My Network Places icon, and then click Properties.
- Right-click the appropriate network connection, and then click Properties.
- On the General tab (for a local area connection) or the Networking tab (for all other connections), click Internet Protocol (TCP/IP), and then click Properties
- Click Obtain DNS server address automatically If it is not already selected.
- Click Advanced, and then click the DNS tab.

- Click Append these DNS suffixes (in order), and then click Add
- Type the domain suffix, and then click Add

To add the domain name suffix for TCP/IP properties to the domain suffix search order in Windows 98.

- In Microsofth windows 98d, right-click the Network Neighborhood desktop icon, and then click **Properties.**
- On the Configuration tab, click TCP/IP, and then click Properties.
- Click the DNS Configuration tab, and then select Enable DNS if it is not already selected.
- In the Domain Suffix Search Order box, add the search order that you want.

It is important to set up security zones correctly for this capability. By default, the URL, without dots (http://sample) is considered to be in the Local intranet zone, and the URL with dots (http://sample sharon.com) is considered to be in the Internet zone. Therefore if you use this capability and no proxy server bypass is available to clearly assign the content to the proper zone, you need to change the zone settings.

Depending on whether the content accessed by the domain name suffix is considered intranet or Internet content, you need to assign the ambiguous site URLs to the appropriate zones. To assign URLs, such as http://sample to the Internet zone, clear the Include all local (intranet) sites not listed in other zones, check box for the Local intranet zone, and include the site in the Internet zone.

3.6 Custom Level Settings

The Custom Level button on the Security tab gives you additional control over zone security. You can enable or disable specific security options depending on your needs and its users.
The Custom level security options for Internet Explorer are grouped into the following categories.

- Microsofta Active ra controls and plug-ins
- Downloads
- Microsoft VM
- Miscellaneous
- Scripting
- User Authentication

Exercise 4

What is the advantage of using Custom Level Settings?

As discussed, the custom level setting allows you to make your own security settings depending on your needs and use.

4.0 Conclusion

When you set up the security zone, you can specify the URL categories in addition to specific sites in the zone you trust. You can place individual URLs or entire domains in the Trusted sites zone. For other sites on the Internet that are known to be sources of potentially harmful Web content, you can select the highest restrictions.

5.0 **Summary**

In this unit, we discussed how you can manage your security zone settings through the automatic browser configuration feature of Internet Explorer. We also discussed how you can add trusted and untrusted Web sites in your security zone.

6.0 **References and Suggestion for Further Reading**

Widernet Project, http//www.widernet.org
Microsoft Windows, http//www. Microsoft.com

7.0 **Tutor-Marked Assignment**

Question

Explain why you would want to download a web page and state the procedure for it.

UNIT 11: Netscape Browser — Introduction

Table of Contents

Netscape Browser

Fig. 11.1

1.0 Introduction

Netscape browser is a software programme that allows users to access and navigate the World Wide Web. Netscape browser enables you to find and view information published on the World Wide Web. Netscape Navigator is available as part of the Netscape Communicator package of Internet access tools or as a stand-alone application. Netscape Navigator translates the coded language of the Web, HTML (Hyper Text Markup Language), into text, pictures, even sound and video.

2.0 Objectives

At the end of this unit you will be able to:

- Identify the different toolbar of Netscape Navigator
- Explain the functions of the various buttons
- Open a web page using Netscape Navigator
- Move from one web page to the next using links

3.1 Netscape Communicator

Netscape Communicator is a software package that includes Navigator, a browser, Messenger, an e-mail and newsgroup programme; and Composer, a web page publishing programme. In each part of this tutorial, we'll refer to the component we're using. In this case, we're using Navigator, which is the programme you use to navigate the web.

3.2 How Web Browsers Work

Most of the information on the web is organized into linked pages located on different computers that are connected to the Internet. These networked computers that store and deliver information are called servers.

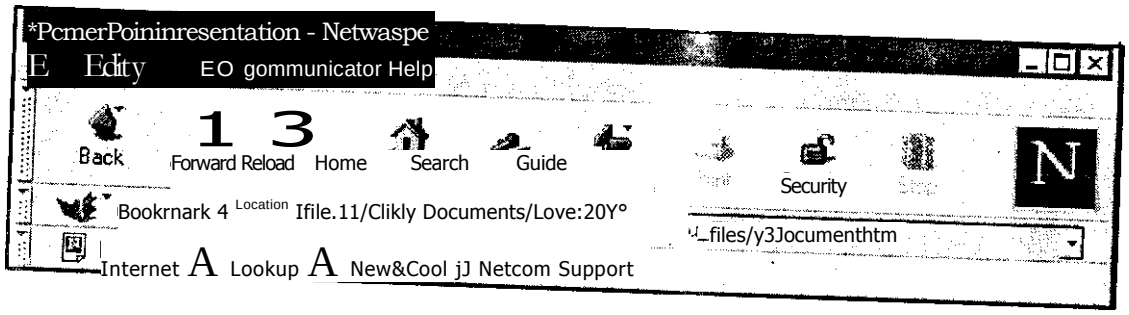


Fig. 11.2

Exercise I

Identify the kind of browser you have on your computer.

The two most popular browsers are Internet explorer and Netscape browser.

When you type in a URL or click a link, Navigator sends a request for that page over the Internet. This

computer network uses the URL to find the server that has the page and ask it for a copy. That server receives the request, finds the page, then sends a copy of the page over the Internet and back to your computer. When the data arrives at your computer, Navigator shows the page and any images associated with it in your browser window. Most of die time, this happens in just a few moments.

3.3 Opening Web Pages

When you first open Netscape Communicator, you will see the Netscape Navigator browser window. Unless your default home page has been changed, when you launch Navigator, the first page you'll see is the Netcenter home page, which is Netscape's portal — or point of entry — onto the web.

Fig. 11.3

Near the top of the Navigator browser window you will see the Location field (a text box preceded by the word *Location* or *Netsite).* The Location field displays the address of the page you're viewing. This address is called a URL (Uniform Resource Locator). Every page on the web has its own unique URL. It helps you locate a particular person. A URL tells Navigator where to find a specific web page.

Although most web addresses begin with http://; you don't need to type that part of the URL. Navigator will add it automatically. You can type home.netscape.com, for example rather than http://home.netscape.com. Note that not all web addresses start with www!

URLs are case sensitive, which means when you type a web address into the Location field, you must type the characters exactly as you see them, including uppercase and lowercase letters. Be sure to include special characters, such as a tilde (—). And no matter how it appears in print, don't type a period at the end of a URL.

When the word *Netsite* appears to the left of the Location field (rather than the word *Location),* it means the page you're looking at is located on a computer that uses Netscape server software.

Exercise 1

What is the main function of URL?

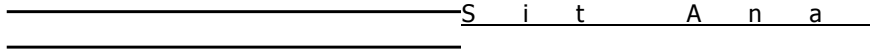
The URL is the unique address of a web site. It is used to access or locate a web site.

3.4 The Toolbar

The toolbar consists of clickable buttons that either take you to predefined Web pages, or perform functions for you such as finding text, loading graphics, or printing.

- Menu bar: Offers menus containing commands for working with the programme.

- Title bar: Shows the title of the web page you're currently viewing.



- Navigation toolbar: Contains buttons to help you navigate from page to page. The following are the functions of those buttons:

Fig. 11.3

Back	Takes you back to the last page you visited.
Forward	If you've gone backward, takes you forward to the next page.
Reload	Gets a new, fresh copy of a web page from its server on the Net.
Home	Sends you to your home page.
Search	Opens the Netscape Net Search page.
My Netscape	Takes you to channeLnetscape.com, where you can create a customized page.
Images	If the Automatically Load Images preference is turned off, this button will load images. (See more about tins in the "Speeding Up Web Browsing" section.)
Print	Prints the web page you're viewing.
Security	Opens a window containing security information about the page you're viewing:
Stop	Stops the current page from loading.

- **Location bar:** Includes the Location field, where you type the web address of a page you want to see, and the What's Related button (find out more about What's Related in the "Smart Browsing" section). PC users will also see the bookmarks menu here, rather than as part of the menu bar.

- **Personal toolbar:** A place for accessing and filing the bookmarks you want to use most often.

- **Status bar:** When a page is loading, download information, such as how much data has been received, appears in the status bar. The status bar also contains a security icon, which you can click to get security information about a page.

Fig. 11.4

Component toolbar: Contains a button for each Communicator component. (If you're using a stand-alone vession of Navigator, you won't have a Component toolbar.)

Fig. 11.5

Activity 1
Use the Navigation Buttons and try the following after clicking the browser:

1. Type the URL www.jellybelly.com in the Location field.
2. Press the Enter (Return) key.
3. Watch the big N logo and/or the status bar to see when the page has finished downloading. (When it's finished, the comets stop streaming and the word "Done" appears on the status bar.)
4. Click the Back button to return to the Netscape Netcenter home page.
5. Click the Forward button to return to the Jelly Belly home page.
6. Click the Home button to return to your home page (it doesn't matter what it is).
7. Click the Search button to go to Netscape Net Search.

3.5 **Customizing the Toolbars**

You can move the Navigation. Location, and Personal toolbars around at the top of the Navigator window, as well as you can shrink or hide those toolbars if you want to see more page less toolbar.

- To move a toolbar, click its left edge and drag it above or below another toolbar.
- To collapse or expand a toolbar, click the expander arrow at the left edge of the toolbar. (It looks like a blue triangle.)
- To view or hide a toolbar, select View, *toolbar* from the Communicator menu bar, where *toolbar* is the name of the tool bar you want to view or hide.

3.6 **Clicking Links**

To move from one web page to the next, you can type a URL into the Location field (as you did in the "Opening a Web Page" section), or you can click the links you will find on most web pages to visit a different page.

A link contains the URL of the page you want to sec. Most of the time you won't need to know a page's URL because it is included as part of the link on the web page. On many pages, a blue link represents a page you haven't viewed yet, and a purple link represents one that you have visited.

Fig. 11.5

Activity 1

Use the Navigation Buttons and try the following after clicking the browser:

1. Type the URL www.jellybelly.com in the Location field.
2. Press the Enter (Return) key.
3. Watch the big N logo and/or the status bar to see when the page has finished downlbading. (When it's finished, the comets stop streaming and the word "Done" appears on the status bar.)
4. Click the Back button to return to the Netscape Netcenter home page.
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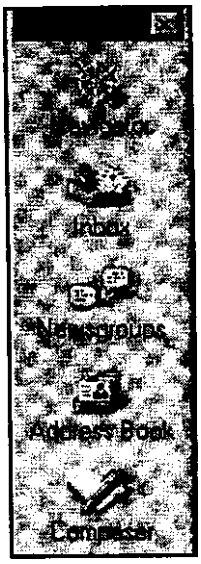

Fig. 11.5

Activity 1

Use the Navigation Buttons and try the following after clicking the browser:

1. Type the URL wvvw.jellybelly.com in the Location field.
2. Press the Enter (Return) key.
3. Watch the big N logo and/or the status bar to see when the page has finished downlbading. (When it's finished, the comets stop streaming and the word "Done" appears on the status bar.)
4. Click the Back button to return to the Netscape Netcenter home page.
5. Click the Forward button to return to the Jelly Belly home page.
6. Click the Home button to return to your home page (it doesn't matter what it is).
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You can move the Navigation. Location, and Personal toolbars around at the top of the Navigator window, as well as you can shrink or hide those toolbars if you want to see more page less toolbar.

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- To view or hide a toolbar, select View, *toolbar* from the Communicator menu bar, where *toolbar* is the name of the tool bar you want to view or hide.

3.6 **Clicking Links**

To move from one web page to the next, you can type a URL into the Location field (as you did in the "Opening a Web Page" section), or you can click the links you will find on most web pages to visit a different page.

A link contains the URL of the page you want to see. Most of the time you won't need to know a page's URL because it is included as part of the link on the web page. On many pages, a blue link represents a page you haven't viewed yet, and a purple link represents one that you have visited.

4.0 Conclusion

Netscape is a software that you use to view information on the World Wide Web. Every page on the web has its own unique URL which identifies its location on the Internet. The Toolbar consists of clickable buttons that enable you Navigate through the web.

5.0 Summary

In this unit, we explored the Navigator window and its tools, and demonstrated the basic browsing techniques, such as opening web sites using URLs and links to move to other web sites.

6.0 References and Suggestion for Further Reading

http:/ www. m icroso ft . c o m/
http:/ home.netscape.com/.

7.0 Tutor-Marked Assignment

Question
Discuss the functions of a Browser and why you need to know the URL of web page.

UNIT 12: Netscape Browser — Bookmark, History and Web Browsing

Table of Contents

1.0 Introduction

You can choose any page on the web to use as your home page which is the first page you see when you start Netscape Navigator. The History window is helpful and detailed, but it tracks all the sites you have typed in, not just the ones you like. Bookmarks and bookmark folders are arranged like folders and files on your hard drive containing the location of your favorite web page. The Netcenter home page contains a handy search box for locating information on the WWW.

2.0 Objectives

At the end of this unit you should be able to use the Netscape browser to:

- Set your home page
- Use the History List
- Create and manage your Bookmark
- Use Netscape's Search Engine
- Speed Up Web Browsing

3.1 Setting a Home Page

The first page you see when you start Netscape Navigator or Communicator is called the home page. Your home page is probably Netscape's home page, your Internet service provider's home page, or your company's home page. You can choose any page on the web to use as your home page.

Go to the page you want to use as your home page.

- From the Navigator menu bar, select Edit, Preferences. The Preferences dialog box will appear.
- In the Preferences dialog box, click Navigator in the Category list. That panel will move to the front.

In the Navigator panel, click the Use Current Pagebutton to set the page you just visited as the home page

Or

Type (or paste) the page's URL into the Home Page Location text box.

1. Click OK to close the Preferences dialog box.

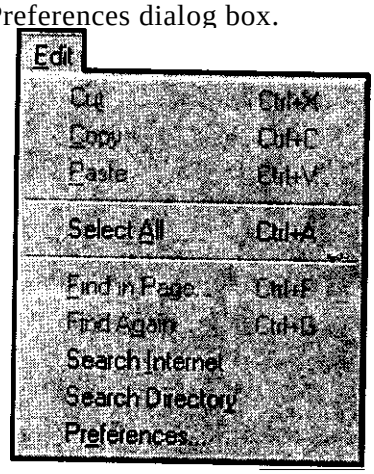


Fig. 12.1

3.2 Using the History List

You can quickly return to the web pages you have visited since you opened and started using Navigator. On Navigator's menu bar, click the Go menu to see a partial history list, which displays titles of the

pages you have visited recently. You'll see a checlunark beside the title of the web page you're currently viewing. To return to a page you visited earlier, simply select it from the menu.

Fig. 12.2

To display complete history information, select Communicator, Tools, History from the Navigator menu bar. On Windows systems, the History window will show information about pages you have visited during your current and previous browsing sessions.

You can hold down the Back or Foward buttons on the Navigation bar to see a list of the pages you can go back or forward to.

3.3 Bookmarking Your Favorite Sites

If you want to save the location of a favorite page or if you want to visit certain pages often, you'll want to create bookmarks for those pages. Bookmarks are saved on the Bookmark list until you decide to delete them.

Exercise 1

What is the important of History list?

You can quickly return to the web pages you have visited since you opened and started using Navigator using the History list.

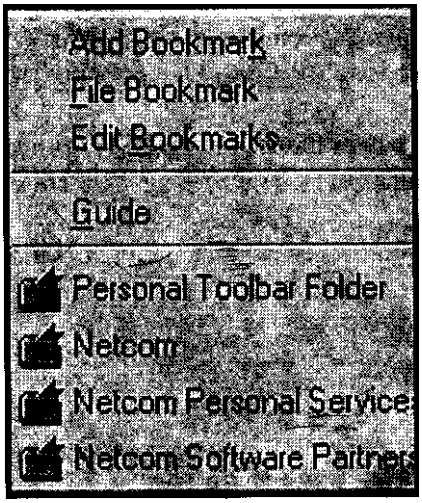


Fig. 12.3

The easiest way to access bookmarks is by using the Bookmarks menu.

Fig. 12.5

- On Windows systems, hold down the Bookmarks button on the Location toolbar to view the list of bookmarks.
  You can then select any bookmark from the list to visit that web page.

3.3.1 Creating a Bookmark

- Go to the page you want to bookmark (for example, www.nasa.gov). You can bookmark a page for which you typed the URL into the Location field, or you can bookmark a page you visited by clicking a link.
- Hold down the Bookmarks button on the location toolbar and select Add Bookmark to add a bookmark for the current page to the bottom of the Bookmarks menu.

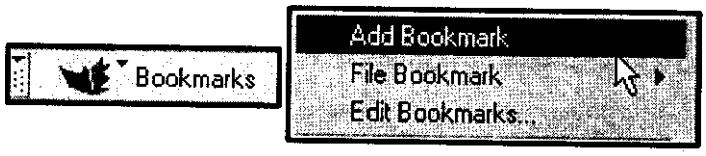


Fig. 12.6

Communicator comes with a set of handy, preinstalled bookmarks sorted into categories like Entertainment, Shopping, and Sports. Explore these sites to learn your way around and web.

3.3.2 Organizing Your Bookmarks

You can organize your bookmarks using the handy Bookmarks window. Besides adding new bookmarks, you can rename them, file them into folders, and delete them. When you use the Bookmarks window to organize your bookmarks, Netscape Navigator updates the Bookmarks menu automatically.

3.3.3 Organizing Your Bookmarks in the Bookmarks Window

To create a new folder for bookmarks, select File, New Folder from the Bookmarks menu bar.

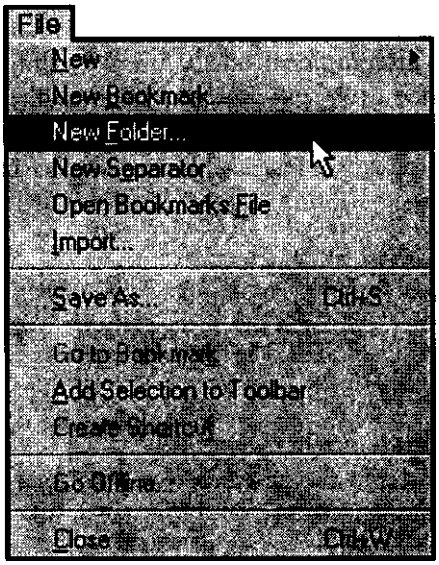


Fig. 12.6

- When the New Folder window appears, type a name for your folder in the Name text box and click OK.

To move a bookmark into a folder, click on it and drag it onto the folder where you want to store it.

- To rename a bookmark, click the bookmark to select it. From the Bookmarks window menu bar, select Edit, Bookmark Properties (Edit, Get Info on the Mac). A dialog box with the same name as the bookmark will appear. Type a new name for the Bookmark in the Name text box.
- To delete a bookmark, click the bookmark icon on the list and press the Backspace (Delete) key on your keyboard.

3.4 Net Search

Netscape's search engine is called Net Search. Net Search lets you choose between six different search tools: Netscape Search, Alta Vista, Excite, Infoseek, LookSmart, and Lycos. All these tools contain slightly different information, but each works much the same way.

3.4.1 Search the Web Using Net Search

- You can search for a piece of text on a particular web page. From the Navigator menu bar,

select Edit, Find (or Find in Page). When the Find dialog box appears, type of word you're looking for in the text box and click Find. The word will be highlighted in the Navigator window.

Or

Click the Search button on Navigator's Navigation toolbar. Navigator will load the Net Search page.

- Type the words or phrase you are looking for into the text box.
- Press Enter (Return) or click the Search button.

In a moment, Navigator will load a page that contains links to pages related to the words you typed. When something looks interesting, click the link. You can always use the Back button or the Go menu to return to the Search results page.

If you don't find what you're looking for, you can try your search again with a different search tool. Just go back to the Search page and click the name of a different search engine. The words you're searching for will appear in the new search tool automatically.

3.4.2 Browse Web Directory

A directory is similar to a search engine in that it, too, stores information about the web in a database. While search engines catalog every page they can find, a directory includes only the information about pages that human beings have selected. These pages are sorted into categories. Most directories let you choose between typing words in a search box and clicking the names of categories to browse the information like a library.

Netscape's directory is called Web Director

The Netcenter home page functions much like a directory. You can click the name of a topic that looks interesting to access news, related links, special offers, and handy tools related to that topic.

Exercise 2

I-low many search tools does net search provide you with?

As indicated above Net Search lets you choose between six different search tools, Netscape search, Altavista, Excite, Infoseek, Looksmart and Lycos.

Click the No to visit Netcenter, then choose a search tool from the pull-down menu. Type in your phrase, clic the button, and go!

3.5 Speeding Up Web Browsing

You may have noticed that web pages load into your browser window at different speeds. The speed of a page's download (or transfer) depends on several factors, including the speed of your Internet connection or modem, the length of the page, and the number of images and sounds the page contains.

If you have a slow Internet connection and want to speed up web page downloads, you can instruct Netscape Navigator to replace the page's own images with small icons, called placeholders, when it loads a page.

3.5.1 Turn Off Automatic Image Loading

From the Communicator menu bar, select Edit, Preferences. The Preferences dialog box will appear.

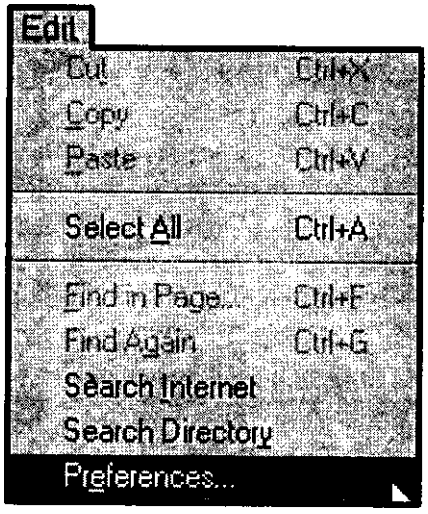


Fig. 12.7

- Click Advanced on the Category list. That panel will move to the front.
- Windows: Uncheck Automatically Load Images. Macintosh: Uncheck Automatically Load Images And Other Data Types.
- Click OK to close the Preferences dialog box and return to the Navigator window.

The next time you access a web page, you'll see little placeholders instead of the images that would normally load with the page, and your toolbar will have a new button called Images.

When you turn off automatic image loading, you can still decide to view images. If you have auto image loading turned off, click the Images button on the navigation toolbar to load the images on that page. To view a single image without loading other images, click the image's icon on the downloaded web page.

Exercise 3

What effect will turning off your automatic image loading give?

Images on a general note slow down the downloading of a web page so turning it off will increase the speed of loading the web page.

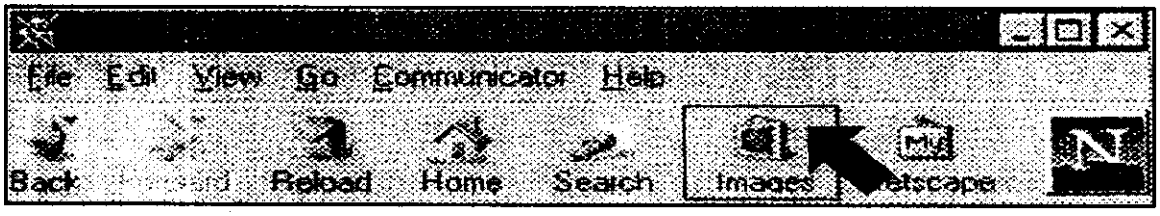


Fig. 12.8

4.0 Conclusion

Your home page is the first page you see when you start Netscape Navigator. The History window allows you to quickly return to the web pages you have visited since you opened and started using Navigator. While the Bookmarks will help you to organize your bookmarks and manage it. Images on the web page can affect the speed at which it is downloaded which can be controlled with Netscape Navigator.

5.0 Summary

We've seen how you can keep track of sites you have visited using the history list and how to manage and organize this site on your bookmarks for easy access subsequently. I have also explained how to set your home page as the startup page anytime you start the Netscape Navigator.

6.0 References and Suggestion for Further Reading

Widernet Project, *(http//www)* widernet.org
Microsoft Windows *(http/Iwww)* Microsoft.com
OpenContent License *(http://www/opencontentorg/).*

UNIT 13: Outlook Express — Toolbars and Composing Messages

Table of Contents

1.0 Introduction

Outlook Express offers you the ability to communicate on line on your desktop, whether you want to exchange e-mail with colleagues and friends or join newsgroups to trade ideas and information. In this unit and subsequent units, you will learn how to use Outlook Express for these purposes.

2.0 Objectives

At the end of this unit you will be able to:

- Identify Outlook Express toolbar and its window panes
- Compose a New Message
- Identify the basic components of a message.

3.1 Starting Outlook Express

In order to experience Outlook Express first-hand, we are going to open the programme. Do this now by double-clicking on the Outlook Express icon under Programme as indicated in Fig. 13.1.

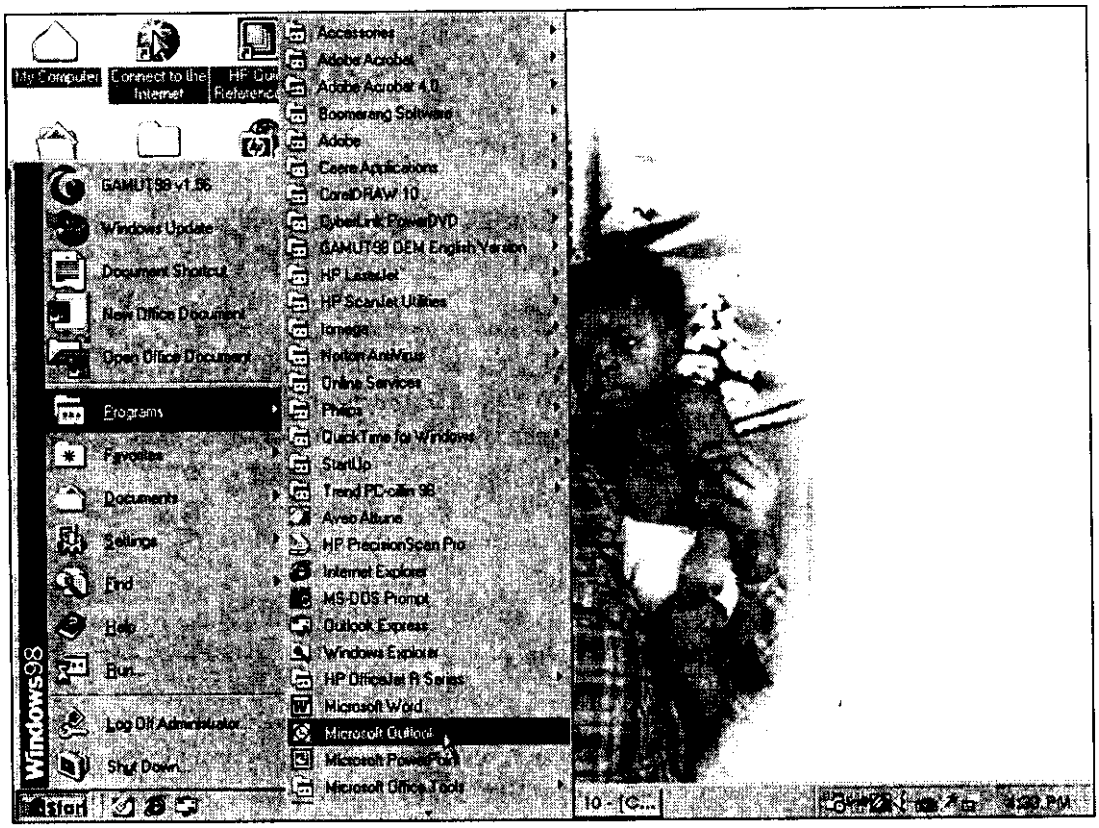


Fig. 13.1

A screen similar to Fig. 13.2 should appear.

