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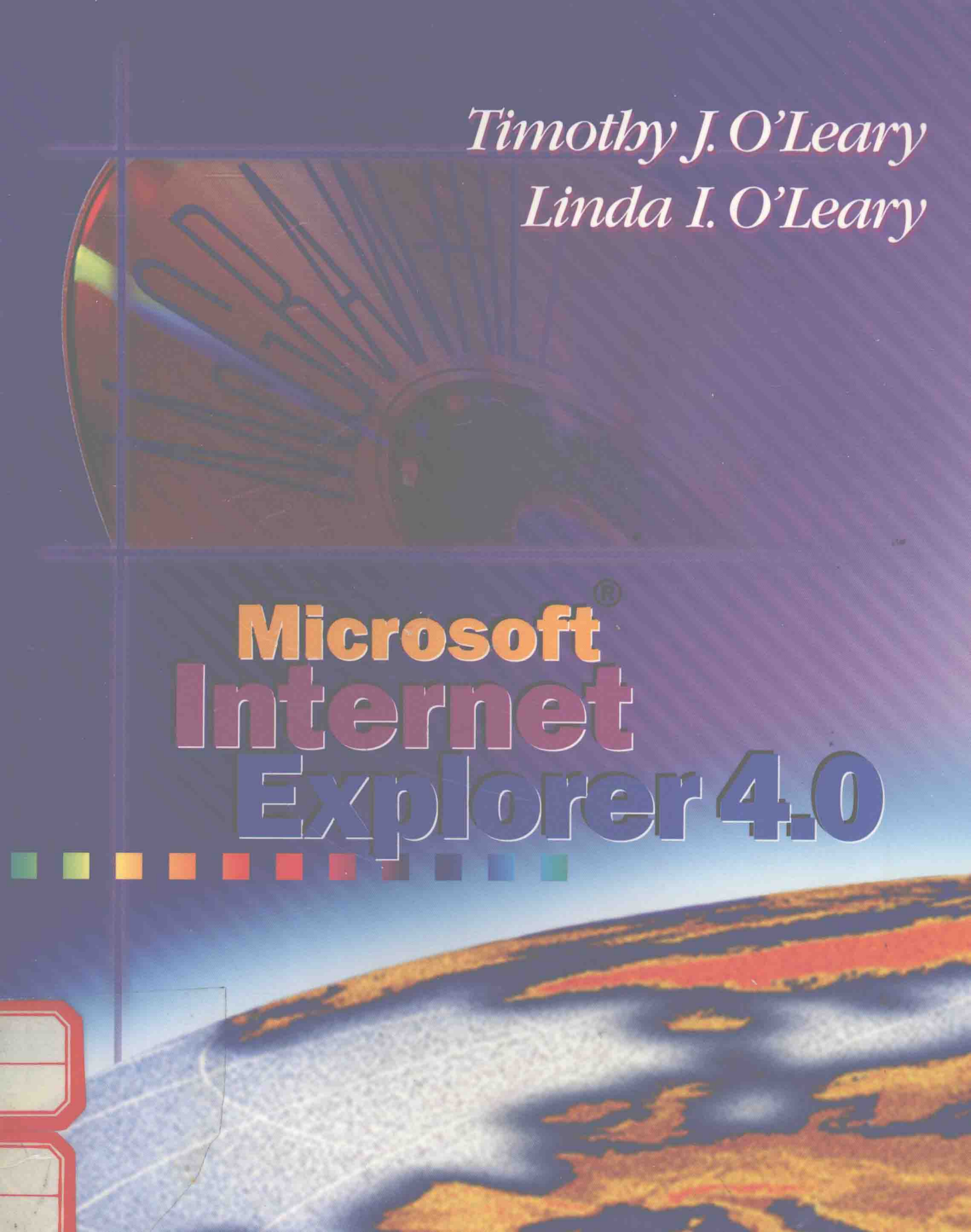

Microsoft® Internet Explorer 4.0

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Irwin McGraw-Hill

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Microsoft ® Internet Explorer 4.0

This book is printed on acid-free paper.