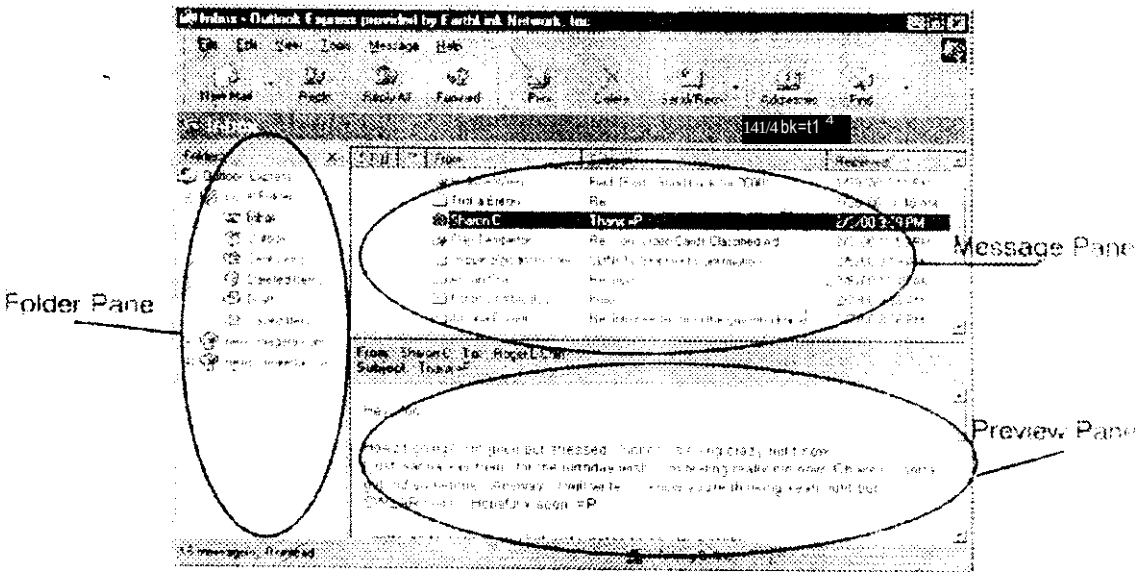


Fig. 13.2: *Main Window of MS Outlook Express*

3.2 The Outlook Express Main Window

The main Outlook Express window consists of the main toolbar and three smaller window panes. They are the folder list pane, the message pane and the preview pane.

3.2.1 The Folder List Pane

The folder pane lists all the folders where you store your messages in. Some of the more common folders are the Inbox, Outbox, Drafts, Sent Items and Deleted Items. The Inbox is where all the new mails you receive are placed. The outbox is where the mail you have finished composing is kept until they are sent. The Drafts store e-mail which you have not finished composing. The Sent Items folder contains all the mails that have been sent. The Deleted Items folder contains e-mail items that you have either composed or received that are deleted.

3.2.2 The Message Pane

The message pane shows all the messages contained in your folder. For each message you have, it indicates the message priority (high, medium or low), whether it has an attachment, who sent the message, the message subject and the date the message was received in your mailbox. In the From: field, there will be an envelope next to the sender's name. If the envelope is closed and the message is bolded, it means that the message has not been read yet. An open envelope means that the message has been read. If there is an arrow pointing to the left, it means that the message has been replied to. An arrow pointing to the right on the envelope means that the message has been forwarded to someone else. Messages with a paperclip means that there is a file attached with the message. See Figure 13.2 for example. Clicking on a message will display the contents of the message in Preview Pane,

3.2.3 The Preview Pane

The preview pane shows the contents of a message from the message pane. From here, you can also view and save your attachments.

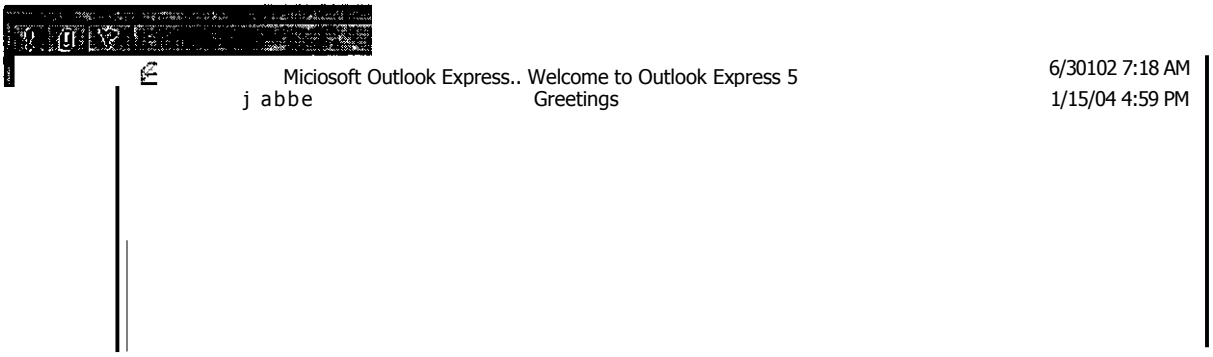


Fig. 13.3

Exercise 1

State the main Outlook Express window and its components.

The main outlook express window consists of the main toolbar, the folder list pane, the message pane and the preview pane.

3.3 **Composing a New Message**

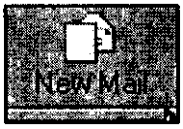


Fig. 13.4

An outgoing message is a typed text you send to someone (i e. an e-mail message that you send). There are two simple ways to create an outgoing message. You can either select file, new, **Mail Message** or select the **New Mail** icon. Once you make this selection, a new message window will display. Note that the toolbar displayed in this window is different from the main toolbar in Outlook.

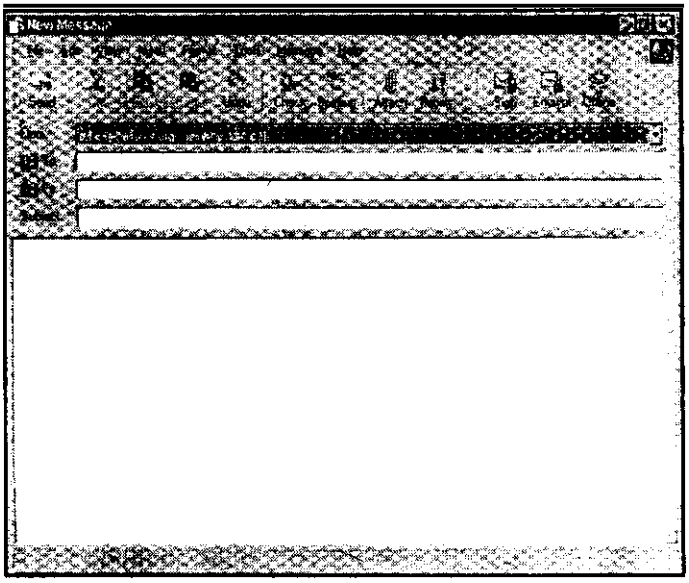


Fig. 13.5: *New Message Window*

3.3.1 New Message Window Toolbar

The New Message window has a different toolbar than Outlook's Main Toolbar. The buttons from this toolbar that we will be using are:

Send	Sends mail either to the queue in the Outbox folder or sends it to the sender immediately, depending on how Outlook is configured.
Cut	Cuts or deletes selected text
Copy	Copies selected text.
Paste	Inserts text that has been cut or copied.
Undo	Undo the last change you made; does not work for everything though.
Check	This button checks the e-mail address of the recipients of your e-mail against the addresses in window's Address book.
Spelling	Spell checks your e-mail document using the language specified in the Options menu.
Attach	Attaches a file to your e-mail.
Priority	Clicking on this sets the e-mail priority from high, low and none.
Off-line	Working off-line tells Outlook not to try to connect to the Internet to check for or send mail. This is used mainly when you want to compose or check your mail on your hard drive without connecting to the Internet.

The Sign button digitally signs any e-mail you send, thus allowing your recipients to be sure that any e-mail you send is from you and not someone else pretending to be you on another computer. The Encrypt button 'scrambles' or encrypts your message so that only your recipient can decode and read the message. Both these features require additional software to be installed in order for it to work.

3.3.2 Writing a New Message

The first thing you do when you write a message is type in the recipient's e-mail-address in the To: field. If the message has more than one recipient, you can type additional e-mail addresses as well. separating them with a semi-colon or comma (" or " .") or a combination of both. See example in Fig. 13.6.

Notice that the From: field is automatically filled in, bearing your name and address (or the address that the e-mail package is configured to). This is the address that will notify the receiver who the sender of the message is.

Before composing your message, it is important that you indicate what your message is about. You can do this by moving your cursor to the Subject: field. To do this, you can press the Tab key or use the mouse. In the Subject: field write a word or short sentence describing the essence of your message.

Now that you have completed the basic components of your message, begin writing the message. Place the cursor in the large white area. Write your message here. When you finish writing, the composition window should look something like the following example.

Usually, after you are done composing your message, you click on the Send button which appears on the top left hand side of your message window. But for now, just click on File, Send Later. We will learn more about sending messages in the next section.

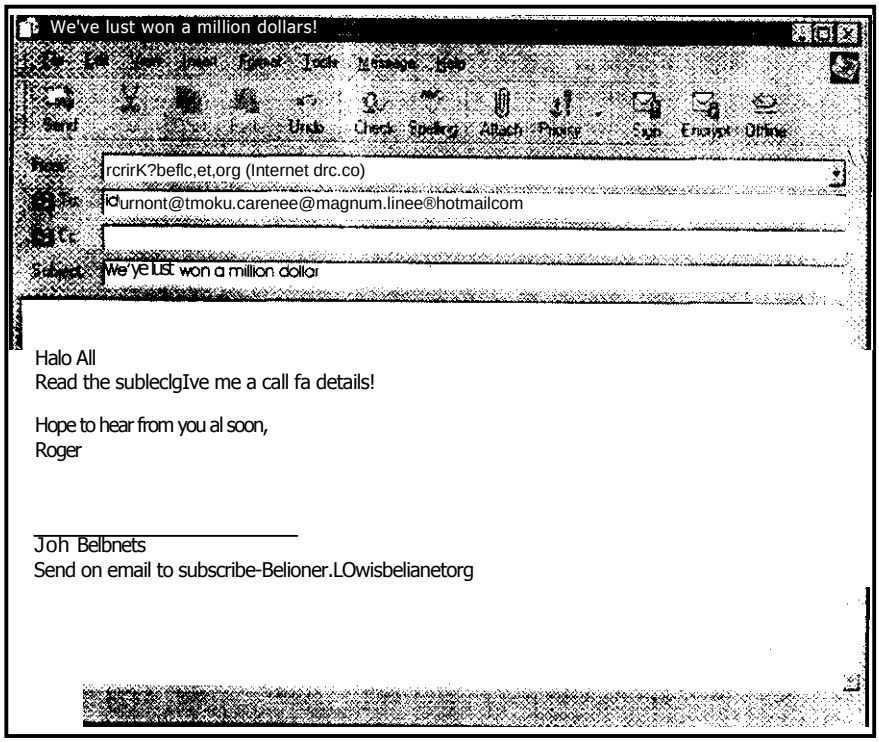
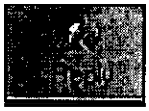
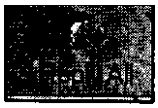
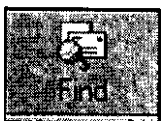


Fig. 5: *New Message Header*

Exercise 2

State the functions of each icon indicated below:

Icons	Function	Icons	Function
			
			
			
			

Use your mouse and point at each of these icons and you will see the functions they perform.

4.0 Conclusion

Exchanging e-mail with friends or joining newsgroups to trade ideas and information is made easy with Outlook Express. The main toolbar and three smaller window panes (the folder list pane, the message pane and the preview pane) have been examined with a view of understanding how to use them. The New Message Window provides you with tools to compose and send your e-mails.

5.0 Summary

In this unit, we studied how to start your Outlook Express and identify the major components of the toolbar and window panes. Preview pane which shows the contents of a message from the message pane and how to compose a new message were carefully studied.

6.0 References and Suggestion for Further Reading

Gildr. G. (1991) "The Information Hyperway" Oregon Quarterly
Open Content License (http://www.opencontent.org/).
WWW metrics (http://www.wwwmetrics.com)
Mediametrix (htttp://www.mediametrix.com/data/thetop.jsp)
Miscrosoft word Ofttp://www.microsoft.com

7.0 Tutor-Marked Assignment

Question
Compose a few messages using the steps explained. Write to the instructor, informing him that you have just started the first unit on Outlook Express.

UNIT 14: **Outlook Express — Sending, Queuing Messages and Attachment**

Table of Contents

1.0 Introduction

A term associated with composing all your messages and storing them in the Outbox before sending them is called *queuing* a message. Queuing a message means to place a message you compose in an outgoing area to be sent later. You can place several messages in the queue. This procedure helps to reduce the amount of time that your computer uses in connecting to the Internet and in that way, it is an efficient way of sending e-mail messages at a cheap cost. Two important words associated with queuing and sending messages are on-line and off-line. On-line means that you are connected to the Internet and off-line means you are not connected to the Internet. Unless you are not billed for the amount of time you are connected, the most efficient method to compose your messages is in off-line mode.

Normally, when you write an e-mail message, you can say everything you wish to say in the body of the message. However, you might have additional information in a different format that you also want to send. That information could be a report written with word processing software, a spreadsheet file, a database file or even a small computer programme. You can send this information as an attachment in your e-mail message.

2.0 Objectives

The objectives of this unit are as follow:

- To identify the importance of queuing your message;
- To state the recommended steps for composing messages;
- To read your mail;
- To state how to attach a document to your mail;
- To receive, open and save attachments;
- To sort and manage your mail.

3.1 Sending Messages Immediately/Later Option

By default, whenever you click on the Send button, Outlook Express tries to connect to the Internet and send the message immediately. This can cause errors if your computer is not connected to the Internet when you click on the button. Additionally, your Internet Service Provider (ISP) or telephone company may bill you every time you connect to the Internet to send-e-mail. Thus, a recommended way to send messages is to first compose all your messages as we have done in the previous section before connecting to the Internet and sending your e-mail. Outlook Express can also be configured such that when you click on the send button after composing a message, it is automatically placed in your outgoing mail folder but not sent until you tell it to. To do this, go to Tools, Options. Select the Send tab and uncheck the Send messages immediately option.

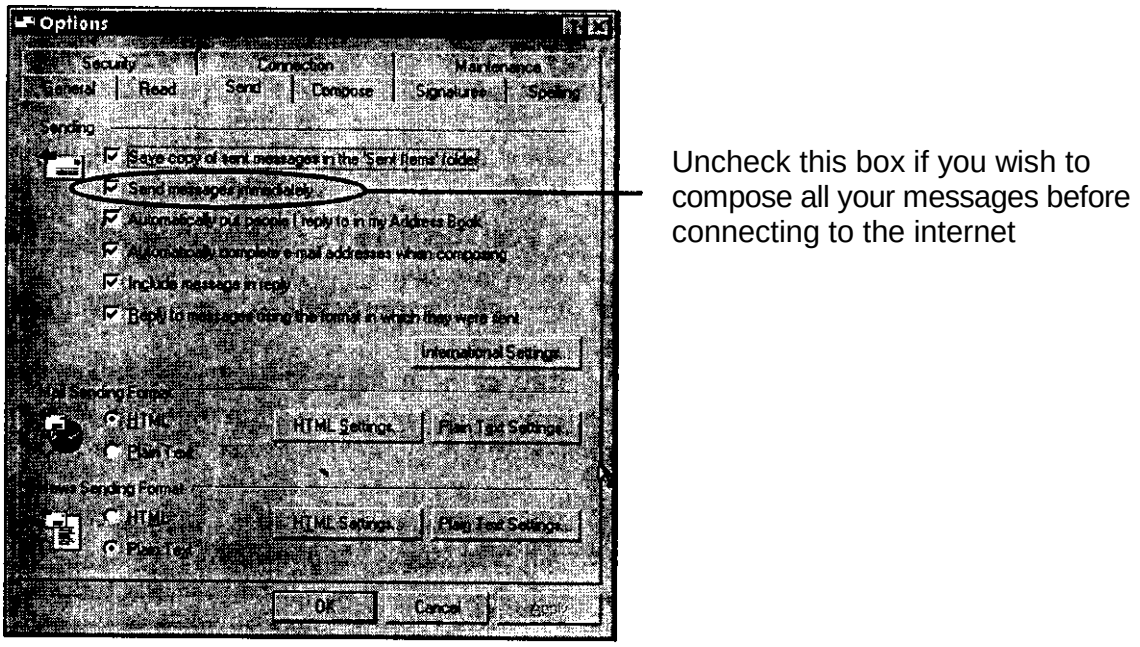


Fig. 14.1: *Sending Messages Immediately/Later Option*

3.2 Recommended Steps for Composing Messages

In summary, the recommended steps for composing messages are:

1. Compose a message
2. Place the message in the **Outbox** by selecting **file. Send Later or configuring** Outlook to automatically place the message in your **Outbox** without sending it when you click on the **Send** button. Repeat steps 1 and 2 until you are done composing all your messages.
3. Connect to the Internet and send your queued messages. To send all of your queued messages, select **lools, send** and **Receive, Send and Receive** All. Check your mailbox for incoming mail. If you are not connected to the Internet Outlook it will automatically ask you if you want to connect. Select Yes. In other cases, depending on how the programme is configured. Outlook will automatically connect to the Internet.
4. Disconnect from the Internet
5. Read your new messages (if any)
6. Reply to messages or compose new messages. Go back to step 2.

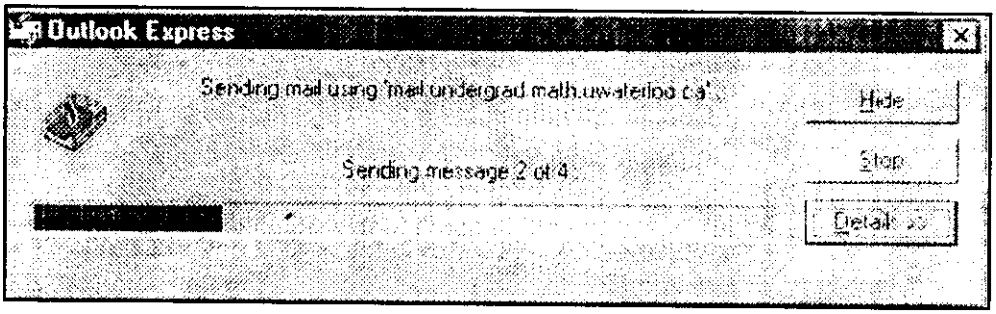


Fig. 14.2: *Sending Mail Status Window*

Activity 1
Open your Inbox folder and see if you have a mail. Identify what is similar in each message. Now download your mail by going to Tools, Send and Receive, Receive All.

3.3 Receiving Messages

Mailboxes for electronic mail are housed on computer servers. The server, where your electronic mail is stored, is often called a POP server. POP stands for Post Office Protocol and this is the standard that allows you to retrieve your mail from a server.

To retrieve your mail from the server, simply click on the Send/Recv icon or select Tools, Send and Receive, Send and Receive All.

Each time you open Outlook and check mail for the first time, you will need to enter a password for your POP account. You can have Outlook store and use your password automatically (see Configuring Outlook). However, if you do that, anyone who accesses your computer can also download your e-mail.

After you have downloaded mail as described above, you can read it. One way to find out if you **have** received new mail is from the icon displayed in your start up toolbar.

Fig. 14.3: *New Mall Icon*

Exercise 2

How can you tell that you receive messages?

Whenever Outlook Express icon is displayed in the start up toolbar, then you have a new message'.

3.3.1 **Opening a Message in Your Folder**

The first step in reading your mail is to open a folder. Outlook Express stores your new mail messages in a folder called Inbox.

You can access your new mail by clicking on your **Inbox** icon near the top left of the screen. When you do this, the Messages pane (window pane on top right of screen) will show all the messages in your **Inbox.** Unread messages are displayed in bold and read messages are shown in regular text.

Clicking on one of these messages will display the contents of the message in the Preview pane below the Messages Pane. Double clicking an item in the message pane will display the contents of the message in a new window.

3.3.2 **Replying To and Forwarding Messages**

Many of the e-mail messages you send will be written as replies to someone. To reply to a message you have opened and read, select Message, Reply to **Sender** or **Message, Reply to All.** Choosing the second option sends a reply to the sender and all the other recipients of the original message. Alternatively, you can select the Reply or Reply **All** icons on the toolbar. When you select the **reply**

icon, Outlook displays a new message window. it will automatically place the original sender's address in the **To:** field of the header. Replies also place the subject of the message you received on the subject line adding **Re;** *(regarding)* before the subject. All of the sender's original text is quoted in the message body. You should edit this text and only leave key phrases. You may also remove all the quoted text. You will then add your additional text that replies to the incoming message.

3.3.3 Forwarding a Message

There are times when you will receive an e-mail message that you would like to send or forward to someone else. To forward the current open message, select the **forward** icon. A new message with the original sender's text quoted in the message body will appear. After entering the intended recipient's e-mail address in the **To:** field, queue the message in the normal manner and send it.

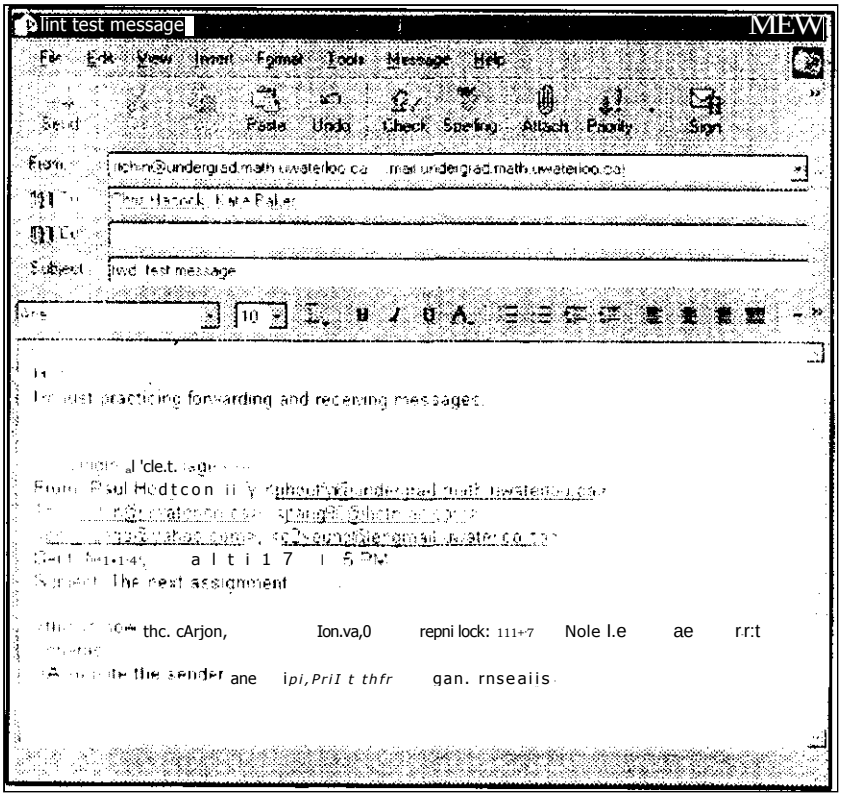


Fig. 14.5: *Example of a Forwarded Message*

3.4 **Attaching a Document**

Additional information in a different format can be sent with your e-mail as an attachment. That information could be a report written with word processing software, a spreadsheet file, a database file or even a small computer programme. Sometimes, different software and different operating systems experience difficulties talking to each other. As a result, people occasionally experience problems accessing attachments.

Outlook Express displays a 'paper clip' icon in the message pane next to your message if you have an attachment. On the top right of your preview pane, there will also be an icon with a paper clip. Clicking on this icon will show you the filename(s) of the attachment(s) and also give you the

option to save the file(s) in your hard drive. You can either save the file or click on the file name. Clicking on the filename will launch the application that is associated with the file. The application will, of course, only launch if you have the software application that the attachment was created in and the sender has used the default extensions at the end of the document (ie **'doe'** for Word and **`wpd'** for WordPerfect). If your computer does not understanding the format of the attached document. it will prompt you to identify the application.

To attach a file to an outgoing message, follow these steps:

1. Create a file using Notepad or a word processor. Save it.
2. Compose a new e-mail message as you would normally do.
3. To attach a file, select the **Attach** icon on the toolbar in the message composition window. The **Attach File** dialog box will appear.
4. Select the file you have prepared.
5. Click on the **Attach** button to attach the document to the current message. Notice that there is now an **Attach** field in your **New Message** Window with the file name you have selected.
6. When you are done composing your message, click **Send.**

Exercise 3

State one reason why you want to attach a document to your e-mail.

If you want a document to retain its formatting then you can send it as an attachment to your e-mail.

3.5 Receiving and Opening Attachments

To save an attachment to your hard drive, click on **File, Save Attachments** or click on the paperclip in the message window. Select the file that you want to save (if there is more than one) and click on the **Save** button. Don't forget to note where you save the file! You can then open it using a word processor, spreadsheet, etc.

Exercise 4

How do you identify that your mail is carrying an attachment?

A paperclip displayed on your message window indicates that the e-mail has an attachment.

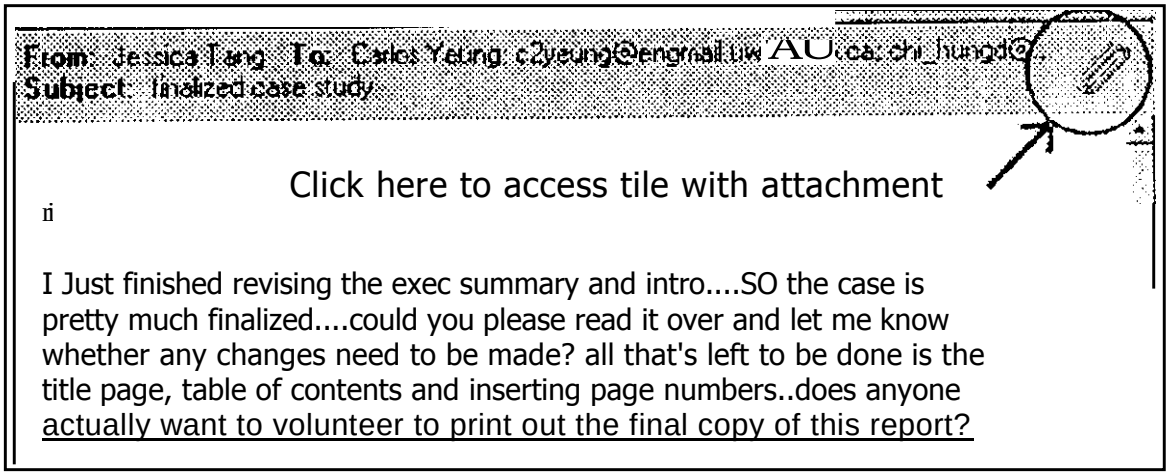


Fig. 14.6: *Files with Attachments*

3.6 Managing Your Messages

3.6.1 Sorting messages in your Mailbox

On this page, we illustrate examples of messages. You may find that your mail folders are becoming very large and contain many unimportant messages. You can delete these messages, if you wish, by simply clicking on each message you want deleted in the message pane and pressing delete.

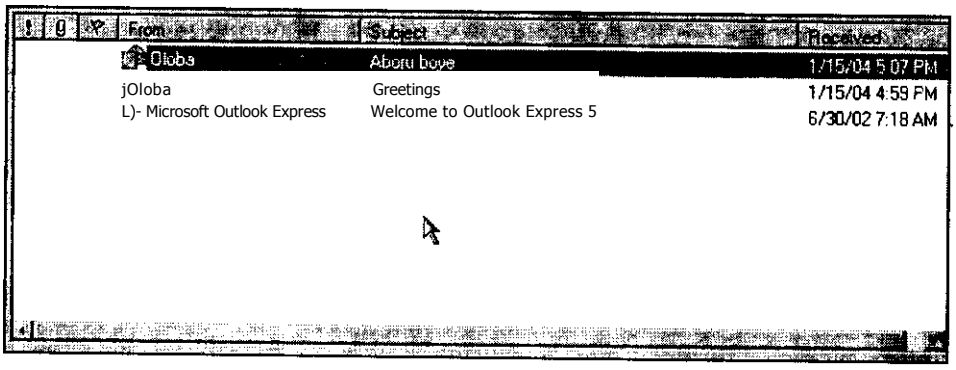


Fig. *Sorting Messages (sorted by date received)*

3.6.2 Deleting Messages

After a few weeks of sending and receiving messages, you may find that your mail folders are becoming very large and contain many unimportant messages. You can delete these messages, if you wish, by simply clicking on each message you want deleted in the message pane and pressing delete.

To select many messages simultaneously, you can click on the message, hold down the *MO* key and click on another message in your folder. All messages between the first and last message you click on will be selected. If you press delete, all these messages will be deleted. If you want to select many messages that are not in sequential order, you can hold down the *Or/* key instead. This will select just the messages you click on and again, pressing delete will delete the messages you have highlighted.

Deleted messages in Outlook get sent to your **Deleted Items** folder. To *permanently* delete your messages, you simply open your **Deleted Items** folder, select Edit and **Empty 'Deleted Items' Folder.**

It is also possible to set up Outlook to empty your **Deleted Items** folder automatically when you exit the programme. To do this, go to Tools. Options... and select the **Maintenance** tab Place a check mark in the *'Empty messages* from the *'Deleted Items'* folder on **exit'** box.

Be aware that there is no way to get your messages back after this. It is usually a good procedure to leave deleted messages in your **Deleted Items** folder for a few weeks or months until you are certain that you will no longer need them.

3.7 Creating Mail Folders

You may find that, even after deleting unwanted messages, your mail folders seem unorganized and complicated. One of the most useful actions you can take is to set up or create folders to sort and store your e-mail messages. There are several ways to organize your folders. You can set up folders for individual people, by project, by dates, activities, by organizations — or by any other criteria or combination of criteria.

To create new mail folders, go to **file, New, Folder ...** A dialog box will appear asking you to name the new folder. Simply type in the name and click **OK.**

3.7.1 Copying Messages to Another Folder

Instead of moving messages from one folder to another, you may want to copy them instead. This is done in the same manner as moving messages, but instead of selecting 'Move to folder...'. Choose 'Copy to folder...'.

3.7.2 Renaming and Deleting Folders

To rename a folder, simply right click on the folder in the folder pane. Select 'Rename...' and type in the new name of your folder. To delete a folder, simply right click on the folder and select Delete. Note that when you delete a folder, all your e-mail messages in that folder do not get sent to the Deleted Demi-older but instead, are deleted right away. Delete folders with care!

Exercise 5

Explain why you need to create folders for your mails.

Folders are other ways you can sort out your mails. You can organize your mails using folders for easy access.

3.8 Message Rules (Filters)

Message Rules in Outlook help to manage your mails — automatically. You can create the rules you want to use. For example, all mails from an individual could be automatically placed in a mailbox named after that person. The messages would be placed in that mailbox as it is downloaded to your computer. You manage the rules using the Message Rules window.

To open the Message Rules window, select Tools, Message Rules, Mail... The New Mail Rule window is displayed. From here, you can create rules on how you want to deal with specific e-mails. You will need to select the conditions and actions for the rule. When you are done, click OK and a list of all the rules created will be shown.

4.0 Conclusion

You can place several messages in the queue. This procedure helps to reduce the amount of time that your computer is connected to the Internet and in that way, it is an efficient way of sending e-mail messages at a cheap cost. If you have several mail or news accounts, you can use them all from one window. One of the most useful actions you can take is to set up or create folders to sort and store your e-mail messages. You can place additional information with your e-mail as an attachment.

5.0 Summary

In this unit we looked at how you can place several messages in the queue to be sent later. This procedure helps to reduce the cost of sending e-mail messages. We also looked at how you can attach additional information of different file format and send it with your e-mail as an attachment.

6.0 References and Suggestion for Further Reading

OpenContent License (http://www.opencontentorg/),
WWWmetrics (htt://www.wwwmetrics.com)
Mediametrix (http://www.mediametrix.com/data/theop.jsp)
Microsoft word(http://www.microsoft.com)

7.0 Tutor-Marked Assignment

Question

Describe the procedure for attaching a document to a mail you want to send to a friend.

UNIT 15: **Outlook Express: Using the Address Book**

Table of Contents

1.0 Introduction

In this unit, we will be looking at how to use the Outlook Express address book to store and retrieve your e-mail addresses, as well as automatically address any messages you want by clicking the name of the recipient.

2.0 Objectives

At the end of this Unit, you should be able to:

- Explain how to add address to your address book;
- Explain how to send same mail to different people at same time;
- How to use the To:, Cc: and Sec: buttons.;
- How to use the signature picker.

3.1 Adding an Entry to Your Address Book

When you click on the Addresses button in Outlook, it will open and show all your contacts and e-mail addresses. If you have more than one folder, then the address book will display the other folders as well. In this dialog box, you can create new address folders, rename existing ones and delete folders you no longer require. You can also add new contacts and create groups of contacts.

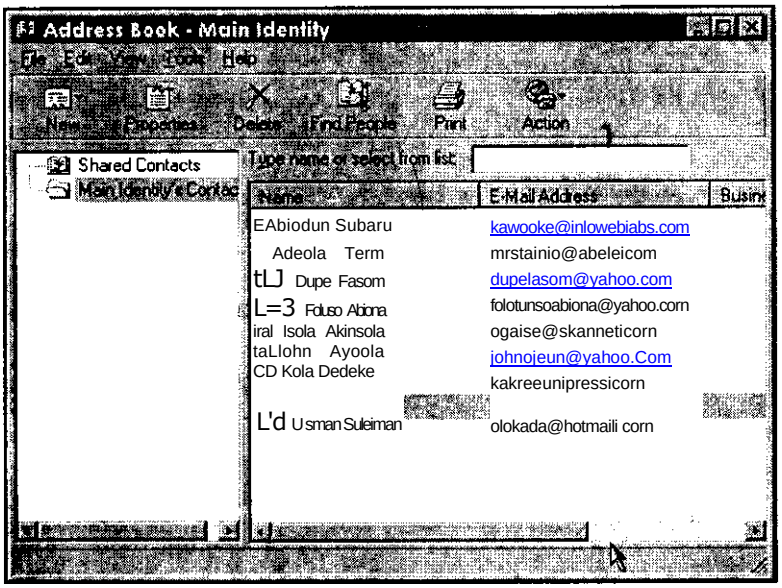


Fig.15.1: *The Address Book*

To add an entry to your address book, select the Addresses icon. Next, if you have more than one folder, select the one in which you would like to place the new entry. You can add new contacts, groups or folders

31,1 New Contact

When you select New Contact ..., a new dialog box appears which lets you fill out information about that person. The necessary fields which should be filled in are First: name or Last: name. All other fields are optional, although inputting the e-mail address will be very helpful if you are planning to use the address book with Outlook.

3.1.2 New Group

A group is a list of e-mail addresses of at least one person. You may want to create a group if you send e-mails to the same people all the time. For example, if you are working with 12 people on a project, you may not want to type in all their e-mail addresses every time you compose a new message. To create a new group, simply click on the New button on the toolbar in the address book, select New Group... and give a name for this group of contacts. Next, select the contacts that you want placed in this group and press Okay.

3.1.3 Adding Contacts to Your Address Book Using Outlook Express

You can quickly add the contacts from your e-mails into the Address Book by right clicking on the message in the message pane from the contact you want added and selecting Add Sender to Address Book. This will automatically place the contact's e-mail address and name as it appears in Outlook in the Address Book.

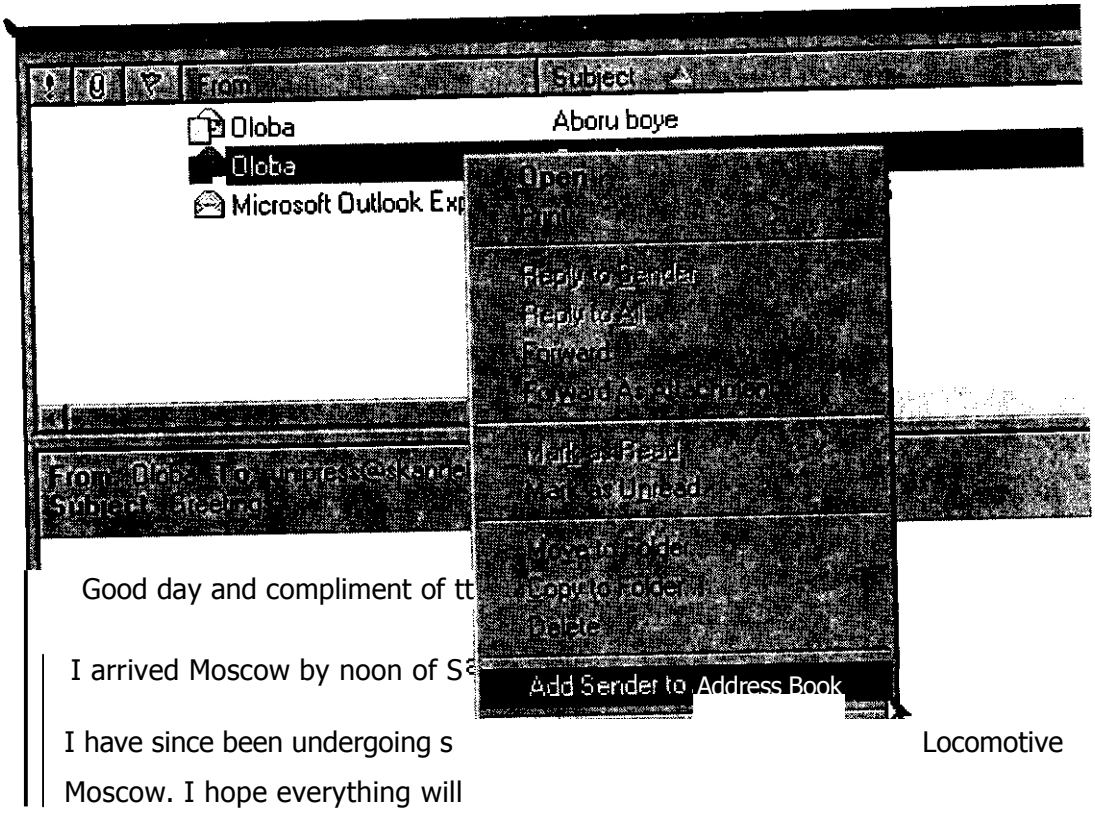


Fig. 15.2: *Adding the Sender to the Address Book Using Outlook*

Adding an entry to your address Book involves typing in the necessary particulars in your address book while add contact will automatically place the contacts e-mail address and the particulars as it appeared in the e-mail.

Exercise 1

Distinguish between Adding an entry to Your Address Book and Adding Contacts to Your Address Book using Outlook Express.

3.2 Selecting Recipients from the Address Book

You can open and address a new message from the Address Book using the To:, Cc: and Bcc: buttons.

To create a new message from the Address Book, click on the To:, Cc: or Bcc: buttons in your New Message window. This will bring up a window with all contacts from your Address Book. Select the entry or entries to which you want to address the mail (hold down the *Shift* key to select multiple entries in sequence or the *Ctrl* key to make disjoint sections). Then, click on To:, Cc:, or Bcc: The name(s) are inserted into the appropriate field. When you are done selecting your recipients(s), click OK.

3.2.1 To:, Cc: and Bcc: Fields

The To: field represents the main recipients of your message. The Cc: field means 'carbon copy' and is used when the message is not directed at the receiver, but you would still like him/her to know the contents of the e-mail. Finally, putting an e-mail address in the Bcc: field sends a copy of the e-mail to that person as well, but the e-mail address is not shown in the other recipient's e-mail messages. This is used when you want to send an email to multiple users without them knowing that it was sent to multiple users.

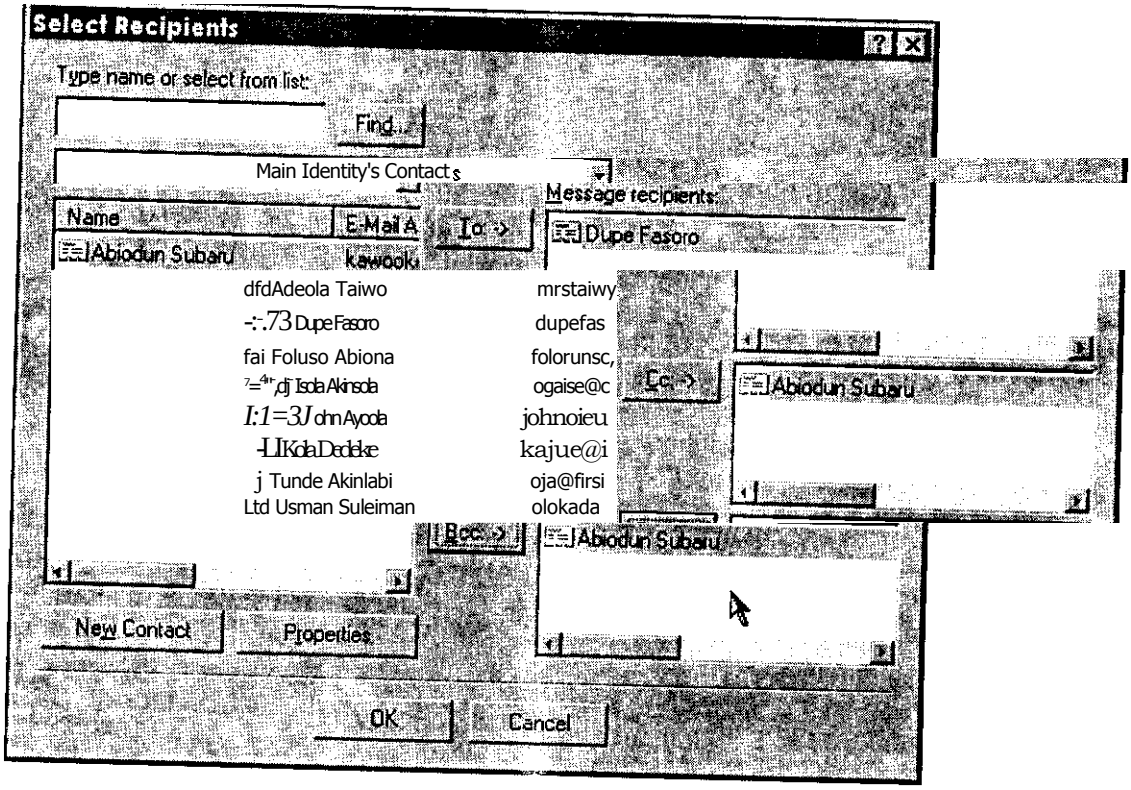


Fig. 15.3: *Selecting Recipients from the Address Book*

Activity 1

Add the sender's name from one of the e-mail messages you received into the Address Book without actually opening the Address Book. Next, open up the Address Book by clicking on the Addresses icon in Outlook. Add a new.

3.3 The Signature File

A signature file contains afew lines of text about your contact information that appears at the end of your e-mails. Once set up, Outlook automatically adds your signature to the end of every outgoing message. When people read your signature, they learn whom you are and how to contact you by ways other than e-mail. Also, electronic mailing lists sometimes do not include the sender's e-mail address in the sender information, so it is a good idea to place your e-mail address information in your signature. If you do this, other people will be able to communicate with you directly instead of going through the mailing list. Fig. 15.3 illustrates a signature in Outlook.

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Library and Information Science
Ahamadu Bello University.. Zaria
Nigeria — West Africa

Fig. 15.3: *Example of a Signature File*

To set up your signature file, go to Tools, Options ... Select the Signatures table and click on New. Next, in the Edit Signature text box, type in the signature you want added to the end of your e-mails. Click on Set as default, then Apply. At this point, you may also fill in the check boxes, depending on whether you want to apply the signature to all outgoing messages and whether or not you want the signature added to replies and forwards.

Exercise 2

State a reason why you will need to sign your mail.

Adding your signature in your mail will enable people to communicate with you through your e-mail address directly.

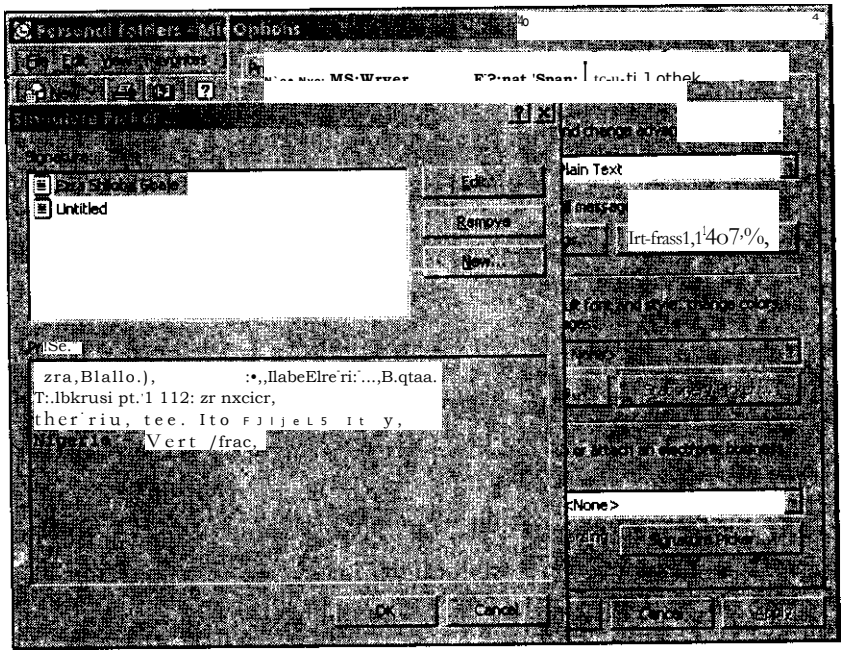


Fig. 15.4: *Example of a Signature File*

4.0 Conclusion

You can see all your contacts and e-mail addresses using the Addresses icon and also create a new groups of contacts. The address book can be used to create a new message by selecting the recipients from the address book. To: Cc: and Bcc: fields are used to send e-mail to multiple users without them knowing that it was sent to multiple users. You can insert essential information into outgoing messages as part of your personal signature, and you can create multiple signatures to use for different purposes. Adding a signature file will enable other people to communicate with you directly when they have to contact you for one reason or the other.

5.0 Summary

We have discussed how you can save names and addresses in your Address Book, automatically by simply replying to a message. We also discussed how you can send an e-mail to multiple users and also how to add essential information into outgoing messages as part of your personal signature.

6.0 References and Suggestion for Further Reading

OpenContent License *(http://www.opencontent orz/)*
WWWmetrics *(http://www.wwwmetrics.com)*
Mediarnetrix *(http://www.mediametrix.com/data/thetopjsp)*
Microsoft word *(hitp://www.miscrosoft corn*

7.0 Tutor-Marked Assignment

Question

When do you think you need to create a new group in Address Book? State the procedure for doing so.

UNIT 16: Outlook Express — Managing E-Mail Accounts

Table of Contents

1.0 Introduction

Outlook Express allows you to use and manage an unlimited amount of e-mail accounts. For example, you can have a business e-mail account and a home e-mail account separate from each other.

2.0 Objectives

At the end of this Unit you should be able to:

- Manage your e-mail account to Outlook;
- Explain the function of Post Office Protocol (POP) and (SMTF);
- Customize Outlook to suit your Simple Mail Transfer Protocol tastes.

3.1 Post Office Protocol (POP) and Simple Mail Transfer Protocol (SMTF)

To send and receive messages, you must have an account on a computer running a POP (Post Office Protocol) server and access to a computer running.an SMTP (Simple Mail Transfer Protocol) server. Both these protocols often run on the same server. Your incoming e-mail messages are delivered to your POP account, where Outlook picks them up and transfers them to your PC. Your outgoing messages are sent to the SMTP server, which delivers them to your recipients.

3.2 Adding a New E-mail Account

If you have a new installation of Outlook or if you are using a version that has not been set up for you personally, you will need to configure it. When Outlook is configured properly, it connects to your Internet Service Provider (1SP), uses your e-mail address and automatically includes your name with e-mail messages you send. To add a new e-mail account, select Tools, Accounts ... and the Mail tab. The box below displays the e-mail accounts you have registered with Outlook. To add an account, click on Add, Mail ...

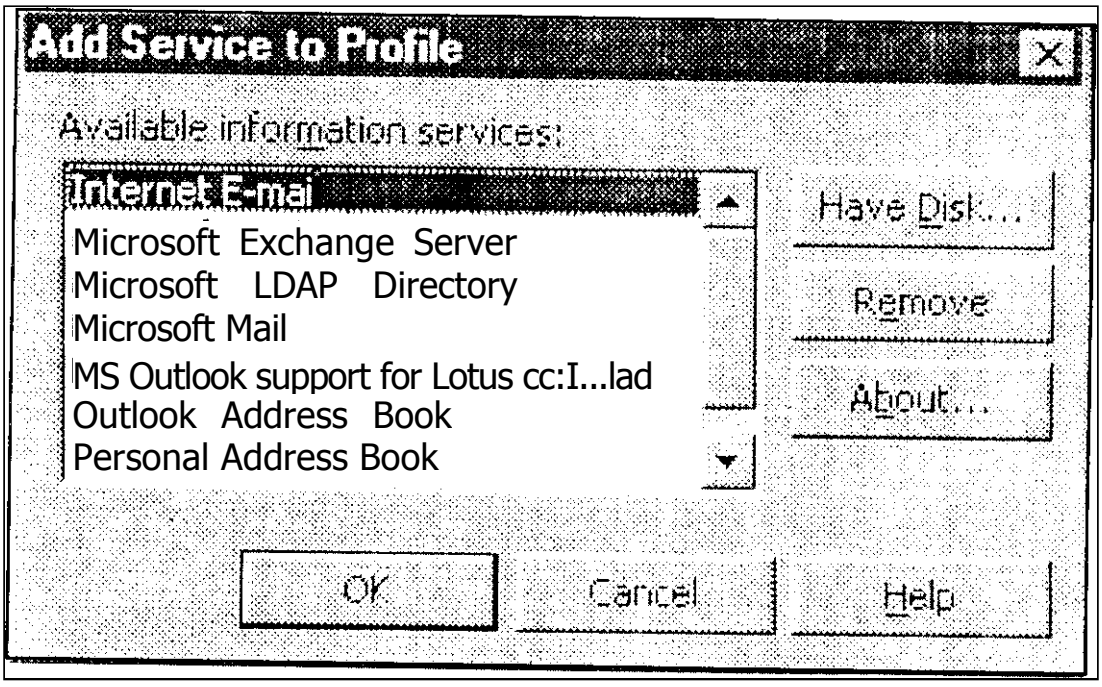


Fig. 16.1

Exercise 1

State why you need more than one e-mail account.

Several e-mail accounts will enable you effectively manage your time and mails. The Post Office Protocol handles all your incoming e-mails while all the outgoing messages are handled by the Simple Mail Transfer Protocol.

Next, follow the on screen prompts to fill out your display name, e-mail address and your POP3 and SMTP account names. Usually, it is your domain name preceded by "mail." For example, an e-mail address of "shiloba@yaboo.com" will typically have a POP3 and SMTP server name of "mail.yahoo.com" (without the quotations). Again, you will have to check with your ISP for the exact name. Next, you will have to fill in your account name (usually your username) and your password. If you place a check mark in the "remember password" box, you will not be prompted for the password every time Outlook checks for or sends e-mail.

Exercise 2

State the functions of the Post Office Protocol (POP) and Simple Mail Transfer Protocol (SMTP).

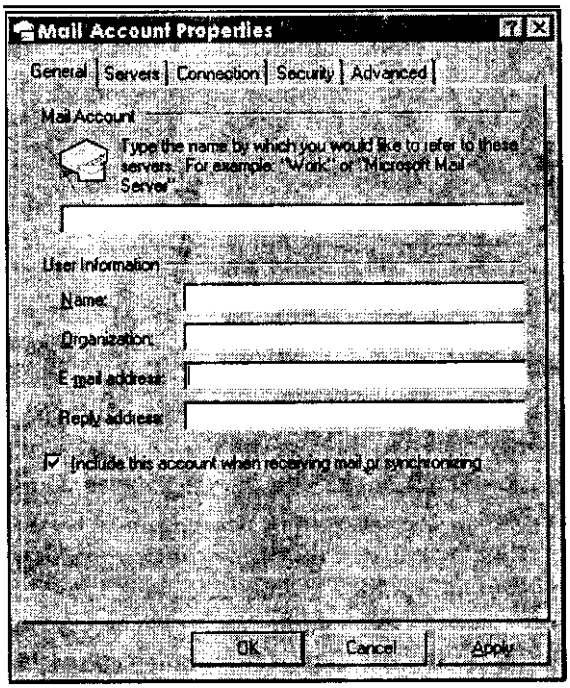


Fig. 16.2

When you are done, click Next, then Finish. If, at any point after this, you have to make changes to these settings, simply go back to Tools. Accounts ... Highlight the e-mail account you wish to configure and click on Properties.

3.3 Managing/Deleting Accounts

To remove an account, select the account (by clicking 01) it) and click the Remove button. You will then be asked if you would like to remove this service. If you would like to, click Yes and if notslick No.

If you would like to modify the settings for the account, select the account by clicking on it and clicking the Properties button.

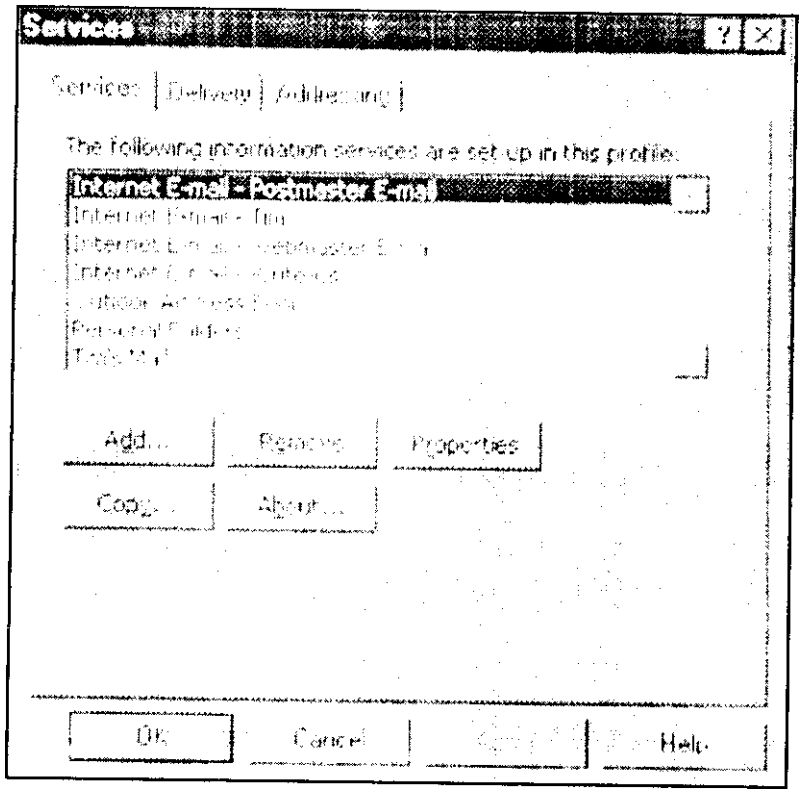


Fig. 16.3

3.4 Configuring the Options Screen

The Options screen lets you configure how often the programme checks for new e-mail, how it displays the messages, your signature and security settings, among other things. Simply select Tools, Options to access these configuration screens. The default settings are usually good enough but you may want to customize Outlook to suit your tastes.

An option that you should be aware of is the *Mail Sending Format.* This option can be found under the Send Tab in the Options Menu. The choices are HTML or Plain Text. Sending mail in FITML form allows you to send more complex e-mails with varying fonts styles, sizes and background pictures. Unfortunately, only other e-mail programmes with these features can see them; otherwise, the recipients will see only garbled text as the content of their e-mail. Sending a plain text e-mail lets you send an e-mail without background pictures and only with the default font; however, the e-mail can be read by all e-mail programmes. In order to ensure compatibility, it is recommended that you set the option to Plain text to ensure the e-mails you send are viewed properly by others, since many people still use basic e-mail programmes.

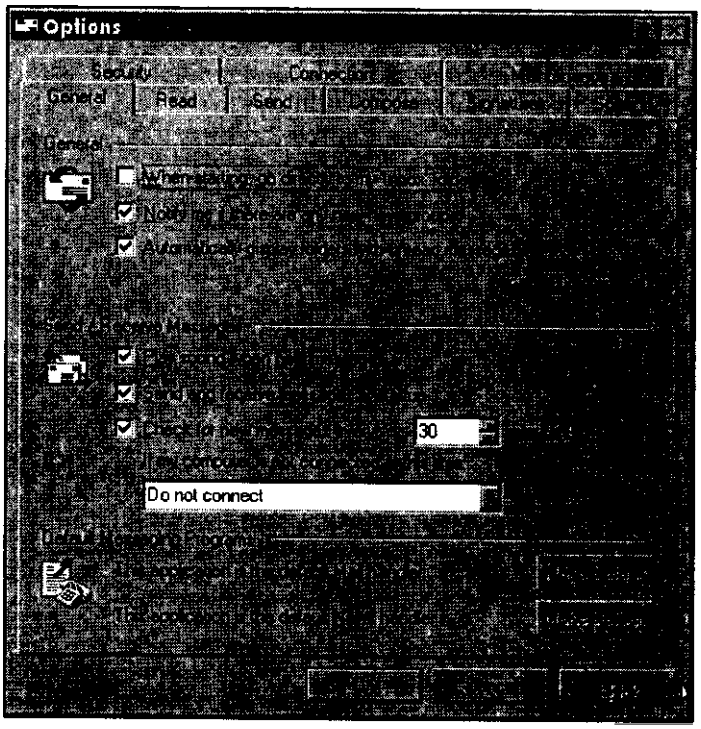


Fig. 16.4:

4.0 Conclusion

You must provide basic information about your account, servers and network connection before you can send and receive messages with Outlook Express. You can configure Outlook Express using your e-mail address, so that it connects to your Internet Service Provider (ISP). If you have more than one e-mail account, you have to add it to Outlook Express account. Outlook Express allows you to configure how it checks for new e-mail, how it displays the messages, your signature and security settings, among other things.