2 3 4 5 6 7 8 9 0 BAN BAN 9 0 0 9

ISBN 0-07-228534-6

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Compositor: GTS Graphics, Inc.
Typeface: 10/13 ITC Clearface Regular
Printer: The Banta Book Group

Library of Congress Cataloging-in-Publication Data

O'Leary, Timothy J., 1947–
Microsoft Internet Explorer 4.0 / Timothy J. O'Leary, Linda
I. O'Leary.
p. cm.
Includes index.
ISBN 0-07-228534-6
1. Microsoft Internet Explorer. 2. Internet (Computer network)
3. World Wide Web (information retrieval system) I. O'Leary, Linda
I. II. Title.
TK5105.883.M53045 1999
005.7'13769—dc21 98-27515

http://www.mhhe.com

Contents

Overview

The Internet and the World Wide Web

Every day you see references to the Internet in the newspaper, in TV ads, in popular soaps and sitcoms, and more. You would need to be living in the backwoods not to hear or see references to such things as e-mail. What does all this mean to you? It means that in the future how you learn, do business, shop, or play will be different. Through the Internet you will find amusement, companionship, information, and tremendous opportunity. In the future, not knowing how to use the Internet will have an effect similar to not knowing how to read today.

Definition of Internet

What is the Internet? It is a network of thousands of computer networks that allows computers to communicate with each other. The popular term for the Internet is the "information highway." Like a highway, the Internet connects thousands of computers throughout the world, making available more information than you could read in a lifetime.

In 1993 the Internet connected 45,000 networks. Today's estimates are that between 2 and 4 million computers in 156 countries are connected to the Internet, and that 25 to 35 million people have access to the Internet. In the United States alone 7 to 15 million people have access. The Internet is expected to continue growing from about 3.2 million computers today to over 100 million machines on all 6 continents. By 2000 there will be an estimated 1 million networks connecting 1 billion users, with the majority of these users to be through at-home connections.

Things You Can Do on the Internet

The uses for the Internet are many and varied, and include the following:

- Send and receive electronic mail (e-mail). The largest use of the Internet is to send e-mail messages between users. E-mail is the process that allows you to send and receive messages along Internet pathways to and from users at other computer sites.

- Transfer files between computers. File Transfer Protocol or FTP allows you to send (upload) or receive (download) files between computers. The files are made available on the hard drives of computers and are similar to an electronic library of information that can be accessed through the Internet by all users.
- Interact with other computers. Telnet is software that gives a user the ability to log on to another computer and run programs. It is also a utility that lets you run other search or information services. Other "client software" is available if you have Windows or a Mac that connects you to a search service but does not use Telnet.
- Participate in discussion groups. Newsgroups are databases of messages on a huge number of topics. Users participate in public discussions about the topic by sending e-mail messages to the newsgroup. Mailing lists are another type of discussion group, consisting of a database of people interested in a particular topic. Your e-mail messages are mailed to the address of every participant in the mailing list. Chat groups, another type of discussion group, allow people to converse in real time.
- Search the World Wide Web. The World Wide Web, also called the WWW or Web, allows users to quickly jump from one information source to another related source. These sources of information may be on the same computer or different computers around the world.

About the World Wide Web

The World Wide Web consists of information organized into pages that contain text and graphic images. But most importantly, a page contains hypertext links, or highlighted keywords and images, that lead to related information. Clicking on the links quickly transports you to the location where that information is stored. The links may take you to other pages, text files, graphic images, movies, or audio clips. The Web allows users to view millions of pages of information by jumping from one related source to another by clicking on links.

To access the WWW, you must have a browser software program. Browsers display text and images, access FTP sites, and provide in one tool an uncomplicated interface to the Internet and WWW documents. Browsers allow you to surf the net unencumbered by the complexity of how to access information on the Internet. Two popular browser programs are Microsoft's Internet Explorer and Netscape's Communicator.

How Does Information Travel on the Internet?

The Internet uses a standard set of protocols, or rules for communication between computers. Protocols are a set of rules that establish guidelines for methods of communication to ensure uniformity among users. This allows various computer systems to connect and communicate.

Transmission Control Protocol/Internet Protocol (TCP/IP) is the core protocol used on the Internet. It breaks the information that is being transmitted into small packets of several hundred bytes each, including the addresses of

sending and receiving computers. Each packet travels independently to its destination. The packets are sent along the network until they reach a router. Routers are the switchers of the system and are located at network intersections. Routers determine the best (fastest, most direct, least crowded) path for the packet to travel to reach its destination. There are many different paths to the same destination. As packets arrive at the destination, they are reassembled (they may arrive out of sequence). If a packet arrives damaged, it is requested to be sent again from the host. When reassembled, the source and destination address information are removed. The use of small packets helps the network to operate efficiently, so that load is distributed over the entire network, thereby avoiding overburdening any one part of the network.

Other protocols that are used are Point to Point Protocol (PPP) and Serial Line Internet Protocol (SLIP). PPP creates an Internet connection that checks data transfer over lines and resends the data if damaged. SLIP is similar to PPP, but does not provide damage check.

How Do You Connect?

Many schools and businesses have direct access to the Internet using special high-speed communication lines and equipment. Students and employees are typically provided access through the organization's local area network (LAN) or through personal computers acting as dumb terminals (a terminal that attaches directly to a mainframe or other large computer).

Another way to access the Internet is through an Internet Service Provider (ISP) such as America Online and Microsoft Network. To access the ISP, you use your personal computer, modem, and telecommunications software to log onto the online service. Your computer is the client that links to a larger computer called the server, which runs special software that provides access to the Internet. You pay a fee for use of their service.

You may have free access to the Internet through a nearby city, college, or corporation. The level of access through these sources varies, as explained below.

- *Local Bulletin Board Systems (BBS).* Many BBS's have limited access to the Internet, commonly e-mail, mailing lists, and newsgroups, and do not offer nearly the amount of information as is available through the Internet. Also, many offer information on specialized topics only. You can find BBS telephone numbers through computer magazines and local computer newsletters.
- *Campus Computer Systems.* If you are affiliated with a college or university with an internal computer network that is connected to the Internet, you may be able to get "free" access (no charge directly to you—however, someone is paying). Access from outside the organization is generally via modem.
- *Corporate Network.* If you are affiliated with a corporation that is connected to the Internet, you may be able to get "free" access, generally via modem, similar to campus computer systems.

- *Libraries.* College and university libraries and many public libraries have replaced card catalogs with computer terminals tied to a central database. When colleges and universities connected to the Internet, the libraries were easily able to make their databases available. If they have the funds, public libraries may provide access to the Internet through their computer network.
- *Freenets.* Freenets are community-based bulletin boards whose area of concern is community related. All have the same basic structure in that they are set up like an electronic town. The setup allows you to stop at different "buildings" to collect information about the community. Users must register to use the freenet. This is usually free to the community resident. Also, you can register as a guest, which allows you to look around and explore the freenet with limited access time. Freenets are directly accessible by modem (you need to locate the phone number). Some freenets also provide access to the Internet.

Microsoft Internet Explorer 4

Microsoft Internet Explorer 4 is a browser suite that comes in a Standard version and a Full version along with a browser-only version. The Standard version includes the six components described below.

Component	Use
4.01 Browser	Browse the WWW
Java Support	Enables you to create and run Java applets from a Web site
Microsoft Outlook Express	Send and receive e-mail
True Web integration	Opens other programs within Internet Explorer
Microsoft Wallet	Stores address and payment method information on a personal computer for use in online shopping transactions

The Full version includes the additional components described below.