5.0 Summary

In this unit we were able to explain that to send and receive messages, you must have an account on a computer running a POP server and access to a computer running an SMTP. We have looked at how you can configure your Outlook Express to your taste and how to effectively manage your numerous e-mail accounts.

6.0 References and Suggestion for Further Reading

OpenContent License *(http://www.opencontentord/),*
WWWmetrics *(http://wwwwwwmetrics.com)*
Med iametrix *(http://www.mediametrix.com/data/thetopfip)*
Microsoft word *(http:/lwww.tnicrosoft corn)*

7.0 Tutor-Marked Assignment

Question
State why you would want to configure your screen option.

UNIT 17: Front Page-Creating, Importing Web Page and Image Formatting

Table of Contents

1.0 Introduction

Microsoft FrontPage is an application package that comes with the Microsoft office and it is very users friendly. This unit and the subsequent ones provide you with a step by step procedure to developing and importing web pages. Inserting clip art and images from a file will also be treated. Formatting an image to improve the speed of loading is also explained.

2 0 Objectives

It is expected that at the end of this unit you will be able to:

- Design a new web page;
- Insert graphics in your web page;
- Insert clip art in your web page;
- Import and edit other web pages;
- Identify how you can reduce the speed of downloading a web page with image.

3.1 Starting a New Web

You can quickly get started with a new web. To begin working on a new web, follow these steps:

- Go to File on the menu bar and go down to New and click on Web.
- Click on the one page web icon. Type in the location where you want your web to reside locally on your machine.
- Click on next.
- Your new web will open with a blank page if you were in page view when you created the web.
- You can begin designing your new web.

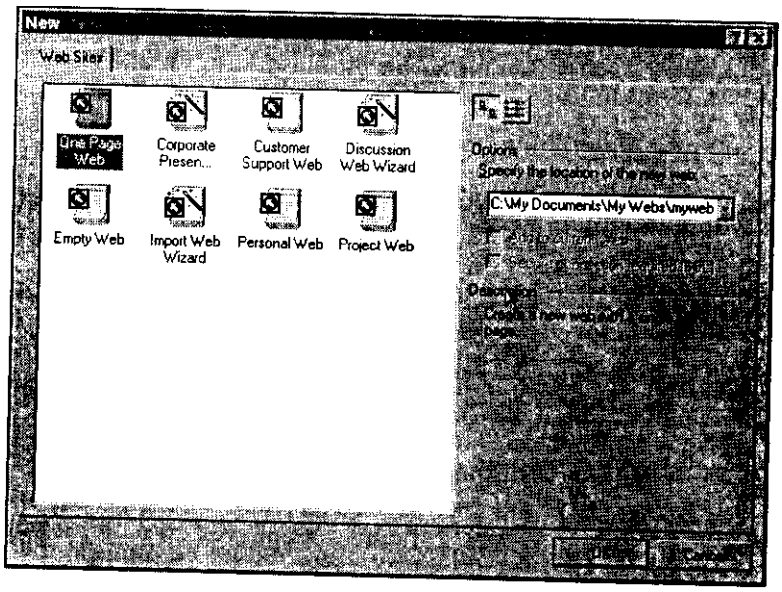


Fig. 17.1

3.2 Importing A Web

You can take a web page that you have created in any other programme or one that you created using HTML or even a web you want to import to learn how it was put together (as long as you have permission to do this from the designer). Importing a web is very easy to do. This is a great feature

if you just start using FrontPage and you want to use your own existing web that was created elsewhere. To import your web, follow these steps:

- Go to File on the menu bar and go down to New and click on Web.
- The New dialog box will open. Click once on Import Web Wizard in the specified location for your new web box type in the path where you want your web to reside locally (on your computer)

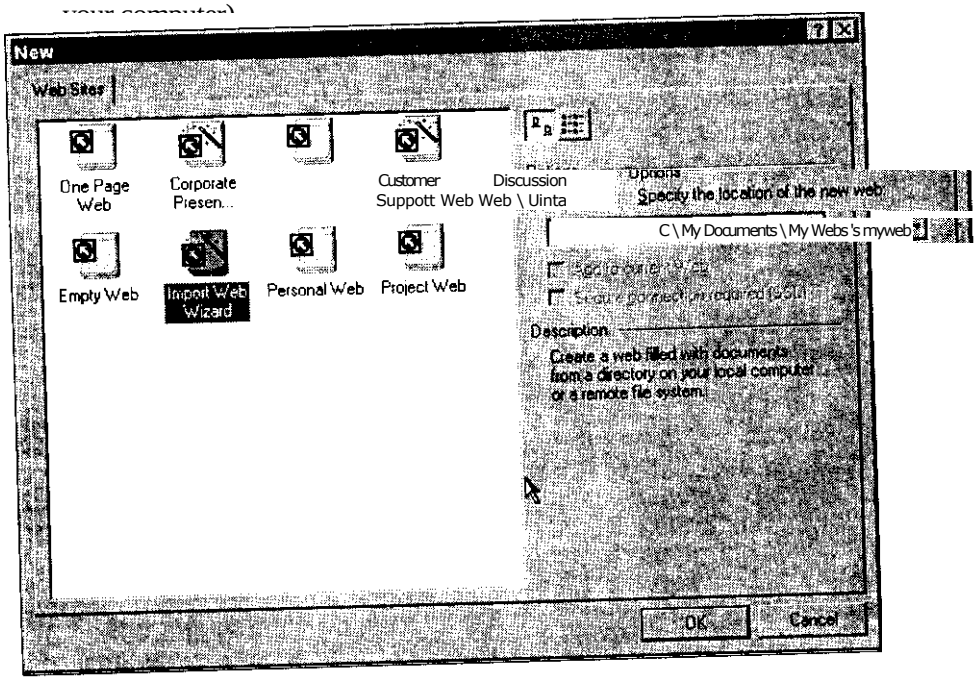


Fig. 17.2

- Click OK

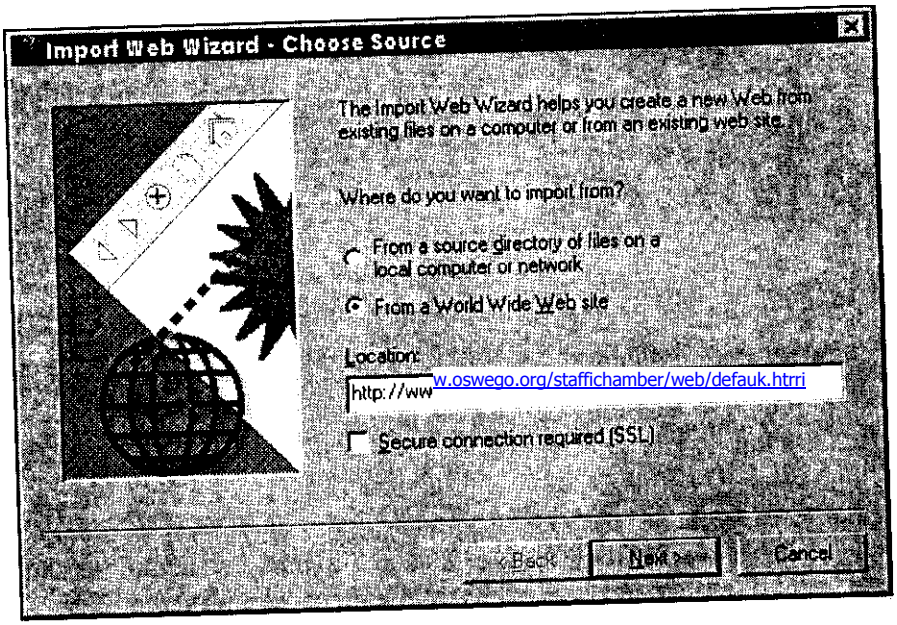


Fig. 17.3

- Type in the location of your web (URL/web address) if it is being taken from the Internet.
- Click on next.
- Make your choices for download amounts in the next dialog box that opens.
- Click on Next.
- Make your choices for download amounts in the next dialog box that opens.
- Click on Next.
- Click on Finish.
- The web page or pages you chose will be downloaded and placed in a new web in FrontPage.
- You can save your web and continue to work on it.

Activity 1
From the given procedure above, import the web page with the following URL http://www.lib.berkely.edu

3.2.1 **Inserting Clip Art**

Adding Clip art to your FrontPage web is a simple task. Follow the steps below.

- Go to Insert on the menu bar and go down to Picture and click on Clip Art.
- The Insert Clip Art Gallery will open. Click on the category that you want to use. You can also type a keyword in the search for clips box. Hit enter.
- Right click on the image you want to use and click on insert or click on the image you want to use and click on the insert clip icon.
- Your image will appear on your page. (Images in Front Page work a lot like text. You can align them, put them in a table or click and drag them to a location). You can resize them by clicking on the corner handle and moving out to enlarge and in to decrease the size. (You do not need to hold the shift key down, it will keep the picture in proportion automatically).

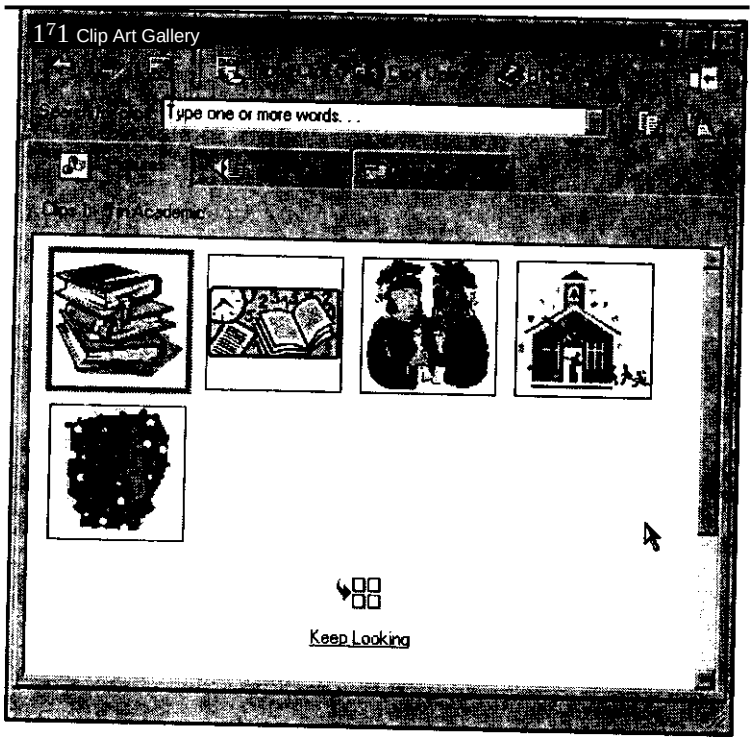


Fig. 17.4

3.2.2 Inserting Images from File

Adding Images that you have stored to your FrontPage web is a simple task. Follow the steps below.

- Go to Insert on the menu bar and go down to Picture and click on From File.
- The Picture dialog box will open.
- Click on the file folder with the magnifying glass in the bottom right hand corner. The Select file . dialog box will open.
- Click on the file for image you want to use. You can use various file types but once inserted into

  FrontPage they will be converted to either JPEG or GIF.
- Click on OK.
- Your image will be added to your page.

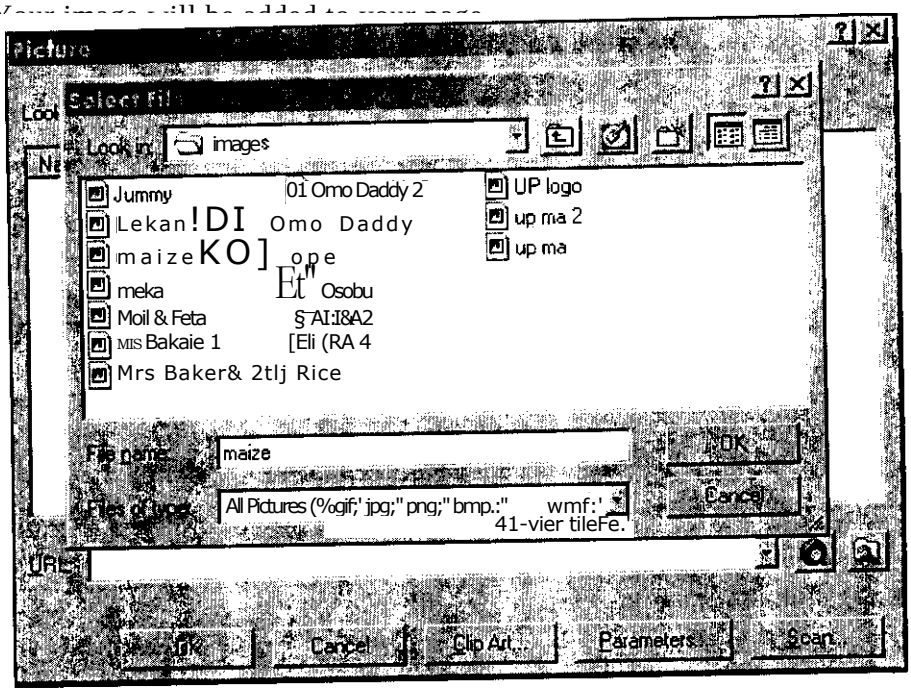


Fig. 17.5

Activity 2

Assuming you have your picture scanned and saved on your hard disk, insert it at the top right corner of the web page you imported in Activity 1.

3.3 Thumbnails

If you have a page that is filled with graphic images it will most likely take that page a long time to download. One way to get around this is to create thumbnails or mini versions of the image. In this way the visitors can click on the thumbnails that they want to view and the larger picture will be displayed. The thumbnail is actually a hyperlink to the actual image in its original size. To turn an image into a thumbnail, follow these steps:

- Click on the image you want to convert to a thumbnail.
- Click on the auto Thumbnail button from the pictures' toolbar which is located at the bottom of the screen.
- Your image will automatically convert to a thumbnail and it becomes a hyperl ink.

3.4 Resampling an Image

When you insert an image into FrontPage it will retain the original size of the image. If you resize the image by clicking and dragging, it will appear smaller and the size of file will remain the same thus affecting the download time of the page. If you resize an image smaller than its original size, you need to use the resample button after resizing. This will reduce the file size of the actual image. To resample an image follow these steps:

- Click on the image and click on a corner handle. Drag inward to make the image smaller.
- Click on the resample button. It is found on the Pictures toolbar on the buttom of the screen.
- Your image file size will now be reduced.

Exercise 1

Does resizing of an image affect the speed of downloading an image?
State the reasons for your answer.

Resizing an image does not affect the speed of downloading because resizing does not affect the size at the file.

4.0 Conclusion

In designing a web page, you can begin learning by looking at what other people have done by importing any web page of your interest in the front page and looking at how it was created. Clip arts are pictures files that come with Microsoft office you can insert and resize them. For images that are either scanned or snapped using a digital camera, you have to use the **Insert an image from file** procedure to insert it in your web page. Images on a general note reduce the speed at which a web page is downloaded. These can be solved by creating a Thumbnail or resampling the image.

5.0 Summary

We have succeeded in studying how to create a new web page, and import a web page into front page. Procedures for inserting and formatting images were also discussed as well as increasing the speed of downloading your web page.

6.0 Reference and Suggestion for Further Reading

Open Content License *(http://www.opencontentorg/),*
WWW metrics *(http://www.wwwmetries.com)*
Mediametrix *Ottp://www.mediametrix.com/data/the(opfsp)*
Microsoft word *(http://wwwmicrosofrcom)*

7.0 Tutor-Marked Assignment

Question

Discuss the importance of turning an image into a thumbnail and state the procedure for doing it.

UNIT 18: Front Page-Image Formatting

Table of Contents

1.0 **Introduction**

The front page provides you with facilities to change the background of the image you've inserted to reflect the design, and also to format an image to stand out distinct by putting border, cropping the image and adding text to it. For length page bookmarks allow you to quickly jump to certain parts of the page and every good website should have a contact name and an e-mail link if possible.

2.0 **Objectives**

At the end of this unit you should be able to:

- Make an image transparent;
- Add text to an image;
- Add border to an image;
- Crop an image;
- Add hyperl ink to an image;
- Explain how to create bookmark;
- Explain how to add an e-mail hyperl ink.

3.1 **Making an Image Transparent**

There are times that you insert an image like clip art and if you have a coloured or textured background, you get a white box around the image. You can make this transparent. You can also just make a certain color within the image transparent. When you use the transparent tool that is built into FrontPage, you will actually be converting the image to a GIF. This is a file format for graphic images. Follow the directions below to make your image transparent.

- Click on the image that you want transparent.
- Click on the transparent icon found on the pictures' toolbar on the bottom of the screen.
- Your mouse now has the transparent tool on it. It looks like a pen. Click on the area that you want to make transparent. In Fig. 18.1, I clicked on the green background to make that transparent.
- A dialog box will open, telling you that you will be converting the image to a GI F.

Click on Yes as shown in Fig. 18.1:

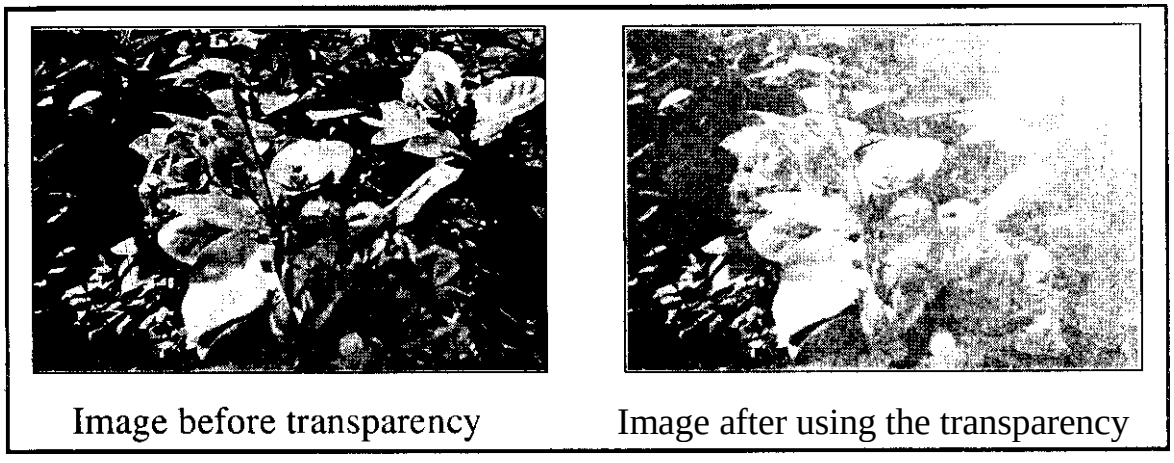


Fig. 18.1

Exercise 1

Think of way in which you can get a picture into your computer.

One of the easiest ways is to have the picture saved on your hard disk or you can use a digital camera to snap the picture and save it on your hard disk.

3.2 Adding a Border to a Graphic

If you want your image that you added to your FrontPage web to stand out, you can easily add a border to it. The border color will be black by default. To add the border follow these steps:

Click on the image that you want transparent.

- Right click on the image that you want to add a border to and click on Picture Properties.
- Click on the appearance tab.
- Click on the up arrow text to border thickness to choose a number other than zero. The larger the number the thicker the border.

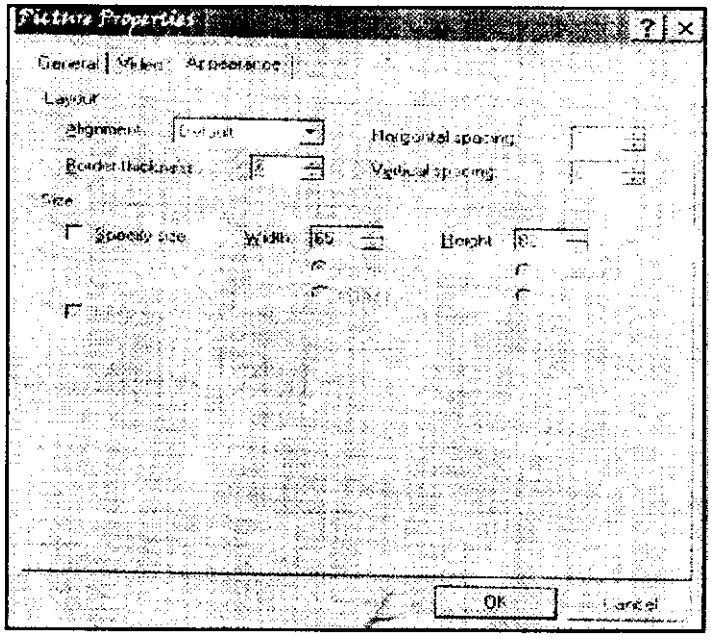


Fig 18.2

Activity 1

Insert or import an image into your web page and add a border to it.

3.3 Cropping a Graphic

You can crop images so that you eliminate sections of the image that you do not want to display. There is a cropping tool built right into FrontPage that allows you to do this. Follow these directions for cropping an image.

- Click on an image that you want to crop.
- Click on the cropping tool icon from the Pictures' toolbar which can be found on the bottom of your screen.
- Your image will now have a dotted line with handles around it.

- Click on the handles and drag them until the dotted lines are around just the portion of the image that you want to display.
- Click on the crop tool one more time to crop your image.

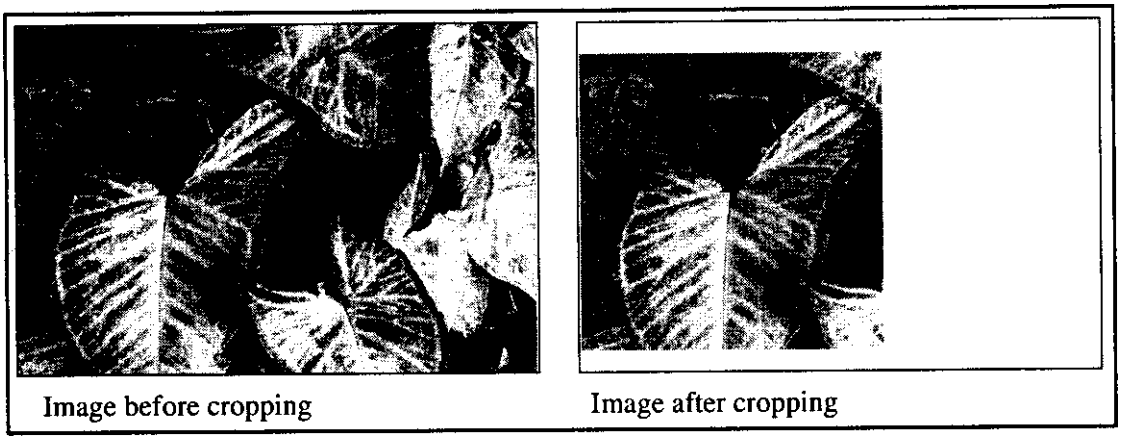


Fig. 18.3

Exercise 2

Why would you want to crop an image?

Cropping an image will eliminate some sections of the image that you do not want displayed.

3.4 Adding Text on a Graphic

In FrontPage it is very easy to add text on top of an image. To do this, follow these steps:

- Click on the image that you want to add text to.
- Click on the text icon from the Pictures' toolbar at the bottom of your screen.
- A text box will appear on your image. Type the text you want to add. You can move the text and format it like you would do to any text box.

Activity 2

Type the name of the image on the image you inserted.

3.5 Adding a Hyperlink to Text or Images

Many times you may want to have an image that is linked, so that if someone clicks the image or text, the person will be taken to another page.

You can add a hyperlink to both text and images. It is a simple task to do. Follow the steps below to create a hyperlink.

- Select the text or image that you want to add a hyperlink to.
- Click on the Hyperlink icon on the standard toolbar.
- The created hyperlink dialog box will open. Type in the URL that you want to link to in the URL box.
- Click on OK.
- Your text or image will now be hyperlinked. When in the preview mode or after you publish, you will see that when you click on the text or image, it will jump to the URL you typed in.

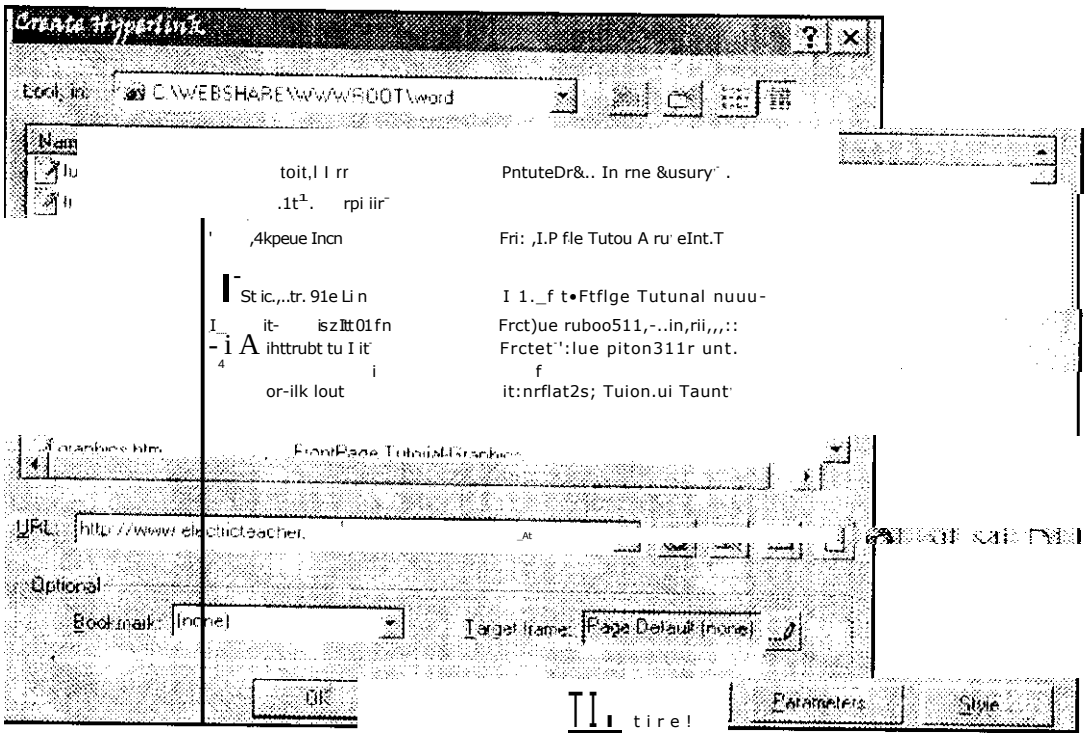


Fig. 18.4

3.6 **Adding an E-mail Hyperlink**

In this way, if someone visiting has questions or comments, they have a contact. You can create an e-mail hyperlink using either text or images. To create an e-mail hyperlink, follow these steps:

- Select the text or image that you want to add the e-mail hyperlink to.
- Click on the Hyperlink icon on the standard toolbar.
- Click on the little envelope icon.
- Type the e-mail address you want the messages addressed to.
- Click OK and then OK again.

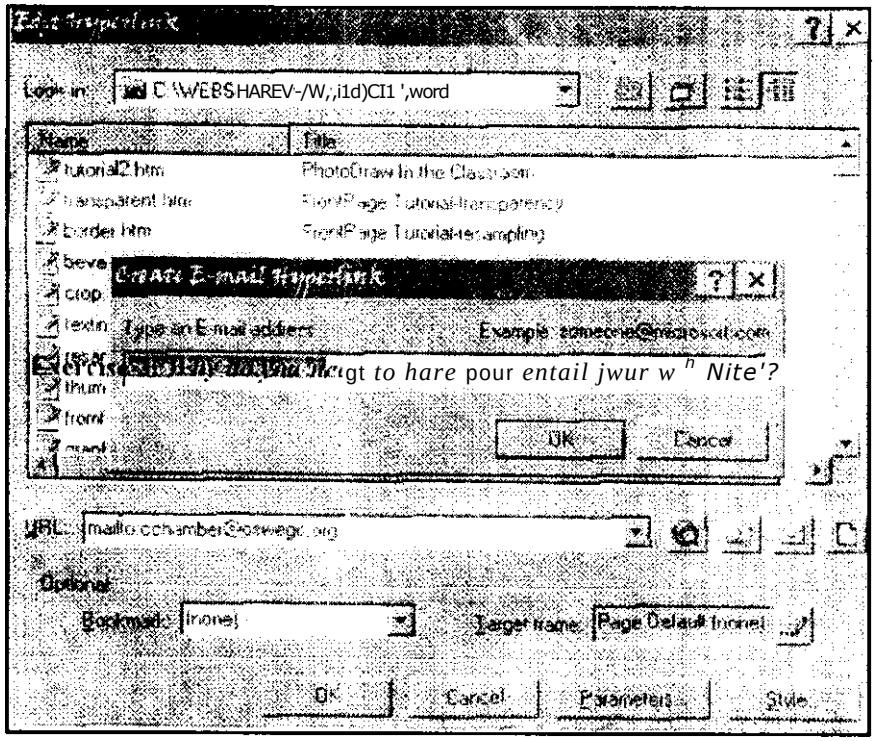


Fig.18.5

Exercise 3

What is the function of URL in hyperlink?

The URL is the address or location of the web page the hyperlink is referring to.

3.7 Creating Bookmarks

If you have a page that is quite long in length you may want to create bookmarks which allow you to quickly jump to certain parts of the page. Another name for bookmarks are anchors. To create a bookmark follow these steps:

- Select the text that you will want to jump to.
- Go to Insert on the menu bar and click on Bookmark.
- The bookmark, dialog box will open. The text that you selected will be placed in the bookmark name. You can type your own name for this if you wish.
- Click OK.
- When you get to the part of your page that you want to hyperlink to that bookmark, select it and click on the hyperlink icon from the standard toolbar.
- Click on the down arrow next to bookmarks. Select the bookmark that you want to link to.
- Click on OK.

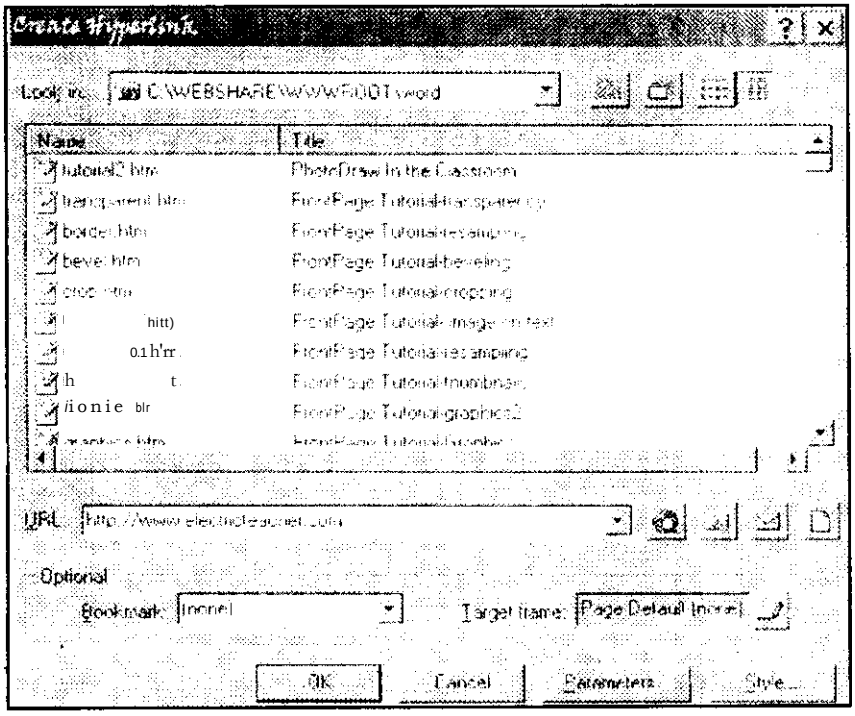


Fig. 18.6

4.0 Conclusion

When you use the transparent tool that is built into FrontPage, you will actually be converting the image to a GIF. This allows you to format the image. Adding a border to your image makes it to stand out. Cropping an image eliminates sections of the image that you do not want to display. Links in either image of text will take you to another web address indicated, while bookmarks are very handy for navigation in a lengthy page.

5.0 Summary

In this section, we were able to make an image transparent, add border and text to our image and finally looked at how to add hyperl ink to your image and text. Using bookmark for navigating in your web page was also discussed.

6.0 References and Suggestion for Further Reading

Basic HTML *(http://www.htmlgoodies.com)*

Widernet Project. *thttp//wwwwidernet.org)*

Microsoft Windows *(httpilwww.Microsqft.com)*

Developing HTML *(http://www.davesite.com/webstation/hunl/)*

7.0 Tutor-Marked Assignment

Question

What happens when you click on the text or image that is hyperlinked in a web page published? State the steps to take to add a hyperlink to Images.

UNIT 19: **Front Page — Tables**

Table of Contents

.0 Introduction

Adding tables is a very important skill to know. Tables become a very integral part of web pages especially when you have items such as graphics that you want to line up. Hence, in this unit, we will look at how to insert and format a table in your web Page.

2.0 Objectives

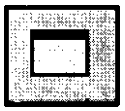
At the end of this Unit you should be able to:

- Add a table to your web page;
- Add a border to your table;
- Merge table cells:
- Align your tables;
- Adjust table padding and spacing

31 Adding a Table

There are mainly three methods of adding a table to your web page within FrontPage. These are described below:

Method 1:



- Position you cursor where you want the table to go.
- Click on the Insert table icon from the standard toolbar. Drag down until you have the desired number of columns and rows selected.
- When you click, the table will be added to your page.

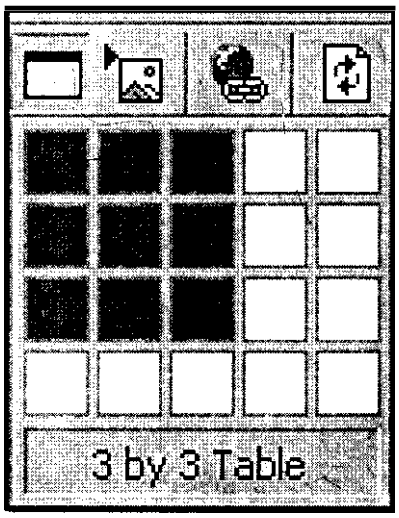


Fig. 19.1

Method 2

- Go to Table on the menu bar and down to insert and click on table.
- The Insert Table dialog box will open. Type in the number of rows and columns you want to add.
- Click on OK.
- The table will be added to your page.

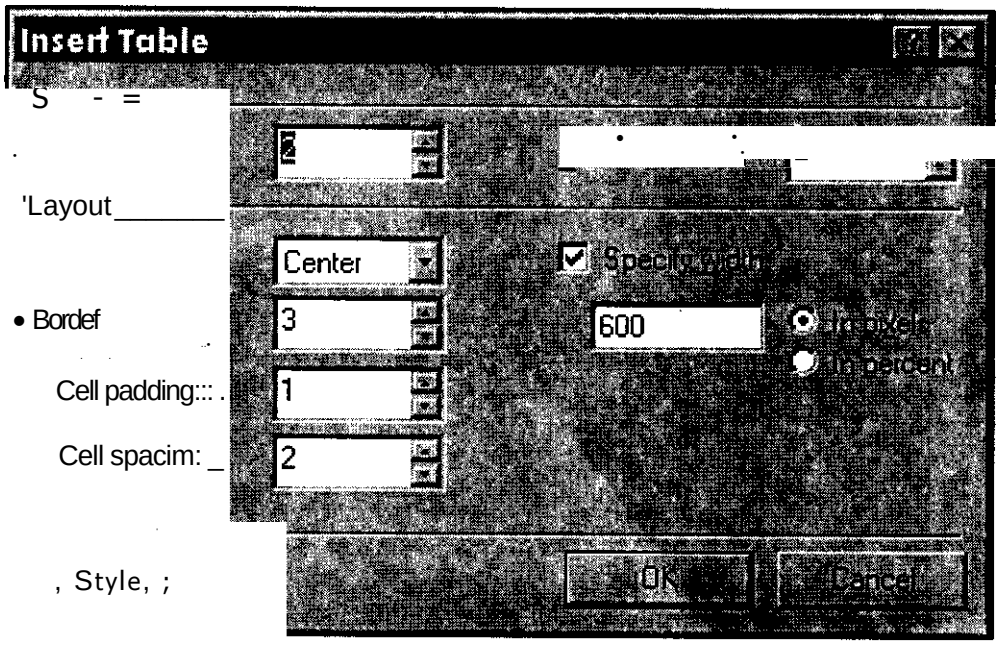


Fig. 19.2

Method 3

- Go to Table on the menu bar and click on draw table.
- Your mouse will turn into a pencil.
- Click and drag the outside frame of your table.
- Continue using the pencil to add rows and columns.

3.2 **Adding a Border to Your Table**

You can add a border to your table. It can be colored with a single color or you can use two colors. You can also remove the border if you don't want it showing. This can especially come in handy when you want to line up things on the page without having them appear as if they are in a table. Follow the directions below to add either a single color, two color border or removing the border from a table.

3.2.1 Adding a Single Color Border:

- Right click anywhere within your table and click on table properties.
- Click on the up arrows next to border size to increase or decrease the table border's thickness.
- Click on the down arrow next to color to choose the color for the border.

(By choosing this color, your table will show this color in both Netscape and Internet Explorer).

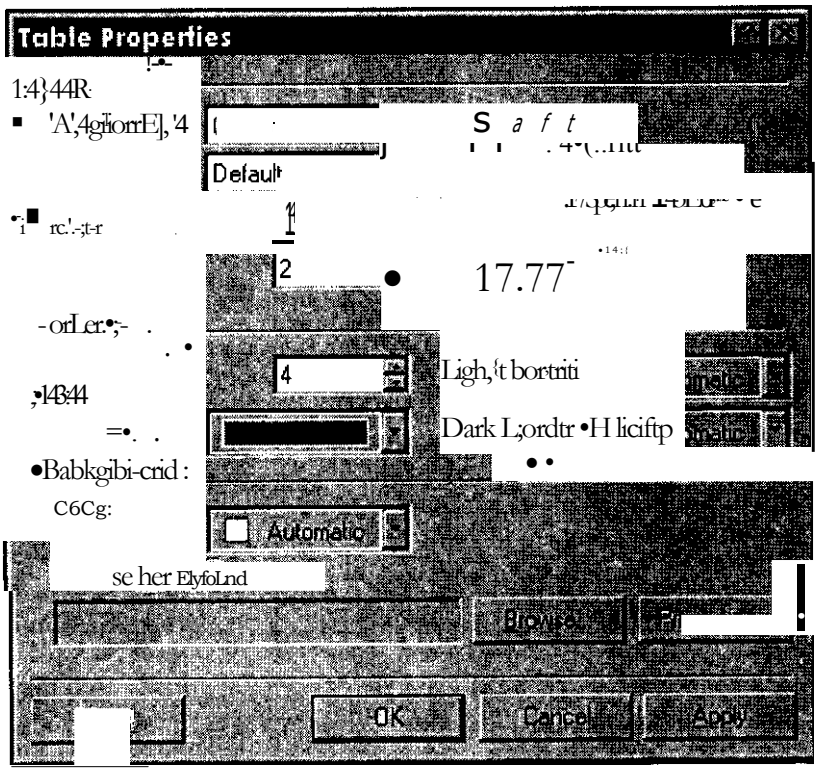


Fig. 19.3

Activity 1
Add a table to your web page. The table should have 5 rows and 4 columns and add a single border to it.

3.2.2 Adding a Double Color Border:

- Right click anywhere within your table and click on table properties.
- Click on the down arrow next to light color and choose a color you want for the top half of the table.
- Click on the down arrow next to the dark color and choose a color you want for the bottom half on the table.
- Click on the arrow next to color and pick a color for the border of the table. This will ensure that you will have a color for your table when people are viewing it with Netscape. The duo color border will orrly show if you are using Internet Explorer.

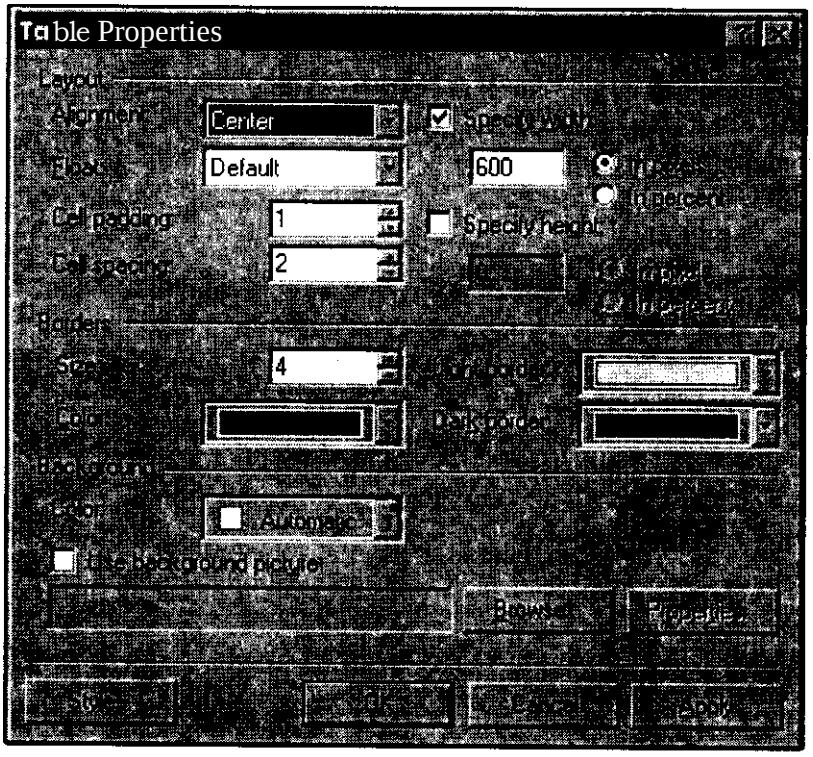


Fig. 19.4

3.2.3 **No Border:**

- To get rid of the border from a table so that it won't display, right click inside of the table and choose table properties.
- Click on the down arrow next to border size box and set the number to zero.
- Click on OK. Your table border will be invisible.

3.3 **Merging Table Cells**

Sometimes when you create a table, you may want to merge cells together. A good example of when you might want to do this is when you want to add a title on the top row of your table. Follow the directions below to merge cells in a table. Fig. 19.5 is a sample table with the top row having merged cells.

- Select the rows that you want to merge from your table.
- Click on the merge cell button from the tables toolbar.
- Your cells will be merged.

Activity 2
Merge the first row of your table and type in a Heading for the table.

. List of Students Taking the course for the		
• Surname	Othername	Address
• Gbaje	Ezra Sluloba	....., ABU, Zaria

Fig. 19.3

3.4 Aligning Your Tables

To align your table follow these steps:

- Right click inside of the table and choose table properties.
- Click on the down arrow next to alignment.
- Choose either default, left, right, center or justify.
- Click on OK.

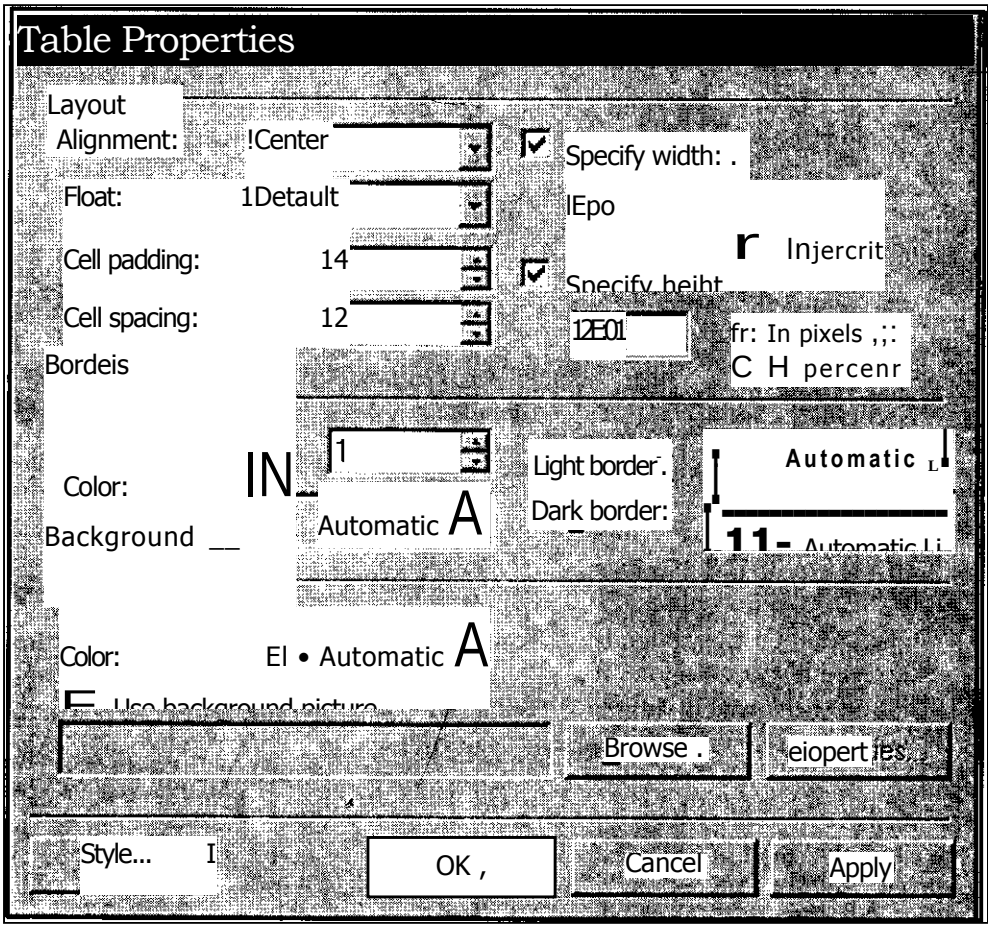


Fig. 19.6

Activity 3

Align the table at the center of your web page.

3.5 Adjusting Table Padding and Spacing

The cell padding is the amount of space surrounding the text and or graphics inside of a cell. The cell spacing is the amount of space between cells. To adjust these components follow these steps:

- Right click within your table and choose table properties.
- Use the up and down arrows to adjust the size of your cell spacing and cell padding.
- Click on OK and your adjustments will be made.

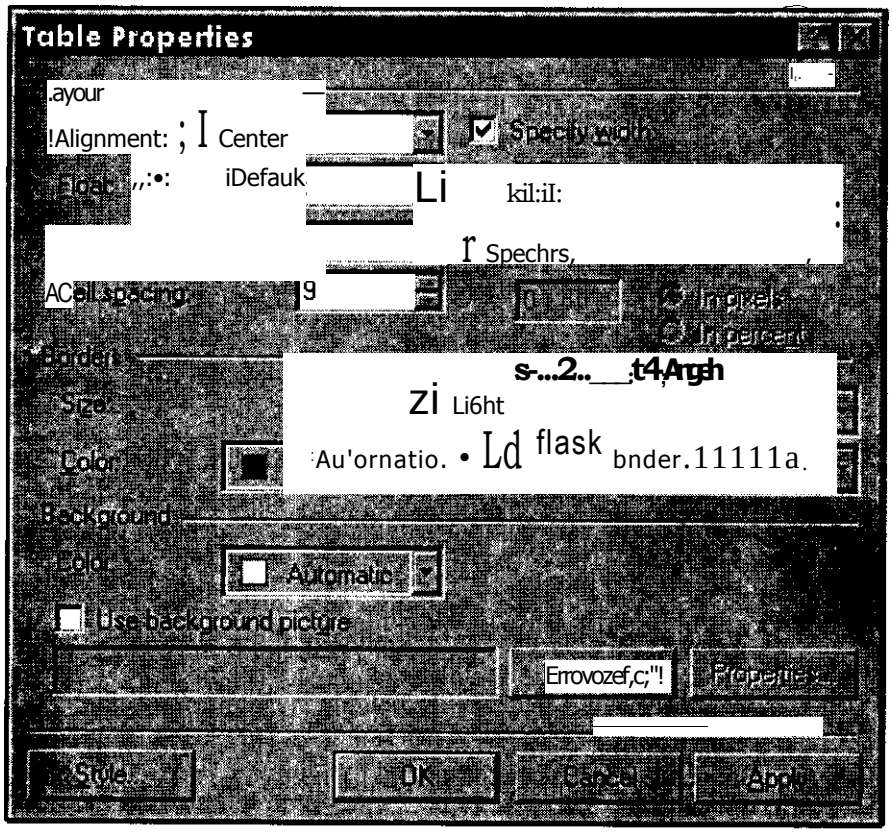


Fig. 19.7

4.0 Conclusion

Tables are used to line up things on the page neatly, you can also remove the border if you don't want it showing or change the color of the border. The amount of space surrounding the text and or graphics inside of a cell can also be adjusted to your desire.

4.0 Summary

In this unit, we were able to look at how to add table and format it by either aligning it, merging the cells, adjusting table padding and spacing.

6.0 References and Suggestion for Further Reading

Basic HTML *(http://www.htmlgoodies.com)*

Widemet Project, *(httpftwww.widernet org)*

Microsoft Windows *(http/Iwww.microsoft. corn)*

Developing HTML *(http://www.davesite.com/webstation/htm/)*

7.0 Tutor-Marked Assignment

Question

Describe any two methods of adding a table to a web page.

UNIT 20: Front Page — Theme, Marquee and Dynamic HTML

Table of Contents

1.0 **Introduction**

One of the neatest features in FrontPage is the capability of adding a Theme and Marquee to your website or just a page of your web. It is important to note that this will only work in Internet Explorer. You will see the text Netscape but it will not be scrolling. We will also look at how to add Dynamic HTML to your web page. Dynamic HTML effects are active elements that you can add to pictures, text, buttons, etc.

2.0 **Objectives**

It is expected that at the end of this unit, you will be able to:

- Add Theme and Marquee in your web page;
- Add Dynamic HTML;
- Add Counter to your web page.

3.1 **Adding a Theme**

A theme is a collection of color, styles and images that you can add to your pages. The theme consists of bullets, background image, buttons, banners, hyperlink color, font colors and styles, table colors and horizontal lines. By adding a theme, you automate the process of using many of these components. FrontPage has many themes to choose from and there are sites on the Internet where you can purchase additional themes. To add a theme to your site, follow these steps:

- Go to Format on the menu bar and choose theme.
- The Themes dialog box will open.
- Choose the theme you want to use by clicking on it in the left hand pane. A preview of the theme will be displayed in the right hand pane.
- I usually put a check next to vivid color, active graphics and background picture.
- Click on OK.
- The theme will be added to your page.

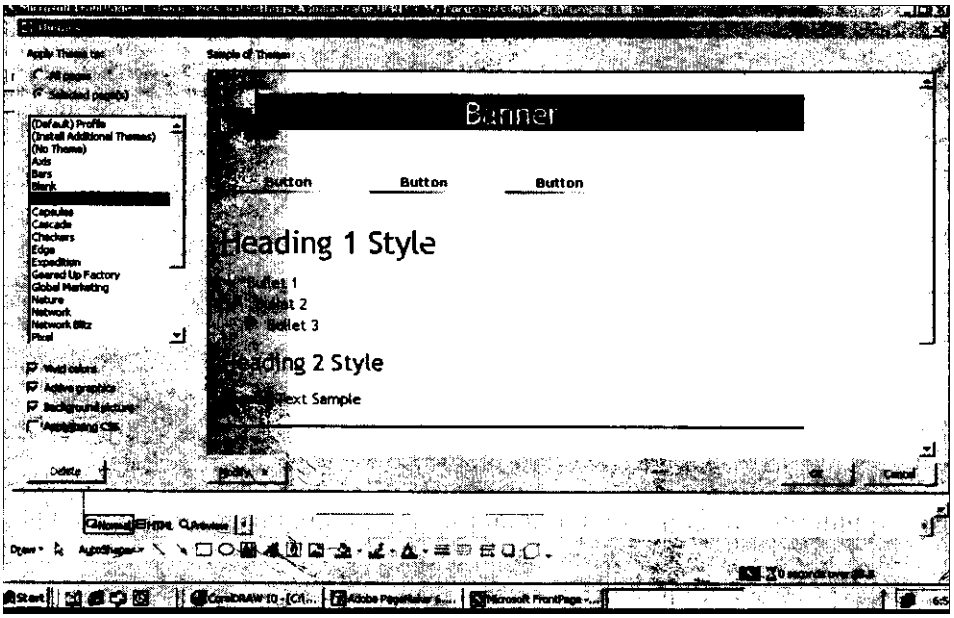


Fig. 20.1

3.1.2 Deleting Themes

You can delete a theme by going to Format on the menu bar and click on Theme. Choose on theme from the left hand pane and click on OK. Your theme will be removed.

3.2 Adding a Marquee

Marquee will only work in Internet Explorer. You will see the text in Netscape but it will not be scrolling. To add a marquee to you page follow these steps.

- Click on the section of the page where you want to insert your marquee.
- Go to Insert on the menu bar and go down to Component and click on Marquee.
- The Marquee Properties' dialog box will open.
- Type the text that you want displayed.
- Click on the down arrow for background color and click on your color choice.
- Click on the Style button Format, and then Font. Make the choices for the type of font you want as well as size and color.

The marquee will not work in Netscape rather, text will only be displayed while it will work well on Internet explorer.

- Click on OK and OK again.
- Make a choice for the type of marquee that you want to use. (Scroll, slide or Alternate). See Fig. 20.2.
- If you ever want to make changes to your marquee, right click on it and choose marquee properties

Exercise 1

Will the marquee work in any browser?

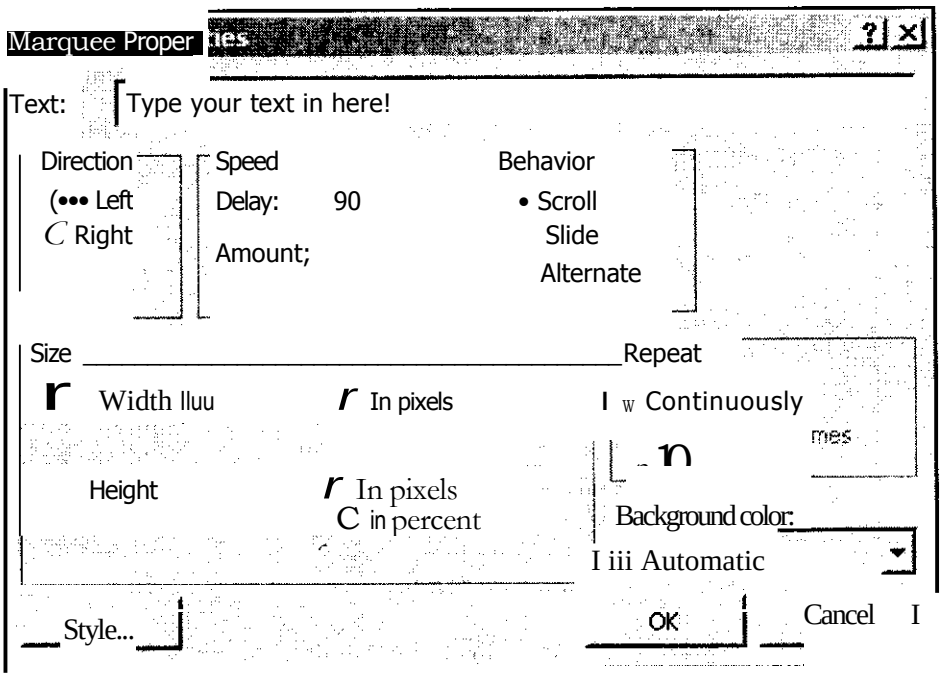


Fig. 20.2

3.3 **Adding a Counter**

You can add a counter to view how many people have visited your page. Most times you can get this information without a counter but a counter is nice if you would like your visitors to know how many hits your page gets. FrontPage built in a counter feature. In order for the counters to work, the server that you post your web page on must have the current versions of FrontPage extentions on them. If your server doesn't have them then on the next [hit counter] will be displayed. To insert on your page follow these steps:

- Click on the part of your page where you want to insert your counter. Counters are usually found at the bottom of a page.
- Go to Insert on the menu bar and down to Component and click on Hit Counter.
- The Hit Counter Properties' dialog box will be displayed.
- Choose the type of counter you want by clicking on the radio button next to your choice. (You can also use your own image by clicking on custom picture and navigating to the image you want to use.)
- You can reset your counter to any number by clicking in the box and typing in the number. You can do the same for displaying your desired number of digits.
- Click OK.