Component	Use
Microsoft Netmeeting	Hold conferences over the Web or a local area network
Netshow	An audio and video system for the Web
FrontPage Express	Used to create and publish Web pages
Microsoft Web Publishing Wizard	Step-by-step creation of web pages
Microsoft Chat 2.0	Chat with others in a chat room, in graphical comic-strip format or standard text format

Internet Terminology

browser: A software program used to access and display WWW pages.

download: To copy or receive a file from another computer using FTP.

e-mail: The process that allows you to send and receive messages along Internet pathways to and from users at other computer sites.

FTP: File Transfer Protocol allows you to upload or download files between computers.

hypertext link: A connection to another Web page or to another location on the current page.

Internet: A network of thousands of computer networks that allows computers to communicate with each other.

ISP: An Internet Service Provider is a company that provides access to the Internet for a fee.

mailing list: A discussion group in which e-mail messages are sent directly to the e-mail address of every participant in the mailing list.

newsgroup: A discussion group in which e-mail messages are stored on centralized computer sites.

PPP: Point to Point Protocol creates an Internet connection that checks data transfer over lines and sends it again if damaged.

protocol: A set of rules that establishes guidelines for methods of communication between computers to ensure uniformity among users.

router: A switch located at a network intersection on the Internet that determines the best path for a packet to travel to reach its destination.

SLIP: Serial Line Internet Protocol is similar to PPP, but does not provide damage check.

TCP/IP: Transmission Control Protocol/Internet Protocol is the core protocol used on the Internet.

Telnet: A software program that gives users the ability to log on to another computer and run programs.

upload: To send a file to another computer using FTP.

WWW: The World Wide Web is a part of the Internet that consists of information organized into pages containing text and graphic images and hypertext links.

Case Study for Labs 1–5

As a recent college graduate, you have accepted your first job as a management trainee for The Sports Company, a chain of discount sporting goods stores located in large metropolitan areas throughout the United States. The management trainee program emphasis is on computer applications in the area of retail management and requires that you work in several areas of the company.

In this series of labs, you are working in the marketing department. You have recently helped with setting up The Sports Company Web site. As part of

your continued involvement in this project, you are using Internet Explorer 4 to find information, send e-mail, and create a Web page.

Lab 1. The first lab introduces you to Microsoft Internet Explorer's browser. You will learn basic techniques for navigating the WWW and how to save and print pages.

Lab 2. This lab continues with the browser component and demonstrates how to use the search features to make finding information on the WWW much easier and more efficient.

Lab 3. In this lab you use Microsoft Outlook Express to compose, send, reply to, forward, and delete e-mail messages. In addition, you learn how to create a personal address book.

Lab 4. This lab continues with Microsoft Outlook Express, through which you learn how to find, read, and communicate with newsgroups. You will also learn how to subscribe and unsubscribe to a mailing list. In addition, you will learn how to use Microsoft's Chat 2.0 to participate in an online discussion.

Lab 5. In the last lab you use FrontPage Express to create a Web page.

Appendix. Finally, the Appendix gives a short demonstration of two additional Internet tools: FTP and Telnet.

Before You Begin

To the Student

The following resources are needed to complete these labs:

- The full version of Microsoft Internet Explorer 4 must be installed on your computer system. If the version of Internet Explorer 4 you are using is different than that used in this book, the menu selections and instructions in this manual may be slightly different.
- You need to have an Internet account with your school and an e-mail address.
- The data files required to complete this series of labs are provided by your instructor and should be copied to a new floppy disk.
- It is helpful if you are already familiar with how to use Windows applications.

In addition, you will learn while using the WWW that it is in a state of constant change. One day you can connect to a site and the next day you cannot. The information on a site may change from week to week. New sites are added and others are removed. There is no guarantee that the information you found one day will be there the next, but you may just as easily find something new. Because things constantly change on the Internet, you need to be open to trying and searching. You may get lost, but you can always get home.

To the Instructor

The following assumptions have been made:

- The figures in this lab were created using a Standard VGA setting (640 x 480). If the screen display settings at your school are 800 x 600 or higher,

more information will be displayed in a maximized window than shown in the figures in the text.