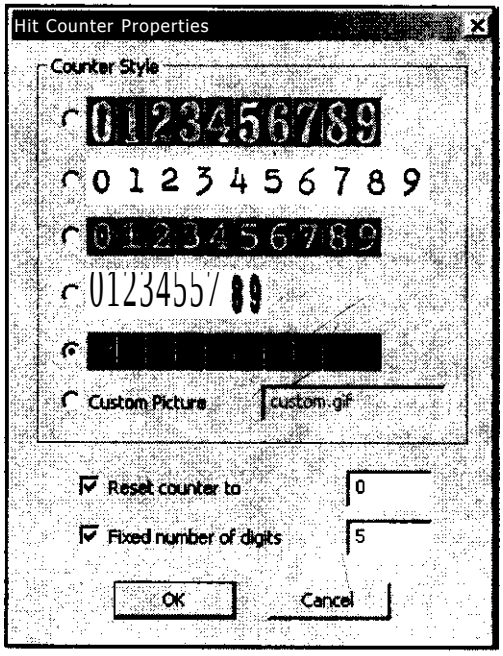


Fig. 20.3

Exercise 2

What is the importance of a Counter in a Web page?

The counter will enable you keep track of the number of people that visit your site.

3.4 **Adding Dynamic HTML**

Dynamic HTML effects are active elements that you can add to pictures, text, buttons, etc. You can have picture or text fly onto the page, have text turn bold when you rest your mouse on it, add a

border around the next when you click on it. These are just to name a few. To add these effects to your page follow these steps:

- Select the item that you want to add the dynamic HTML effects to.
- Go to Format on the menu bar and click on Dynamic HTML effects.
- The DHTML effects toolbar will open.
- Click on the down arrow where it says choose and event. This will determine how the effect will start. You can choose between click, double click, mouse over, or page load.
- Click on the down arrow next to choose an effect. You have eight effects to choose from. Depending on the effect you choose, you might have a third drop down that you have to set which is called choose settings.
- Notice that on this page, the graphic (Special Components and the text Adding Dynamic HTML) both have dynamic html added to them. Click the reload or rellesh button to see the event again.

Fig. 20. 4

Exercise 3

What is the main function of Dynamic HTML?

The Dynamic HTML adds active elements to your pictures and text.

3.5 Adding a Banner

You can add a page banner to your page. This usually resides at the top of your page and includes the text for the title of your page. If you are using a theme and you add a banner, it will automatically add the graphic that is set for a banner that matches your theme and automatically hyperlinks to the previous page. (The page the current page is linked from). To add a banner follow these steps.

- Click where you want the banner to go.
- Go to Insert on the menu bar and click on Page Banner.
- You can choose picture if you are using a theme and a page banner, with a graphic image that matches your page will be added.
- Type in the text you want displayed for your banner.
- Click OK.
- Your page banner will be added.

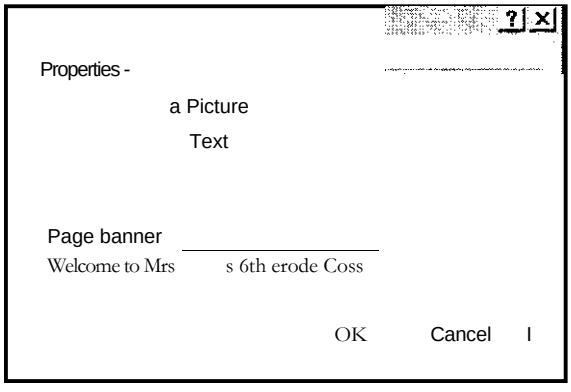


Fig. 20. 5

4.0 Conclusion

By adding a theme you automate the process of using bullets, background image, buttons, banners. hyperlink color, font colors and styles, table colors and horizontal lines. Marquee which can only work in Internet Explorer can also be added to your web page. You can have picture or text fly onto the page, have text turn bold when you rest your mouse on it by using the Dynamic HTM L effects.

If you are using a theme and you add a banner, it will automatically add the graphic that is set for a banner that matches your theme.

5.0 Summary

In this unit, we have considered the process of adding a theme, banner and marquee as well as the process of adding a dynamic effect to your web page. How to add counter to keep count of the number of people who visit you site was also discussed.

6.0 References and Suggestion for Further Reading

Basic HTML (http://www.htmlgoodies.com)
Widernet Project, (Mtp//www.widernet.org)
Microsoft Windows (http//www.Microsoft.com)
Developing HTML (http://www.davesite.com/webstation/html/)

7.0 Tutor-Marked Assignment

Question
What are the steps to be followed for adding a theme and a banners to your web page?

UNIT 21: Front Page—Adding Date and Time, Spell Check and Web Publishing

Table of Contents

1.0 Introduction

Visitors to your web site will always want to know when last you updated your web page hence we will look at how to include date in your web page in this unit. Since your page will be available for the world to view, you really need to take the time and spell check your pages using the spell check in Frontpage. Having developed your web page and want to make your work public to the world, this unit will discuss how you can publish it on a web server.

2.0 Objectives

At the end of this unit you will be able to:

- Add date to your web page;
- Spell check your work;
- Preview your web page;
- Publish your web.

3.1 Adding Date and Time

You can add the date that you last updated your page. This will show visitors if you had worked on your page since the last time they visited, so they know when to expect some new editions. To add the date the page was updated, follow these steps:

- Click where you want your date and time to go. (I usually type something like: This page was last updated on)
- Go to Insert on the menu bar and click on Date and Time
- Choose the Date and Time Properties you want displayed
- Click on OK

The date will automatically be updated each time you edit your page.

Exercise 1

State the importance of adding a date to your web page.

By dating your website, visitors are able to know when last the web page was updated or how current your website is.

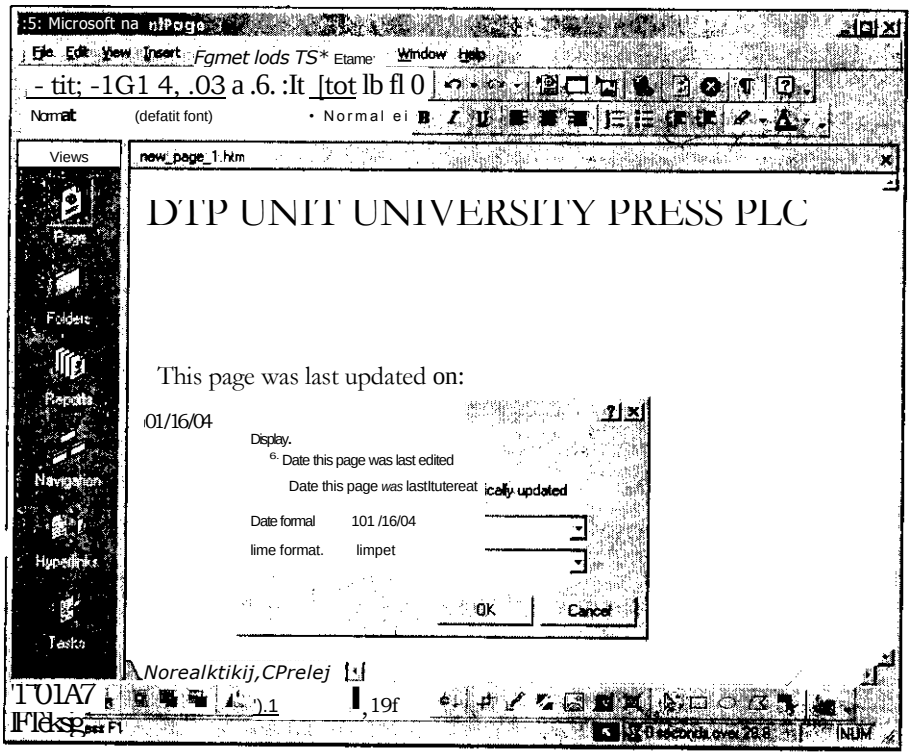


Fig. 21.1

3.2 Performing a Spell Check

Even after you run spell check, you should carefully look over all of your pages to check for errors. You might even want a friend to double check your page for you before you are through with your site. To run a spell check follow these steps. FrontPage only runs a spell check. There is not a grammar check like in Microsoft Word. By default the spell check is turned on to work as you type. If you misspell a word a red wavy line will be displayed under the incorrect word. To run a spell check on your page follow these steps:

- Go to Tools on the menu bar and click on Spelling. (You can also click on the ABC button from the standard toolbar).
- The spell check will run automatically.

3.3 Previewing Your Web Page

There are really three different ways to preview your web page. You can use the preview tab within the FrontPage screen. Go to File Preview in Browser, or open up your browser and type in the URL for your page and preview it there. If you use the preview tab, sometimes things appear incorrect but when you really view them in your browser they are tine. I use Preview for a quick look. If I see a problem Twill open up my browser to be sure the problem really exists. The File Preview in browser component is great if you want to check to see what your page looks like in different browsers arid r different resolutions. You can set what browser and resolution you want and that browser (as long as you have it on your computer) will open, displaying the screen as a visitor would see it with that specific resolution. It is important to do this because all browsers don't support the same code. Your page may look very different in one browser to another. The resolution issue is important because you don't want

your visitors to horizontally scroll while viewing your pages. If you set your page for a certain resolution you can type a line at the bottom of the page stating that it is best viewed in that particular resolution. You can also type in the preferred browser if your site looks better in one than another. To preview your page using the three different techniques, follow the appropriate directions below:

3.3.1 Using the Preview Tab

g. Save your page.
g• Click on the Preview tab at the bottom of your FrontPage screen while in the Page View.
g> You can check out how your page will be displayed on the Internet.

3.3.2 Using Preview in Browser

g> Save your page.
K> Go to File on the menu bar and click on Preview in browser.
g> The Preview in Browser dialog box will open.
K. Choose the browser that you want to view it in and click on the resolution that you want to check,
g• Click OK.
g? That browser will open and the screen will be sized so you can view what a visitor with that particular resolution would see when they come to your page.

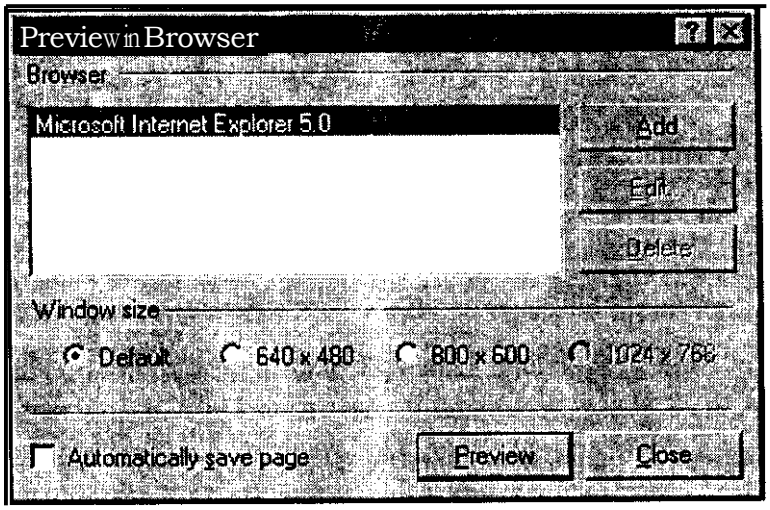


Fig. 21.2

3.3.3 Typing in your URL

g> Save your page
g) Publish your page
g. Open up your browser
g> Type in the URL for your site
g> Check to see how your site looks online.

Excercise 2

Which preview method will you use to see what your page looks like in different browsers?

The preview in the browser will naturally give you a good view of how your page will look like in different browsers,

3.4 Publishing Your Web Page

If you work directly on the web server then you only need to hit the save button and your page is automatically published. If you are working on your own local machine and need to publish to your web server, then you have to go through the publishing steps. Follow the directions below to publish your pages:

- After saving, go to File on the menu bar and click on Publish Web. Or you can click on the Publish web icon from the standard toolbar.
- The Publish Web dialog box will open.
- Type in the FTP for the web server you will be posting to. You can get this information from your administrator for the web server.
- Click on OK.
- Your page will be sent up to sour \seb server and published. You can then view your published pages online.

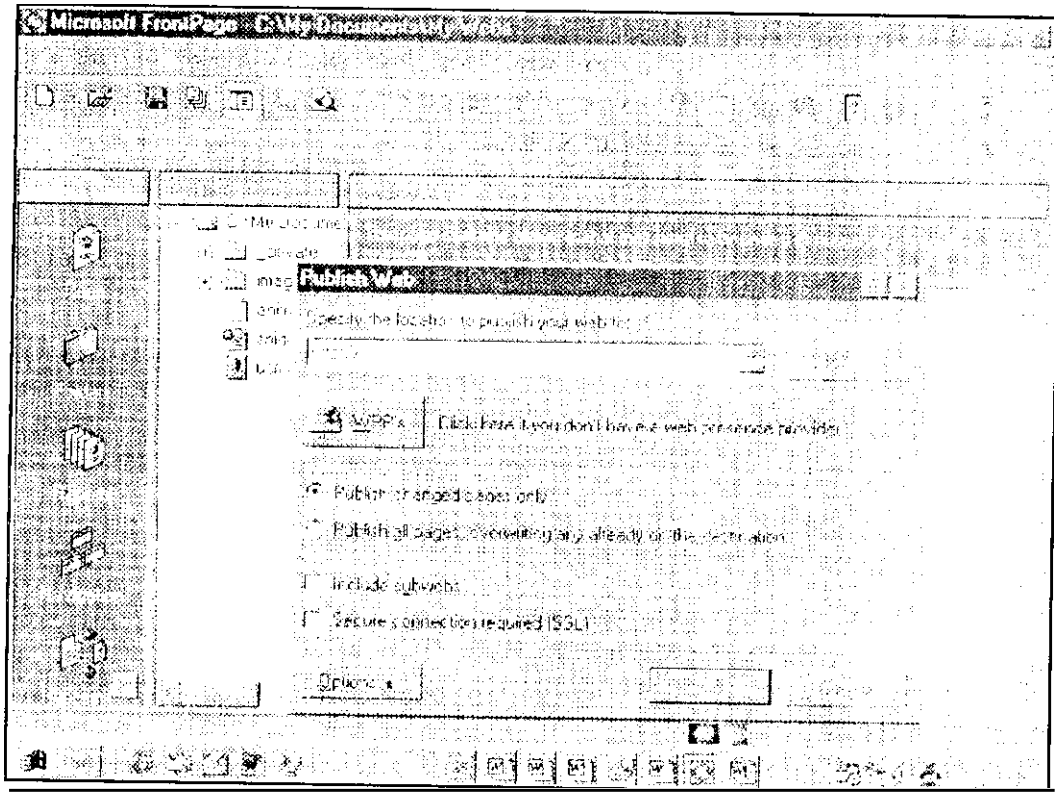


Fig. 21.3

4.0 Conclusion

Putting dates on your web page will show the visitors how current your page is. By default the spell check is turned on to work as you type. If you misspell a word a red wavy line will be displayed under the incorrect word to enable you easily correct the spelling. The File Preview in Browser component is great if you want to check to see what your page looks like in different browsers and different resolutions. To make your web page available to the public, you will have to publish it on a web server.

5.0 Summary

In this unit, we were able to look at three different ways to preview your web page and editing the spell mistakes before publishing it on a web serve. How to include dates and time on your web page was also discussed.

6.0 Tutor-Marked Assignment

Question:

Why do you need the web server address? And suppose you don't have a web server, what are the procedures to follow to post your web page for publishing in a web server?

7.0 References and Suggestion for Further Reading

Basic HTML http://www.htmlgoodies.com
Widernet Project, http//www.widernetorg
Microsoft Windows httpllvvww.Microsoft.com
Developing HTML http://www.davesite.com/webstation/html/

UNIT 22: HTML— File Format and Structure

Table of Contents

1.0 Introduction

This Module is made up of seven units in series that will introduce you to the very basics of HTML. HTML files are just normal text files.., they usually have the extension of .htm or .html. It is used to develop web pages. HTML documents are written on the word processor, or Notepad, WordPad, or Simple Text. HTML documents must be text only. HTML works in a very simple, very logical, format. It reads like you do. top to bottom, left to right. When you are finished creating the HTML document, you'll then open the document in a browser, like Netscape Navigator. The browser will interpret the HTML commands for you and display the Web page.

2.0 Objectives

At the end of this unit you should be able to:

- Define HTML;
- Save a document in word processor as AIME document;
- Open document in the browser;
- View Source Code for other HTML.

3.1 **What is HTML?**

H-T-M-L are initials that stand for HyperText Mark up Language

- Hyper is the opposite of linear. It used to be that computer programmes had to move in a linear fashion. This before this, and so on. HTML does not hold to that pattern and allows the person viewing the World Wide Web page to go anywhere, any time they want.
- Text is what you will use.
- Mark up is what you will do. You will write in plain English and then mark up what you write.
- Language - but the language is plain English.

3.2 **The Word Processor**

When you write to the word processor you will need to follow a few steps:

- Write the page as you would do to any other document.
- When you go to save the document ALWAYS choose SAVE AS.
- When the SAVE AS box pops up, you will need to save the page in a specific format. Look at the SAVE AS dialogue box when it pops up: Usually at the bottom, you find where you will be able to change the file format as ASCII TEXT DOS or just **TEXT.** Either one will work.

When you save your document in WORD, or some other word processor format other than text, you are saving much more than just the letters on the page. You're saving the margin settings, the tab settings, specific fonts, and a whole lot of other settings the page needs to be displayed correctly. These are not needed in web page design.

NotePad. WordPad, and Simple Text are already saved in text-only format so if you use one of them as your word processor, you'll get the correct format simply by saving your document.

Exercise 1

List any three word processors that you can use to write HTML.
Among the numerous word processors that you can use include:

- Corel word perfect
- **Microsoft** word
- Word perfect.

3.2.1 How To Name Your Document

What you name your document is very important. You must first give your document a name and then add a suffix to it. That's the way everything works in HTML. You give a name and then a suffix. Follow this format to name your document:

- Choose a name. Anything. If you have a PC not running Windows 95, you are limited to eight letters.
- Add a suffix. For all HTML documents, you will add either .htm or .html

Exercise 2

Does all HTML documents need to have the extension .htm or .html?

As a rule all HTML documents must have an extension .htm or html.

3.3 Opening the Document in the Browser

Once you have your HTML document on the floppy disc or your hard drive, you'll need to open it up in the browser to see exactly how it would appear.

- Under the FILE menu at the very top left of this screen, you'll find OPEN, OPEN FILE, OPEN DOCUMENT, or words to that effect.
- Click on it. Some browsers give you the dialogue box that allows you to find your document right away. Internet Explorer, and later versions of Netscape Navigator, require you to click on a BROWSE button or OPEN FILE button to get the dialogue box. When the dialogue box opens up, switch to the A: drive and open your document. If you saved the file to your hard drive, get it from there.
- You might have to then click an OK button. The browser will do the rest.

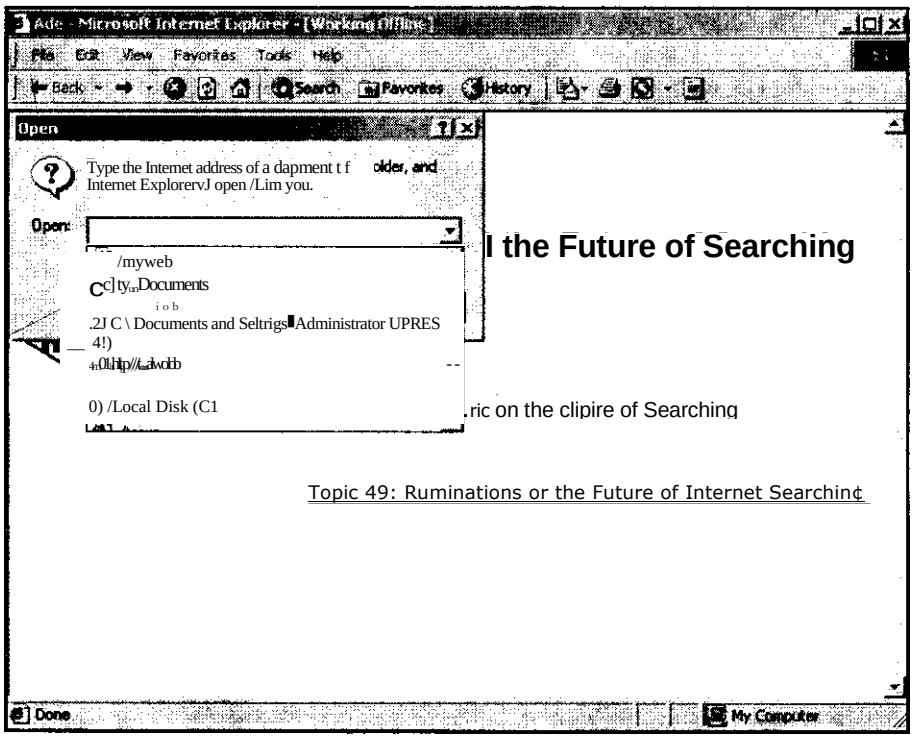


Fig. 22.1

3.4 **View Others' HTML Source Codes**

Let's say you run into a page that has a really neat layout, or a fancy text pattern, or a strange grouping of pictures or if you see some landscaping you like, you're going to use the idea. You can look at another page's HTML document using the browser, which is one of the best ways to learn HTML.

Here's how you look at an HTML document (known as the "source code"):

1. When you find a page you like, click on VIEW at the top of the screen.
2. Choose DOCUMENT SOURCE from the menu. Sometimes it only reads SOURCE.
3. The HTML document will appear on the screen.

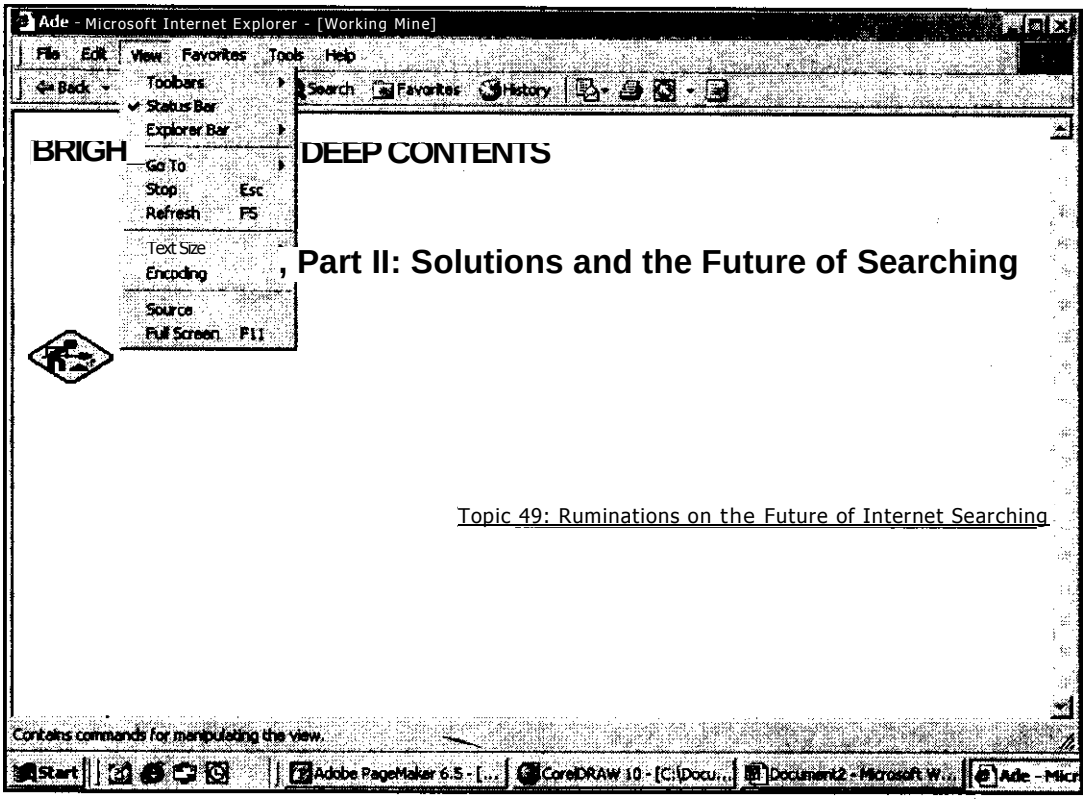


Fig. 22.2

3.5 Document Structure

HTML documents have two (2) parts, the head and the body. The body is the larger part of the document, as the body of a letter you would write to a friend would be. The head of the document contains the document's title and similar information, and the body contains most everything else.

Example of basic HTML document Structure...

<him>

<head><title> Title goes here<title></head>

<body>Body goes here<body>

</html>

Exercise 3

Is there any difference between the structure of word document and HTML document?

As a rule, HTML document must have a beginning and a closing tag.

4.0 Conclusion

You can use a word processor to write HTML document but you must save it as text with the extension .html or .htm, and nothing else. The browser is used to view the appearance of your web page. You can use your browser to look at another page's HTML document and learn one or two things from it.

5.0 Summary

In this unit, we looked at what HTML is all about and how to create them using word processor. We also considered viewing the source codes of other people's web pages with a view of learning one or two things from their designs. The unit also considered how to view your web page in a browser.

6.0 References and Suggestion for Further Reading

Basic HTML http://www.htmlgoodies.com

Developing HTML hup://www.davesite.com/webstation/html/

7.0 Tutor-Marked Assignment

Question

State the procedure for viewing source code of a web page. What is the importance of doing so?

UNIT 23: **HTML — Tags**

Table of Contents

1.0 Introduction

Think of tags as commands. Suppose you want a line of text to be bold you will put a tag at the exact point you want the bold lettering to start and another tag where you want the bold lettering to stop. If you want just a word to be in italics, you will place a start italic tag at the beginning of the word and an end italic tag at the end of the word. Is this making sense so far?

2.0 Objectives

At the end of this unit, you are expected to:

- Identify tags and how they are used;
- Know how to use single and multiple tags;
- Use heading tag;
- Use horizontal ruled lines.

3.1 Tag Format

All tag formats are the same. They begin with a less-than sign: <and end with a greater-than sign:>. No exceptions. What goes inside the <and> is the tag. Learning HTML is learning the tag to perform whatever command you want to do. Here's an example:
The tag for bold lettering is B. That makes sense.
Here's what the tags look like to turn the word Shidinje bold:
<B> Sh id inje</B>

Look At What is Happening:

- <B> is the beginning bold tag.
- Shidinje is the word being affected by the <B> tag.
- <B> is the end bold tag. Notice it is exactly the same as the beginning tag except there is a slash in front of the tag command.
- This is what the bold tags above produced: Shidinje

In terms of tags, capitals and lowercase letters are equal. But it would be a very good idea for you to make a habit of writing your tags in capital letters as it sets them apart from the normal text. It also makes them easier to pick out later when you are revisiting the code.

3.2 Open and Close Tags

The major' ty of HTML tags do require both an open and a close tag (a begin and end tag). Most are very easy to understand because the tag is obvious. Here are a few and what they do to text:

Affect	Code	Code Used	What It Does
Bold	B	<B>Bold <B>	Bold
Italic	I	eltalic<I>	italic
Typewriter	TT	<TT>Typewriter<TT>	Typewriter

3.3 Multiple Tags

HTML allows you to use two or more than one tag at a time. To do this, always set the beginning and ending tags at the same time and always place them on the farthest end of the item being affected.

For example:

<B><I>Bold and Italic <1><B> gives you Bold and Italic

If you do use multiple tags to alter text, make a point of not getting the end tags out of order.

Exercise 1

Look at this example below:

<B><I><TT> Text Text</TT></B><I>

In terms of format, the example above is not correct. The end tags are out of order in relation to the start tags.

You should rewrite this tag correctly.

If you have written it correctly your answer should look like this:

<B><I><TT> Text Text<TT><I></B>

3.4 Single Tags

The open and close tags format dominates the majority of the available HTML tags, but there are tags that stand alone. Here are three frequently used ones.

Tag	What It Does
<HR>	This command gives you a line across the page. (HR stands for Horizontal Reference.)
 	This breaks the text and starts it again on the next line. Remember you saved your document as TEXT so where you hit ENTER to jump to the next line was not saved. In an HTML document, you need to denote where you want every carriage return with a
<P>	This stands for Paragraph. It does the exact same thing as the above except this tag skips a line. BR just jumps to the next line, P skips a line before starting the text again.

Exercise 2

Do all HTML tags use a capital letter?

Tags are not case sensitive hence you can use either lower or upper case in writing tags.

3.5 Beginning and Ending Tag in a Page

In writing HTML document you will start every page with this tag:

<HTML>

You are denoting that this is an HTML document. Your next tags will always be these:

<TITLE> and <TITLE>

Whatever falls between the TITLE tags will be the title of the document When the page is viewed it is usually found in the title bar at the top of the screen. (On Windows machines, this is to the left of the maximize/minimize buttons at the very top of the window.)

You may NOT use other tags within the TITLE tags

Example:

You cannot have the code read: <title><b> title goes here <b></title>.

Finally, you'll end every page you write with this tag: <HTML> You started the page with HTML and you will end the page with /HTML.

Activity 1

Try this code and view it in your browser

```
<HTML>
<TITLE> My first html page </TITLE>
<B> This is my first HTML pagel<B><P>
I can write in <I>Italic<I> or <B> Bold <B><BR>
<HR>
<B><I> Or I can write in both <I><B><BR>
<HR>
<TT> ..and that's all </TT>
<HTML>
```

3.6 Heading Commands

Headings are some of the most important tags within the BODY ofyour TITML document. You will usually use a headirtg to tell what the following section of your page is-about The-opening tag for a heading is <hy> and the closing tag is <Thy> with y being the size ofthe heading... from I to 6 (1 being largest, and 6 being smallest)

Here are the relative sizes:

i

Shidinje s a lovely baby [H1]

<hi> Shidinje is a lovely baby. fl-11]</h I>

Shidinje is a lovely baby.[H2]

<h2> Bob fell over the chicken. fH2]<fh2>

Shidinje is a lovely baby. 11131

<h3> Bob fell over the chicken. [1131</h3>

Shidinje is a lovely baby. 11141

<h4> Bob fell over the chickien. [1-14]</h4>

Shidinje is a lovely baby. [H5]

<h5> Bob fell over the chicken. II-1514M>

Shidinje is a lovely baby. f H6] <116> Shidrine is a lovely baby [146]</h6>

Shidinje is a lovely baby [1 1-161

3.7 Horizontal Ruled Lines

Horizontal Ruled Lines are used to separate different areas of a web page. The tag for a horizontal ruled line is <fir>. The horizontal ruled line DOES NOT have a closing tag. You may also add certain attributes to the <hr> tag, such as WIDTI-1=n% (for fixed pixel width) or WIDTH=n% for a certain percentage of the screen wide, *SIZE = n* to make the line a certain pixel amount thick, and NOSHADE to turn the line's shading off. A plain <hr> with no attributes will make the line the full width of the screen.

*Example of horizontal ruled lines_*

<hr width=50>

<hr width=50%

<hr size=7>

<hr noshade>

You may also use several attributes within one tag...

<hr width=50% size=10 noshade>

Activity 2

Access your code in Activity 1 and add a heading and a line below the heading.

4.0 Conclusion

- Tags are commands used in formatting HTML documents. Tags must have a begin anti an end tags. HTML allows you to use two or more tags at a time. If you do use multiple tags on text, you must get the end tags out in first in first out order. Also each page of HTML must start with <HTML> and you will end the page with </HTML>. Heading commands are used extensively in HTML documents to create headings.

5.0 Summary

In this unit, we were able to identify what tags are and how you can use them in formatting your HTML document. The use of heading tag and how to separate different areatitof a web page were also considered.

6.0 References and Suggestion for Further Reading

Basic HTML http://www.htmlgoodies.com

Developing HTML http://www.davesite.com/webstationd/html/

7.0 Tutor-Marked Assignment

Question:

State any three tags that do not accept multiple tags and state the functions of the tags.

UNIT 24: HTML — Text Formatting Properties

Table of Contents

1.0 Introduction

If you had an entire web page without formatted text, it would look rather dull and boring. In this unit, we will be looking at text formatting tags.

2.0 Objectives

- At the end of this unit you should be able to:
- Create a paragraph in your document;
- Centralize and right align text in your dodument;
- Change font size and font.

31 Paragraphs

You will often use paragraphs in HTML, just as you do when you write stories. The opening tag for a paragraph is <p>, and the closing tag is <p>. The closing tag for a paragraph is not always needed, but I recommend using it anyway.

Example of a paragraph.

Shidinje can stand on her own while holding something to support her. She will not want to try standing without leaning on an object for fear of falling own.

Shidinje can stand on her own while holding something to support her She will not want to try standing without leaning on an object for fear of falling own.

Exercise 1

Does the paragraph need a closing tag?

As mentioned above, the closing tag for a paragraph is not always needed.

3.2 Font Size Commands

Maybe you'd like a little more control over your text size. The <FONT SIZE> commands. Heading commands are great for right at the top of the page.

There are twelve (12) font size commands available to you: +6 through +1 and -1 through -6.

As you've probably guessed, +6 is the largest (it's huge); -6 is the smallest (it's a little too small). Here are a few of them in action. There's no need to show all of them. You'll get the idea of their relative sizes. Follow this pattern to place one on your page.

```
<FONT SIZE= "+3"> This is +3</FONT>
<FONT SIZE= "+1"> This is +1</FONT>
<FONT SIZE= "-1"> This is -1<FONT>
<FONT SIZE= "-6"> This is -6</FONT>
```

Notice that this first command, <FONT SIZE= "--"> is actually doing two things:

1. It's asking for a new font size...
2. Then offering a number to denote the font size.

This is what I like to call a command inside of a command. The technical HTML term is an "attribute". When you have that, you denote the attribute with an equal sign and enclose it within quotation marks. Look above. See the equal sign and the plus or minus number in quotes? That's what I'm talking about.

Example of font tags...

Sharon is a **Lovely baby** isn't she?

 Sharon is   a   lovely </ font> baby isn't she?

Also notice that the end command for a <FONT SIZE= "--"> tag only requires </FONT>. Remember that an attribute is inside of a tag. When you use an end command, you are closing the tag, not the attribute. So you only need the one end tag, like above.

Activity
Write a font tag for this text.

Shidini.! is a *darling*

The newest version of many browsers supports extended fonts, in which you can choose to have the document fonts other than the normal one. This is accomplished by adding the FACE="font name" attribute to the <FONT> tag. The most commonly supported fonts are Verdana, Anal, Helvetica, Impact, Comic Sans MS, and a few others. It is not recommended to make your page font dependent, because the older versions of many browsers don't yet support this feature.

Examples of Extended Fonts...
 Verdana
Verdana
Arial
Anal
 Helvetica
Helvetica
 Impact
Impact
 Comic Sans MS
Comic Sans MS

3.3 **Text Color**

You can change the color of the text by setting the **COLOR** ="font_color" attribute in the **<FONT>** tag. The Color is usually set by using the hexadecimal system (#000000 black to #FFFEFF white) but can also be set in newer browsers by using the simple word of the color. (Red for Red. Blue for Blue, etc.)

Example of Text Color...

 Hey I'm Blue!

Hey I'm blue!
Hey I'm green and in Impact Fontl

Hey rm green and in Impact Font!

 Hey I'm Red!
Hey I'm red!

Activity 2

Try typing this and see the result on your browser.

<html>
<head><title> Fonts and Colors Are Cool<title>
<head>
<body>
 Hey I'mYellow Text.. Change my color!
<font size=+2 color= "white"> Hey I'm White Change My Colork/font>
This page Copyright & amp; copy; 1997 Little Joe's Pages & amp; davesite corn.
</body>
</html>

3.4 **Centering Text**

Since you've already done some writing you've no doubt noticed that the text that appeared in the browser window was justified to the left of the screen. That's what's known as the default. It just happens without your specifying any particular justification.

Notice that this text is centered on the page. It's done by surrounding the text you want centered with simple <CENTER> and </CENTER> commands.

Here's what it looks like:

<CENTER>
All text in here will be centered
</CENTER>

3.5 **Right Align and Left Align**

Many tags support ALIGN attributes, if you want something to be aligned from the left margin, from the center, or from the right margin. The ALIGN attribute is **placed** in theopenirig 'tag beitire the >.

Here's the format:

*cF **ALIGN="right"> Text in here is pushed to the right </P>***
Left Align
hi al ign=left> Left Align </h 1>

Note that if you add an attribute to a single tag like the <P> tag, or the
 tag (yes, there are attributes for BR), then you'll need to use an end tag. See the <P> up there.

If you're just using **<P>** to create a new paragraph, then it can sit all by its lonesome. But the moment you add an attribute=, you need to use the end tag.

Exercise 2

Explain the function of the Align attribute.

The Align attribute is used to align something from the left margin, from the center or from the right margin.

3.6 The Line Break

When your HTML document is viewed, normally the text will do a word-wrap at the end of a line. If you want to have the text BREAK (go to another line) you will use the
 tag. This tag has no closing tag.

Example WITHOUT line break...

Sentence One. Sentence Two. Sentence Three.

Example WITH line Break...

Sentence One.
Sentence Two.
Sentence Three.

Sentence One.
Sentence Two. <hr>
Sentence Three.

4.0 Conclusion

If you had an entire web page without formatted text, it would look rather (lull and boring. This is why we use text formatting tags. Some common text formatting tags are <b> and <b> for bold, <i> and <i> for *italics.* <u> and </u> for underlined, and <tt> and <ft> for typewriter. The and tags also come in handy.

5.0 Summary

In this unit, we looked at how you can have more control over your text size, color, text alignment and set out your paragraph.

6.0 References and Suggestion for Further Reading

Basic HTML http://www.htmlgoodies.com
Developing HTML http://www.daves ite.com/webstation/htm I/

7.0 Tutor-Marked Assignment

Question

State the format for changing the color of a text and what happens if you add an attribute to a single tag.

UNIT 25: HTML - Creating Links to Other Pages

Table of Contents

1.0 **Introduction**

In this unit we will learn how to create a link to another page. It's a set tag format like any of the others you have seen so far. Once you learn the format, you can make as many links as you want to any other page you want. The ability of the World Wide Web to provide pictures, technically called images, graphics, or sometimes icons, has made it so popular. In this unit, you'll learn how to place an image on your page and also how to turn an image into a link to another page.

2.0 **Objectives**

At the end of this unit, you will be able to:

- Create a Hypertext Link;
- Create E-mail Links from your page;
- Insert an Image on your page.

3.1 **Creating a Hypertext Link**

To add a link to other web pages on the Web, you will use the ****** opening tag and closing tag. Whatever appears between these two tags will become underlined and colored, and if you click on the underlined text it will send the browser to the location within the quotes.

For example: What is below would create a link to the HTML Goodies home page.

<A HRET="http://www.htnilgoodies.com"› Click Here For HTML.Goodies</A>

Here is What is Happening

- **A** stands for Anchor. It begins the link to another page.
- **HREF** stands for Hypertext REFerence. That's a nice, short way of saying to the browser, "This is where the link is going to go."
- **http://www.htmlgoodies.com** is the FULL ADDRESS of the link. Also notice that the address has an equal sign in front of it and is enclosed in quotes. Why? Because it's an attribute of the Anchor tag, a command inside of a command.
- Where it reads "Click Here For HTML Goodies" is where you write the text you want to appear on the page. What is in that space will appear on the page for the viewer to click. So, write something that denotes the link.
- /A ends the entire link command.

Here's what will appear on the page using the command above.

Click Here For HTML Goodies

Now, without clicking, simply lay your pointer on the blue words. You'll see the address of the link you created come up along the bottom of the browser window, down where it usually reads "Document Done".

Exercise 2

Can you state the importance of having hypertext link on your page?

The hypetext link is used to link you to other related web page which could have a different URL.

3.2 **E-Mail Links from Your Page**

Although links are usually used to send people to other web pages, you may also use them to send e-mail to specific addresses by using a location of naltergligt . This is what is known as a

mailto command. It follows the same coding scheme as the hypertext link above. What this format does is place blue wording on the screen that people can click to send you a piece of e-mail.

Here's the pattern:

<A HREF= "mailio:shiloba@yahoo.com"> Click Here To write Me <IA>

Notice it is the same format as a link except in a link you write "mailto." in place of the http://and your e-mail address in place of the page address. Yes, you still need the </A> tag at the end. Please notice there is NO SPACE between the colon and the e-mail address.

Here is what you get using the "mailto:" command above:

Click Here To Write Me

On clicking it, you'll get an e-mail dialogue box addressed to me. Then you can write if you want. The same thing will work for you. Just place your e-mail address in place of mine following the format above.

Exercise 2

What is the difference between Hypertext Link command and E-mail Links?

The Hypertext link command links you to other web pages on the web while the e-mail link is used to send e-mail to a specific address

3.3 Placing an Image on Your Page

The command to place an image is constant. You will use the same format every time. Now might be a good time to talk about where to store everything because you're starting to call for additional items to fill up your home page. Until now, all we did was put text on the page. Now you're going to place an image.

It's a good idea for you to place whatever images you are going to use in the same place as your web pages. That means place the image right on the same floppy disc, or in the same hard drive directory, as the page that will call for it Here's the format for placing an image:

<IMG SRC = "image.gir>

By replacing "image gif' "with "oziohu.git, one of my own graphics, you get this

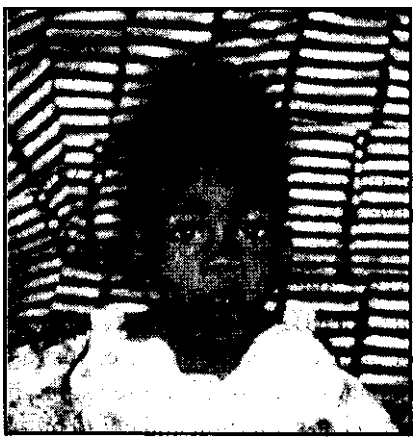


Fig. 25.1

Here is What is Happening

- IMG stands for "image." It announces to the browser that an image will go here on the page. Yes, the image will pop up right where you write in the image tag.
- SRC stands for "source." This again is an attribute, a command inside a command. It is telling the browser where to go to find the image. Again, it is best for you to place the images you want to use in the same directory as the page. This way you can call for the image by name alone. If you start to place your images all over the place, you'll have to start adding directories and sub-directories to the SRC attribute. And at this point, it is too confusing. Just place the image in the same place as the HTML document that will call for it and then call for the image by name alone. You can get fancy later. Right now, let's just get it to work.
- Image.gif is the name of the image. Notice it is f011owing the same type of format as your HTML documents. There is a name (image) then a dot and then there is a suffix (gif).

3.3.1 Image Formats

There are three basic formats you will find on the World Wide Web. Each is denoted to the browser by a different suffix (gif).

.gif This is pronounced "j if ' or "gir (hard "G") depending on whom you speak to. I have always said `lir, like the peanut butter. This is an acronym for Graphics Interchange Format.

The format was invented by Compuserve and it is very popular. The reason is that it is a simple format. It is a series of colored picture elements, or dots, known as pixels, that line up to make a picture. Your television's picture is created much the same way. Browsers can handle this format quite easily.

.jpeg or .jpg (pronounced "j-peg") There are two names to denote this format because of the PC and MAC formats allowing 3 and 4 letters after the dot. JPEG is an acronym for Joint Photographic Experts Group, the organisation that invented the format.

The format is unique in that it uses compression after it has been created. That's fancy computer talk that means when the computer is not using a .jpeg image it folds it up and puts it away. For example, if the picture is 10K bytes when displaced, it may be only 4K bytes when stored. Nice trick, huh? It saves hard drive space, but also tends to require a bit of memory on your part to unfold the image.

.bmp (pronounced bimp") This is a "bitmap." You will probably never place a bitmap as an image, although now Internet Explorer browsers allow it. A bitmap is an image that a computer produces and places for you.

Exercise 3

State the advantage of the .jpeg image format.

The .jpeg image format uses compression after it's been created. A picture at 10k bytes when displayed, may be only 4k bytes hence save hard drive space.

3.3.2 Where Do I Get Images for My Page?

They are literally everywhere. The IITML Goodies Images Page allows you access to over 500 place for free, and there are other sites out there that offer just as many. Plus, since you've been surfing, you've seen hundreds of images already. If you see something on someone's page that you really like to use it, don't just take it. That's not right and could be against copyright law. Ask. You'll probably get the image.

4.0 **Conclusion**

Without links, the World Wide Web wouldn't be a web at all. They are usually used to send people to other web pages, you may also use it to send e-mail to a specific address. You may also add images (pictures) to your web page, as long as the image is in the .gif or jpg (or jpeg) file formats. You will not be able to use .bmp format files! The basic tag for in-line images in <imgsrc= "location">

5.0 **Summary**

In this unit we were able to discuss how to use Links to send people to other web pages, and also use it to send e-mail to a specific address and as well as how to insert images, graphics, or sometimes icons.

6.0 **References and Suggestion for Further Reading**

Basic HTML http://www.htmlgoodies.com
Developing HTML http:..www.davesite.com/webstation/htmal/

7.0 **Tutor-Marked Assignment**

Question
Explain the main function of a link in your web page.

UNIT 26: HTML — Manipulating Images

Table of Contents

1.0 Introduction

I have shown you how to create a hypertext link. What it did was to create blue words on your page so that someone could click on them and then jump to another site, Well, here we're reloing to set it up so that an image becomes clickable or 'active.' The viewer will click on that image instead of on blue words, to make the hypertext link.

2.0 Objectives

At the end of this unit you will be able to:

- Use images as link;
- Position an image at an appropriate place on your page;
- Change image size;
- Identify and use the body attributes.

11 Combining Links and Images

11/44anY tinies you May want to have an image that is linked, so that if someone clicks the image, the person will be th another page.: ThW IS Mille? 'sitnpid'cytailult need tOplaceiheINIG tag within **the** A HRIF tag (ic/ *I= "lobs:Min:4 Iiiik"·5<hhcigsre=·11adatithi1 of'irtioge">). You may also use the ALIGN tags With images!'

Example of a linked image
ahref= "http://www.davesits,capar <ling>
src = "hu::://www.dawesite.comlgrapIpt4piesmItsit". ali,gn=right>.</q>.

3.2 Activating. an ;Image

Activating anirnage•Willallow the vieweptothcicon the image, instcad.of on,blue worcis,,to make the hypertext link. For example:. ,
Here's the format:

<A HREF="hlip://www.goodies.com"> <IMG SRC = "homepage.gir align=right> </A>

•.

33 Placennept 4:14 tbs rage „

First let's worry about placing the Image somewhere on the page. The default is justified to the left. If you ;Nijt,e, AP image :tag onra Mgr the imase will pop up m

P k[iwi] l[e]•Th ,

If you want to have an image pIaced tile cgarept the page, you might De ae to guess at this point thatyou'cluse the ccCENTER> apa4CENTEq> commands described earlier on in this module.

Here's the format:

"<IMG ALION= SEC='"ittttige.gr>

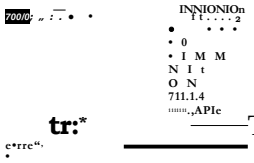
3:4.; Text·With Ithages

'Images don't alwaysStand Alm¯ie.' You vill often Want text alongside theih. Ilete you Will ¯ALIGN="--" attribute With one of these threm.'"tdp", "Middle", Cebotforti" •
Here are the formats'.

<INIG ALIGN= "top" SAC= "Sally.gir> text text tei&
' • <IN/1G AL IGN=-"Middle" SRC' sally.gir> text texttext
<IMG ALIGN= "bottom" SRC = "sal ty:gir'› text teXt tea'

And here's what it all looks like:

This is text ALIGN="top" - - s a w .



This is text ALIGN="middle"

This is text ALIGN= "bottom"

You may notice that using the top, middle, and bottom attributes.only allows for one line of text and then the rest jumps down below the image.

Here's the trick to solving that. Don't use the top, middle, or bottom attribute unless you only want one line of text. If you want text to wrap around the image use ALIGN= "left" and ALIGN= "right".

Even if the image is already to the left, use the ALIGN= "left" attribute anyway. It allows the text to wrap around the image fully. Try it, it's quite a clever little deal.

Exercise 1

What attribute will you use if you want text to wrap around the image?

The Align= "left" and Align= "right" is used to wrap text around an image.

But what if you want only one line of text to come out of the middle of the image, and you want the image aligned to the right? Can you use two ALIGN= "--" attributes in the same image? No.

You set the text coming out of the middle using the ALIGN= "middle" attribute in the IMG tag. Then you set the image and its text to the right by surrounding the two items with the <P ALIGN="righr> and <P> commands.

3.5 Changing Image Size

To begin this discussion, let me state that images on a computer are not like photographs. Computer images are made up of a lot of little coloured dots. They're known as picture elements or "pixels" for short. So, just remember that during this part of the unit, numbers refer to pixels rather than inches, or centimeters, or whatever. When! say pixels, I'm talking about little coloured dots.

Every image is made up of pixels. The more pixels per inch the image has the better, and more detailed, the image will appear. Of course, that also means the image will take up a whole lot more bytes on your hard drive. You're going to find that most images on the web are 72 and 100 pixels per iitch. Yes, there are other settings, but 72-100 is a good trade-off between loss of details and bytes required.

This means that you can also denote an image by number of pixels. For example, the "oxiohu.gir image is 97 pixels high by 64 pixels wide. How do I know that? I have an expensive graphics programme that tells me so. How would you know? Without a specific programme, you wouldn't. You'll have to play around with the numbers in these commands a little bit, but it's easy to do.

You might also want to open the image by itself in the Netscape Navigator browser window. Do that by choosing OPEN FILE under the FILE menu. When the picture pops up, look at the title bar along the very top. The height and width should be there.

Denote to the image command how many pixels high by how many pixels wide you want. The "oziohu.gif' image is 64X97 pixels. If I want the image to appear smaller,! will ask for the pixels to be smaller, say 30X55, If! want it bigger, I would set the pixels larger, say 100X250. Just remember form. If you make the image smaller or larger, you must keep the same general square, rectangle, or whatever, form.

Of course, if I want to, I can totally distort the picture.

Here's the coding

<IMG HEIGHT="##" WIDTH="##" SRC="image.gir>

Notice the HEIGHT and WIDTH attributes nestled right where the ALIGN command went before. You will replace the *"lir* with a number of pixels for height and width. Here are the three examples:

This is normal size:

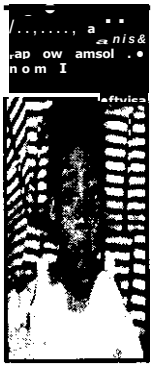
This is 30 X 55

Exercise 2

What is the disadvantage of having more pixels per inch in your image?

The more pixels per inch the image has implies that the image will take up a lot more bytes on your hard drive.

This is 100 x 250



This is 100 x 23:

3.6 The BODY Attributes

In first of this module you learned the BODY tag. The BODY tag has many attributes. Here are the most useful ones;

- BACKGROUND = "location_of image" - Background image for web page. Example: If you have kittenjpg in the same directory as your HTML file, use <body background="kittenjpg"> to load it as your background image.
- BGCOLOR= "is/hexadecimal _here" - Hexadecimal Color Code for Background Color.
- LINK="#hexadecimal here" - Hexadecimal Color Code for Links (if left blank, most browsers default to blue).
- VLINK= ¯#hexadecimal_here" - Hexadecimal Color Code for Links the user has already visited (if left blank, most browsers default to purple).
- TEXT= ¯fthexadecimal_here" - Hexadecimal Color Code for Text Color

4.0 Conclusion

It is recommended to add HEIGHT and WIDTH attributes to the IMG tag, which will allow the image to take proper proportions on a browser that is not currently viewing images. It is also recommended to use the ALT= ¯what picture is" to tell a person what a picture is in case it is still loading or they are not viewing images. (The IMG tag has no closing tag!).

5.0 Summary

In this unit we considered how an image can be used as a link. Positioning our images on the web page was also taught as well setting the height and width of an image.

6.0 References and Suggestion for Further Reading

Basic I-ITML http://www.htmlgoodies.com
Developing HTMLhtIp://www.davesite.com/webstation/html/

7.0 Tutor-Marked Assignment

Question
Type in this in your word processor and print out the result from the browser and submit.

<htrnl>

<head><title> Title goes here</title></head>

<body >

align=right< Body goes here</h I>

<hr.>

<h3 al ign=center> Headings are kewl! </h3>
 I can use text links... Visit Dave's Site ! <hr width=50>
and Image Links... <img src="http://www.davesite.com/graphx/davesmll.gif'>
<body>
</html>

UNIT 27: Effective Internet Searching Techniques: Search Tools

Table of Contents

1.0 Introduction

Conducting a search can be time consuming and frustrating for the non-expert. This is not surprising given the enormous amount of information available on the World Wide Web and the different ways it is stored and retrieved. The search process is made all the more difficult because of the large number of search tools, their differing information content and the lack of industry standards. In this unit and subsequent units on Effective Internet Search, we will be looking at how you can effectively search the internet for information.

2.0 Objectives

At the end of this unit we will be able to:

- Explain why it is difficult to locate information from the WWW;
- Identify the various search tools;
- State the advantage's and disadvantages of each search tool;
- List some search tools web sites.

3.1 Background to the Study

Before we can develop effective searching techniques for the Internet, we need to review some pertinent facts about the Internet itself. There are currently over 11 million sites on the World Wide Web. also known as WWW and are over 1 billion pages on the WWW in computers all over the world. These specialized computers are linked to form part of a worldwide communication system called the Internet. When you conduct a search, you direct your computer's browser to go to Web sites where documents are stored and retrieve the requestd information for display on your screen.

Millions of new Web pages are being added each week, some existing pages are being updated or altered in some significant ways, and some pages are being removed. Because the Web is so large, it is not feasible for any search engine to search the entire Web. Instead, most search engines generate a database of information derived from Web sites and pages. These databases cannot include all Web pages: in fact, the largest databases (probably Alta Vista and Northern Light) contain intbrmation on about 250 million Web pages. Other search engines claim to use a quality rather than quantity approach and limit the size of their databases.

Most Internet search engines allow anyone to submit Web pages (there's usually a link labelled 'submit/add/suggest a page/site/URL'). Once the page is submitted, the search engine sends out a computer-robot programme called a crawler (spiders, Web; get it). The crawler gathers the information and returns it to the database.

Web crawlers also go out on their own looking for new sites and checking up on old ones. As a result, it's very possible that your site might be added to an index even though you've taken no action.

3.2 Search Tools and Methods

A search tool is a computer programme that performs searches. A search method is the way a search tool requests and retrieves information from its Web site.

A search begins at a selected search tool's Web site, reached by means of its address or URL. Each tool's Web site comprises a store of information called a database. This database has links to other databases at other Web sites, and the other Web sites have links to still other Web sites, and so on. Thus, each search tool has extended search capabilities by means of a worldwide system of links.

Exercise 1

State 3 reasons why locating an information from the web is difficult.

3.3 Search Tools

A search tool employs a computer programme to access Web sites and retrieve information. Each search tool is owned by a single entity, such as person, company or organisation, which operates it from a master computer. When you use a search tool, your request travels to the tool's Web site. There, it conducts a search of its database and directs the response back to your computer.

3.3.1 Types of Search Tools

There are essentially four types of search tools, each of which has its own search method. The following describe these search tools and then suggest exercises for achieving a familiarity with their use.

1. A directory search tool searches for information by subject matter. It is a hierarchical search that starts with a general subject heading and follows with a succession of increasingly more specific sub-headings. The search method it employs is known as a subject search. Choose a subject search when you want general information on a subject or topic. Often, you can find links in the references provided that will lead to specific information you want.
   - *Advantage:* It is easy to use. Also, information placed in its database is reviewed and indexed first by skilled persons to ensure its value.
   - *Disadvantage: Because* directory reviews and indexing is so time consuming, the number of reviews are limited. Thus, directory databases are comparatively small and their updating frequency is relatively low. Also, descriptive information about each site is limited and general.
2. A search engine tool searches for information through use of keywords and responds with a list of references or hits. The search method it employs is known as a keyword search. If you wish to obtain specific information, choose a keyword search, since its extensive database is likely to contain the information sought.
   - *Advantage:* Its information content or database is substantially larger and more current than that of a directory search tool.
   - *Disadvantage:* Not very exacting in the way it indexes and retrieves information in its database, which makes finding relevant documents more difficult.

3 A directory with search engine uses both the subject and keyword search methods interactively as described above. In the directory search part, the search follows the directory path through increasingly more specific subject matter. At each stop along the path, a search engine option is provided to enable the searcher to convert to a keyword search. The subject and keyword search is thus said to be *coordinated.* The further down the path the keyword search is made, the narrower is the search field and the fewer and more relevant the hits. You can use this search tool when you are uncertain whether a subject or keyword search will provide the best results.

- *Advantage:* Ability to narrow the search field to obtain better results.
- *Disadvantages:* This search method may not succeed for difficult searches.

Some search tools use search engine and directory searches independently. They are said to be *non-coordinated.*

4. A multi-engine search tool (sometimes called a meta-search) utilizes a number of search engines in parallel. The search is conducted via keywords employing commonly used operators or plain language. It then lists the hits either by search engine employed or by integrating the

results into a single listing. The search method it employs is known as a meta search. You can use multi-engine to speed up the search process and to avoid redundant hits.

- *Advantage:* Tolerant of imprecise search questions and provides fewer hits of likely greater relevance.
- *Disadvantage:* Not as effective as a search engine for difficult searches.

Of the hundreds of search tools available, listed below are examples of Search tools and their URL.

Table 1: Search Tools

Search Tool	Category	'Websight
Encyclopaedia Britannica	Directory [Subject Search]	
Look Smart	Directory [Subject Search]	www.looksinart.com
Yahoo*	Directory [Subject Search]	www.yahoo.com
Alta Vista	Search Engine Keyword Search	www.altavista.com
Google	Search Engine Keyword Search	www.google.com
Excite	Search Engine Keyword Search	www.Excite.com
llor	Search Engine Keyword Search	www.iIor.com
Hotbot	Search Engine Keyword Search	www.hotbot.com
Infoseek	Search Engine Keyword Search	www.infosee.com
Northern Light	Search Engine Keyword Search	www.northernlight.com
Mamma	Multi-Engine Meta Search	www.mamma.com
Dogpile	Multi-Engine Meta Search	wv'Av.dogpi le
Metacrawler	Multi-Engine Meta Search	www.metacrawler
SavyySearch	Multi-Engine Meta Search	www.sayvysearch.com

Activity 2

Conduct the following searches and write down the differences between the result produced by the search tool.

a. Directory [Subject Search]

Type *http://www.yaltoo.com* in the location box of your Internet Browser [e.g. Netscape Navigator or MS Explorer]. Press *Enter*. The Yahoo! Home Page is displayed. From the subject list provided, choose and click a category of your interest to follow. Choose titles that are increasingly more specific until there are no more options of interest offered. Scroll through the references or hits, and click a hit that interests you to get an abstract or title of the reference.

b. Search Engine (Keyword Search).

Type ***http://www.ilor.com*** in the location box of your Internet Browser and press ***Enter*** to access the Home Page. Using keywords, type your question or query into the location box. Click **Find.** Examine the hits of interest and click one to access the reference.

4.0 Conclusion

The dynamic nature of the Web is one of its true strengths, but it is also problematic when it comes time to finding something. To assist us, several search tools are available and new ones are coming online on a regular basis. Each of these search tools has a unique way of doing some things but there are some things they have in common. Hence in this unit we were able to look at some few search tools and how they work as well as their advantages and disadvantages.

5.0 Summary

There are four basic types of search services: subject directories that classify websites, search engines that perform keyword searches within websites, multi-engine search tool (sometimes called a meta-search) that utilizes a number of search engines in parallel and a directory with search engine that uses both the subject and keyword search methods interactively.

6.0 References and Suggestion for Further Reading

WWWmetrics (http://wvvw.wwwmetrics.com)

Mediametrix (http://www.mediametrix.com/data/thetop.jsp)

Greg Notes' Search Engine Showdown
http://www.notess.com/search/)

Search Tutorial: Guide to Effective Searching of the Internet, revised and update July 1999, VisualMetrics Corporation, (http://www.thewebtools.comAutorialAutorial.htm)

Nua Internet Surveys (http://www.nua.ie)
Internetstats (http://www.intemetstats.com)

7.0 Tutor-Marked Assignment

Question
What are the main categories of the search tool? Also state the advantage and disadvantage of each search tool.

UNIT 28: **Effective Internet Searching Techniques — Search Features**

Table of Contents

- **NOT** excludes any document containing the term. NOT excludes even a single use of the term in the document. It is most suitably employed to reduce a large number of irrelevant hits when other measures have failed.

  Example: "intranet NOT Internet's

  When using these operators, remember to capitalize them as shown above.

Exercise 1

Write a query that will list web sites on networking and Intranet.

3.1.2 **Plus/Minus**

- Employs [+] before a term to retrieve only the documents containing that term. It is similar to the Boolean AND.
- Employs [-] before a term to exclude that term from the search. It is similar to the Boolean NOT.
- Do not leave a space between the operator and the term that follows.

Query Example 2: *-hcomputer+network—internet*

This query gives an enormous number of hits, because each term can be anywhere in the document and is not necessarily related to any other. Nonetheless, because the hits are ranked, the highest-ranking ones should contain all the terms and therefore likely to produce relevant documents.

Use [-] similarly to prohibit the use of a term. This technique is particularly useful when you wish to exclude irrelevant subject matter.

Example 2 will produce a list of hits containing computer and networking and exclude anything web site with internet.

Exercise 2

Write a query that will list web site on Library User Education excluding internet user education.

If you've written it correctly then it should look like this:

Library user education—internet user education

3.1.3 **Phrases**

Words enclosed within double quote marks denote an exact phrase, or reasonably close to it. It is sometimes similar to the Boolean NEAR. More often, it is treated like a single term and is usually searched as such.

Query Example: *"tutorial for beginners"*

This example will produce a list of hits containing the phrase "tutorial for beginners" only.

Exercise 3

Write a query that will list web sites containing the phrase "component *of the internet"*

3.1.4. **Stemming [Truncation]**

- The use of the stem or the main part of a word to search for variations of the word [e.g. the stem "sing" searches sings, singer, singing and singalong]. Stemming can be automatic, or it may require use of a wild card, symbolized by asterisk [s] to initiate.

Query Example: *sing**

To include variations of a keyword, use the wild card symbol [*] after the stem of the word. This broadens a search to retrieve documents that otherwise would be missed.

Query Example: *sin**

3.1.5 **Case Sensitive**

- Use lower case for query terms except for proper names.
- Treat adjacent capitalized words as a single proper name, e.g. Gbaje Ezra.
- Separate proper names from each other with a comma.

Query Example: *Gbaje Ezra, Helen Gbaje*
However. it is more definite to treat a multiple word name as a phrase, by enclosing it within double quotes.

Example
"Gbaje Sharon Shidinje Oziohu"s

3.2 Query Composition Guides

Despite the differences in the way search engines select, index and retrieve documents, there are common guides that you can use to help compose your query.

- Be as specific and complete as you can in selecting your keywords; they are critical to the success of your search.
- When possible, employ uncommon or unique terms, for they are less likely to be ignored or filterd. Avoid adjectives and adverbs unless they are part of a phrase; alone they do not convey much meaning.
- Arrange your terms in a series from the most general to the most specific; it makes for a more effective search.
- Avoid searching for obscure information not likely to be found without use of sophisticated search methods. Once you become familiar with the use of operators, you can move towards the more complex searches.
- When you have located a good site about your topic, see whether it has links to other sites. Sometimes an important document is found this way. The site may also contain keywords that can improve your query.
- In keyword searches, start by working with no more than two or three search tools until you gain some mastery over them. A search tool's help section usually describes its current keyword search practices. From these learn how best to compose a query and focus the search.
- Use the Refine drop-down lists when offered. They are a simple way to narrow your search.
- Avoid m is-spellings, redundant terms and complicated query structure.

Table I is organized to help identify frequently used operators for our list of preferred search tools.

Table I: Preferred Keyword Search Tools and their Operators

Search Tool	Operators				
	Boolean Marks	Plus/Minus Sensitive	Quote	Stemming	Case
Alta Vista	x	x	x		x
Dogpile	x		x	o	
Excite	x	x	x	o	o
Google	o	x	x	o	o
HotBot	x	x	x	x	x
Infoseek	o	x	x	x	x
LookSmart					
MetaFind	x		x		
Mamma	x	x	x		x
NorthernLight	x	x	x	x	o
Yahoo	x	x	x		x

Table Symbols: [x means supports, [o] means excludes, [s] means a wild card capability.

3.3 Searching by Subject

In comparison to keyword searches, subject searches are rather simple. Subject searches begin with broad subject categories and proceed to subject matter that is increasingly more specific. To use a subject search, follow the search path and at each stop, examine the hits that are provided.

The main advantage of directory searches is that they are of significantly higher quality and relevance than those found through a search engine. This is because subject experts review all documents submitted before they are accepted. Because of this time-consuming effort, directory databases are much smaller than those of search engines.

With some exceptions, directories can take weeks, and sometimes months, to update their database contents. In marked contrast, search engines collect and update web sites automatically, often within one or two days. This is of particular value when being current is important.

Exercise 3

State the advantages of directory searches over keyword search.

3.4 Guides to Effective Searching

Below are guides that can greatly help improve your search results.

- If your subject is broad, start with a subject search such as Yahoo, LookSmart or Encyclopedia Britann ica.
- If your subject is narrow or specific, use a keyword search such as Ilor, Google, Infoseek, Excite or Snap.
- If you are not sure, try Yahoo and take advantage of its keyword option if needed. This option narrows the search to the last subject title, but in a smaller field.

- Try a meta engine such as Savvy or Dogpile. Meta engines produce fewer hits usually of higher relevance.
- Try a number of different search engines. You will find that the hits produced by the search engines are significantly different, and therefore the chances of your getting the document you want are much improved.
- Should your search involve an obscure or difficult-to-find topic, use a search engine having a large database such as Alta Vista, Ilor, Google, HotBot or NorthernLight.

4.0 Conclusion

It can be disconcerting to a user to find that the number of hits obtained can range from none to over a million, and their relevance or usefulness can vary from negligible to considerable.

Too many irrelevant hits are often due to too broad a query, because of an inadequate number of defining terms. Too few hits are often caused by too restrictive a query. However, there are many reasons for poor results.

5.0 Summary

Search engines are used to assist us in searching the internet resources. While each search engine has its own operators. some operators are used in common by a number of search engines. These we studied in this unit. Similarly we looked at how to compose a good search query and how to use directory search to search for information on WWW.

6.0 References and Suggestion for Further Reading

WWWmetrics (http:www.wwwmetrics.com)

Mediametrix (http://www.mediametrix.com/data/thetop.jsp)

Greg Notes' Search Engine Showdown
(http://www.notes.com/search/)

Search Tutorial: Guide to Effective Searching of the Internet, revised and updated July 1999, VisualMetrics Corporation,
(http://www.thewebtools.com/tutorial/tutorial.htm)

Nua Internet Surveys (http://www.ntia.ie)
Internetstats (http://www.internetstats.com)

7.0 Tutor-Marked Assignment

Question
Discuss any four keyword search operators and state the advantages and disadvantages of directory search over keyword search

UNIT29: Data Transmission Systems, Internet Service Providers (ISP) and Virus

Table of Contents

1.0 Introduction

One of the most confusing issues for computer users is the excitement that is going on between different Internet access providers. or ISPs as they are called. Dial-up modem, cable modem, digital subscriber lines (DSL), and satellite access are all options available to the average consumer, but which is the fastest of all these? In this unit, we'll look at each of these Internet access methods in depth to show you the advantages and disadvantages of each.

2.0 Objectives

At the end of this unit you will be able to:

- Explain how modems work;
- Identity the various data transmission system;
- Choose an ISP;
- Identify the problems of virus and how to solve it.

3.1 Some Background

Internet access speeds are often referred to in k, or kps. KPS stands for kilobits per second, and stands for a specific amount of data sent through a signal. In order to understand, you must first know the basics of the computer language.

Computers use a language of O's and Ps. A bit is a single 0 or 1 in the computer language. When you put 8 bits together, you get 1 byte. 1 byte is the equivalent of 1 character. For example, when you type the letter. A, the computer sees the "A" as 1 byte of information.

When you talk about file storage, you talk in K, which is kilobyte. 1K is equal to 1024 bytes. When you talk about data transfer like modems, you talk in kbps, or kilobit per second. lk is equal to 1024 bits, or 128 bytes. This is why a 100K file isn't downloaded in 2 seconds on a 56k modem. It actually takes 8 times as long, because 100K is equal to 800k.

3.2 Dial-Up Modem

Since the earliest days of computers, the desire to hook up two systems over long distances was always a challenge. In order to do this, a method of sending a signal over a normal telephone line had to be found. This process is called MOdulation/DEMOdulaltion, short-form to modem.

Modulation and demodulation is required because telephone lines use analog signalling where computers are digital. In order for a computer to talk across a phone line, it first had to change it's signal into a format the phone could understand. This is called modulation. The process of converting the signal back to digital is called demodulation.

Modems are serial connections. That means that they send one signal at a time over the telephone line. In the early days of modems, you could actually talk on the same line to the person on the other computer while the modem was sending. As modems became faster, they regimen more and more space on the phone line to send signals, and ended this ability.

Exercise 1

State the main functions of a modem.

Modem is made up of modulator and demodulators. In order for a computer to talk across a phone line, it first had to change it's signal into a format the phone could understand (modulation). And since the computer signals are digital, the signals from the phone are connected back to digital (demodulation).

Most people use 56k modems to connect to the Internet, although older systems still have 33.6k or 28.8k modems in them. The number (such as 56) is the fastest transfer speed that a modem can send and receive information. A 56k modem can send 56 kilobits of information per second, or about 7Kilobytes per second.

Under the best circumstances with a 56k modem, you will get about 5.5Kbps transfer. This means a 100K file will take about 18 seconds. Noisy phone lines, bad switches, and cheap modems will decrease your chances of attaining these speeds, and speed varies by intemet access provider.

32.1 Cable Modems

When looking for faster data transfer, networking specialists found an easy method of using existing technology to speed up access. This is called a cable modem, and uses the cable TV wire already in your home. Since many networks already run on a cable very similar to cable TV wire, it was just a matter of adapting the signal so the computer could understand.

Cable is considered broadband internet access, because everyone on the cable network sees the signal to and from your computer. This varies from telephone signals that are only seen on your phone line, called baseband transmissions. The advantage of broadband transmissions is that they don't have to dedicate a wire to you and you alone; everyone on the network can share the same wire. The other advantages of broadband is that it's always on, whether you are at your computer or not.

Exercise 2

Explain the difference between broadband and baseband transmission.

In broadband transmission everyone on the cable network and the signal too are from your computer while in the baseband transmission the signals are only seen on your telephone line.

Cable access is sold in many different ways. Most times, you buy it with a limitation on the amount of bandwidth, or the amount of data per second, they allocate to you. This can range from 128kbps to 512bps. Basically, you pay more for faster service.

The average cable plan offers about 256kbps transfer. Some will offer faster access at a premium price, but as more and more people sign up, the data rates tend to fall to slower levels than the 512kbps packages many providers offer. So for argument's sake, we're going to assume you get steady 256kps transfer. Our 100K file now takes only 3.1 seconds to download.

3.2.3 Digital Subscriber Lines (DSL)

In the middle-90's. technicians at Bell Laboratories discovered a new way to use existing phone line to transfer data at a faster rate. They used a combination of existing technologies with the fact that analog phone line only use 2% of the bandwidth available to them. This technology is called DSL.

What inventors did was essentially figure out a way to use the 95% of the bandwidth available on your phone for data transfer. From our dial-up modem's sections, POTS (Plain Old Telephone Systems) work on an analog signal. The wires that carry the signal work for both analog and digital signals. All they had to do was find a way to transfer both at once.

DSL access works by separating the analog and digital signals at your house, allowing the digital and analog signals to co-exist over the distance from your house to the phone company's office, and vice versa. A packet sniffer separates data packets from analog signals. and routes the signals to the proper equipment. This allows you to talk on the same phone line as you're using to access the internet.

DSL comes in many varieties and many speeds. You may have heard of it as ADSL, VDSL, HDSL or XDSL. Essentially they are the same technology with slirhtly different methods of transferring

Exercise 6

State the two phases of a virus and the solution to these virus attacks.

As indicated above, virus have two specific phases which are, infection phase and active phase. The only solution to a virus effect is the use of anti-virus software to clean the infected machine.

4.0 Conclusion

In order for a computer to talk across a phone line, modem is required because telephone lines use analog signalling, where computers are digital. DSL access works by separating the analog and digital signals at your house, allowing the digital and analog signals to co-exist over the distance from your house to the phone company's office, and vice versa. For those of us in areas that are not serviced by cable and ADSL. Dial-up access will continue to be our only method of connection. Well, until wireless services are available nationwide.

Half of the computers on the internet either have viruses, or are a prime target for one. Only you can protect your computer, so take the time to install anti-virus software and keep your virus definition file up to date.

5.0 Summary

In this unit, we considered the various methods of Internet access, with respect to the access speeds with a view of choosing an ISP. The advantages and disadvantages of the methods were considered. The effect of viruses, worms, and Trojans and how to protect our computers from them were discussed.

6.0 References and Suggestion for Further Reading

Computer Networking http://compnetworking.about.com

Widernet Project, http//www.widernet.org

Developing HTML http:www.davesite.com/webstation/html/

7.0 Tutor-Marked Assignment

Question

Discuss the four various systems of data transmission stating their advantages and disadvantages.

UNIT 30: Protocols

Table of Contents

1.0 Introduction

The Internet Protocol (IP) had its origin in UNIX a networking as it developed in the 1970s. Today, IP has become a standard mechanism for network operating systems (NOS) to communicate with each other. In its simplest form, a protocol is an agreed upon set of rules. Protocols can be defined in one of three ways; standard, public and private.

A standard protocol is defined as a protocol whose specification is published and known to the public but controlled by a standard body. A public protocol is defined as a protocol whose specification is published and known to the public but controlled by a private organisation. A private protocol is defined as a protocol whose use and specification are controlled by a private organisation.

2.0 Objectives

At the end of this unit you should be able to:

- Identify an IP address;
- Identify the IP address sub-divisions;
- Explain the use of Network numbering (address);
- Explain Subnetting.

3.1 Internet Protocol Basic Addressing

An IP address contains a full four bytes (32 bits) of data. For readability purposes, humans typically work with IP addresses in a decimal notation that uses periods to separate each byte (also known as an octet). For example, the IP address

00001010 00000000 00000000 00000001

often appears in the equivalent string representation:

10.0.0.1

IP addresses can be sub-divided into classes. The values of the leftmost four (4) bits of an address determine its class. All "Class A" addresses, for example, have the leftmost bit set to zero, but each of the remaining 31 bits may be set to either "0" or"!" independently (as represented by an 'X' in these bit positions):

Oxxxxxxx xxxxmx xxxxxxxx xxxxxx,vc

From this rule it follows that Class A addresses include all values in the range 0.0.0.0" to "127.255.255.255".

Class B addresses must have the leftmost bit set to one, and the next bit set to zero, but all other bits may vary:

10xxxxxx xxxxxxxx xxxxxxxx xxxxxxxx

And so it follows that Class B addresses fall in the range from "128.0.0.0" to "191.255.255.255". Similarly, Classes C. D. and E addresses set the second, third, and fourth bit (respectively) to one. Table III summarizes the overall breakdown of all IP addresses into this class system.

Table III: Summary of Breakdown of all IF Address into class system.

Class	Leftmost bits	Start address	Finish address
A	Om	0.0.0.0	127.255.255.255
B	10)o(	128.0.0.0	191.255.255.255
C	110x	192.0.0.0	223.255.255.255
D	1110	224.0.0.0	239.255.255.255
E	1111	240.0.0.0	255.255.255.255

Exercise 1

List the subclass of an IP address and explain their differences.

Nearly all of the Class A and Class B IPv4 address domains have already been assigned to large organisations. Addresses in the Classes D and E ranges have been reserved for special purposes by the IP administrative authorities. (The terms "Class D" and "Class E." while technically correct, do not appear much in practice). Effectively this leaves only Class C address range available for public consumption.

3.2 Domain Naming and Registration

Names offer a more convenient, easily-remembered way to uniquely identify computers on the network than IP addresses alone. The domain name system (DNS) used across the Internet assigns names to individual IF addresses and performs the mapping (translation from name to address) on demand as needed. The term domain naming refers to the structure of the naming system: names and addresses are organized in a hierarchy and maintained in a distributed fashion across the Internet.

Activity 1

Next time you sit down at a computer, see if you can determine its IP address and domain name.

Names and adresses on the public Internet must be registered with an accredited registrar. For nodes in the ".com," ".net," and ".org" domains, the Internet Corporation for Assigned Names and Numbers (ICANN) oversees registrations. Registered names and addresses must be renewed periodically, and should a dispute occur between two parties over ownership of a given name, such as in trademarking, ICANN's Uniform Domain-Name Dispute-Resolution Policy (URDP) can be invoked.

Exercise 2

What is the advantage of using domain names rather than IP address?

3.3 IPv4 and IPv6

The IP system in widespread use today is also known as IPv4 ("version four"). A newer system, 1Pv6 ("version six" -- version five was essentially skipped), exists now in small deployments and should replace IPv4 in years to come. IPv6 improves the addressing system by supporting up to 128-bit instead of 32-bit addresses, and it adds additional features for performance and privacy.

IPv4 can only represent a finite number of computers on the Internet - approximately 4,294,967,296, or 2 raised to the 32nd power. At the time IP was conceived, this number was perfectly reasonable. but with the explosive growth of the Web and networked computing generally, a time may come in the not-too-distant future when the IPv4 address space will be exhausted. Thanks to technologies

like Network Address Translation (NAT), computers can use virtual addressing analogous to the way network operating systems use virtual memory, but it remains unclear if these relatively recent technology developments will adequately conserve IP space.

Exercise 3

Explain the limitation of Internet Protocol version four.

The Internet protocol version four has a limitation of being only able to represent a finite number of computers on the internet.

3.4 Subnetting

Subnets allow network traffic between hosts to be segregated based on the network's configuration. In IP networking, traffic takes the form of packets. IP subnets improve network security and performance to some degree by organizing hosts into logical groups.

3.4.1 Subnet Masks

Probably the most easily recognizable aspect of subnetting is the "mask." Just like IP addresses, subnet masks contain four bytes (32 bits) and usually appear in the same "dotte ecimal" notation. For example, a very common subnet mask in its binary representation will usually be shown in the equivalent, more human - readable form.

11111111111111111111111100000000

255.255.255.0

Exercise 4

Explain the importance of Subnetting.

As indicated above. subnetting allows network traffic between hosts to be segregated based on the network configuration.

3.4.2 Masking Rules

A subnet mask neither serves as an IP address nor does it exist independently from them. Instead, subnet masks must be applied to IP addresses. Masking a full IP address has the effect of splitting it into two parts -- an ¯extended network address" and a host address.

For a subnet mask to be valid, its leftmost bits must be set to one; a mask of all zeros

00000000 00000000 00000000 00000000

is invalid. In addition, its rightmost bits must be set to zero; the mask of all ones

11111111111111111111111111111111

is likewise invalid. In other words, all valid subnet masks contain two parts: the all-ones left side (the extended network portion) and the all-zeros right side (the host portion).

3.4.3 Subnetting in Practice

An extended network address includes the basic network address as well as additional bits that represent the "subnet number." Used in conjunction with a network address, a subnet number supports a two-level, "extended" addressing scheme recognized in a standard way by implementations of IP.

Taken together, the extended network address with the host address actually produces a three-level scheme.

Consider the following real-world example. A small business plans to use the "192.168.1.0" network for its internal (intranet) hosts. The human resources department wants their computers to be on a controlled part of this network because they store payroll information and other sensitive employee data. But because this is a Class C network, its default subnet mask of "255.255.255.0" will allow all computers to be peers on the network by default.

The first four bits of 192.168.1.0 -- 1100 -- place this network in the Class C range and also fix the length of the network address at 24 bits. To subnet this network, more than 24 bits must be set to one on the left side of the subnet mask. For instance, the 25-bit mask "255.255.255.128" creates a two-subnet network as follows.

Table IV: Two-Subnet Network

Network address (24 bits)	Subnet number (1 bit)	Extended Network	Host address range
11000000 10101000 00000001	0	192.168.1.0	192.168.1.1-192.168.1.127
11000000 10101000 00000001	1	192.168.1.128	192.168.1.129-192.168.1.255

For every additioal bit set to one in the mask, another bit becomes available in the subnet number to index additional subnets. A two-bit subnet number can support up to four subnets, a three-bit number supports up to eight. and so on.

3.5 Private Networks

The governing bodies that administer the Internet Protocol have identified certain networks as reserved for internal use. In general, intranets that use these networks can reduce the difficulty in administering their IP configuration and Internet access. These three networks, along with their default masks, are listed below.

Table V: Three Networks with their Default Marks

Network address	Default mask
10.0.0.0	255.0.0.0
172.16.0.0	255.240.0.0
192.168.0.0	255.255.0.0

3.6 Network Numbering

Computer networks consist of individual segments of network cable. The electrical properties of cabling limit the useful size of any given segment such that even a modestly-sized local-area network (LAN) will require several of them. Gateway devices like routers and bridges connect these segments together although not in a perfectly seamless way.

Besides partitioning through the use of cable, subdividing of the network can also be done at a higher level. Subnets support "virtual" network segments that partition the traffic flowing through the cable rather than the cables themselves. The subnet configuration often matches the segment layout one-to-one, but subnets can also subdivide a given network segment.

3.7 Network Addresses

Even without subnetting, hosts on the Internet (or any other IP network) are uniquely identified on a network by something called the network number. (Multi-homed nodes, that contain multiple network adapters, can belong to multiple networks). Network numbering allows a group of hosts (peers) to communicate efficiently with each other; these may be computers located in the same facility or all computers used by a workgroup, for example.

Network numbers look very much like IP addresses, but the two should not be confused. In the absence of subnetting. some "default" networks can be derived immediately from host IP addressing and its class structure. Consider the host IP address 10.0.0.1, for example, an address commonly used on private networks. Because it is a Class A address, with no subnetting employed, its leftmost by (eight bits) by default refer to the network address (10), and all other bits remain set at zero (10.0.0.0). Thus, 10.0.0.0 is the network number corresponding to IP address 10.0.0.1.

In this scheme, the part of the IP address that does not refer to the network refers instead to the host address (literally, the unique identifier of the host on that network). In this example, the host address becomes "0.0.0.1" or simply "1". Also note that a network address becomes a reserved address that should not be assigned to any actual host. Hosts like 10.0.0.1 may use the 10.0.0.0 address for special purposes, and having a live host at that location could cause conflicts.

The table below illustrates the numbering scheme for Classes A, B, and C networks. Although the same scheme can apply to Classes D and E networks, those address ranges have been reserved for other purposes and should be discussed separately.

Table VI: Numbering Scheme for Classes of Networks

Class	Host address range	Network address	Default mask
A	0.0.0.0- 127.255.255.255	x.0.0.0	255.0.0.0
B	128.0.0.0 - 191.255.255.255	x.x.0.0	255.255.0.0
C	192.0.0.0 - 223.255.255.255	x.x.x.0	255.255.255.0

n general, a network address uses the leftmos byte of its hosts' addressing if the hosts fall within the Class A range, the leftmost two bytes for hosts in Class B. and the leftmost three bytes for hosts in Class C. This algorithm is applied in practice with the use of a network mask. The above table shows the decimal representation of the default network masks that is commonly used by network operating systems. The decimal value "255" corresponds to one byte that has all bits set to one (11111111).

4.0 Conclusion

Class A and Class B address domains have already been assigned to large organisations. While Addresses in the Classes D and E ranges have been reserved for special purposes by the IP administrative authorities, leaving only Class C address ranges available for public consumption.

Network addressing fundamentally organizes hosts into groups. This can improve security (by isolating critical nodes) and can reduce network traffic (by preventing transmissions between nodes that do not need to communicate with each other). Overall, network addressing becomes even more powerful when introducing subnetting that allows network administrators some flexibility in defining relationships among network hosts.

5.0 **Summary**

In this unit, we explained the various sub-divisions of IP addresses, which is sub-divided into four with only one reserved for internal use of any organization. We also discussed how to improve security by the use of Network addressing and subnetting.

6.0 **References and Suggestion for Further Reading**

Computer Networking *(http://compnetworking.about corn)*
Widemet Project, *(http//www.widernet.org)*
Developing HTML *(http://www/davesite.com/webstation/html()*

7.0 **Tutor-Marked Assignment**

Question

List the default mask reserved for internal use and state the advantages of using this mask in a private network.