- The Full version of Internet Explorer 4 is installed on your computer system.
- The Outlook Express preferences are cleared when Outlook Express is exited. This allows the Internet Connection Wizard to appear when Outlook Express is first accessed. If your setup is different and the wizard does not appear, students will need to set their preferences using Tools/Accounts. Students will need e-mail addresses prior to setting Outlook Express preferences. Some systems allow the preferences to be saved for each student. If this is the case at your school, students will not need to re-enter their preferences each time they use Outlook Express.
- The default preferences are in effect each time Internet Explorer, Outlook Express, and FrontPage Express are loaded. It is particularly important that the following settings be in effect:

  Internet Explorer:

  - The Text Labels for the Standard Buttons toolbar are on.
  - The Address Bar and Links Bar share the same row.
  - The option "Internet Explorer should check to see whether it is the default browser" is cleared (View/Internet Options/Programs).

  Outlook Express:

  - Send Messages Immediately is on.
  - Include Message in Reply is on.
  - AutoComplete E-mail Addresses is on.
- Accessing Telnet through Internet Explorer requires that Internet Explorer be appropriately configured.

Instructional Conventions

This text uses the following instructional conventions:

- Steps that you are to perform are preceded with a bullet (■) and are in blue type.
- Command sequences you are to issue appear following the word "Choose." Each menu command selection is separated by a /. If the menu command can be selected by typing a letter of the command, the letter will appear bold and underlined.
- Commands that can be initiated using a button and the mouse appear following the word "Click." The menu equivalent and keyboard shortcut appear in a margin note when the action is first introduced.
- Anything you are to type appears in bold text.

1 Navigating the Web

COMPETENCIES

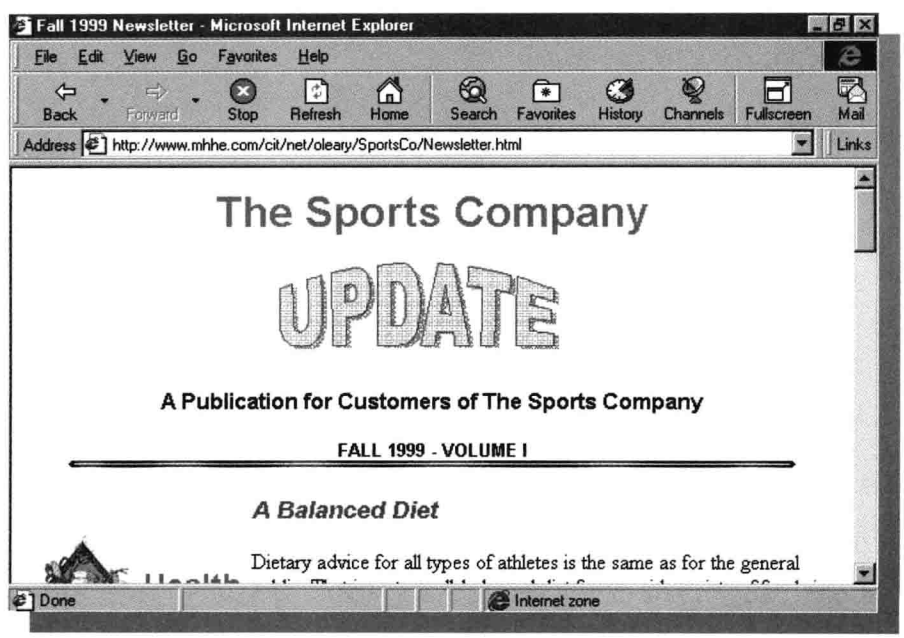
After completing this lab, you will know how to:

1. **Enter a URL.**
2. **Select links.**
3. **Use the History list.**
4. **Create and organize Favorites.**
5. **View the HTML source code.**
6. **Save Web pages and images.**
7. **Use a form.**
8. **Print Web pages.**

CASE STUDY

The Sports Company has recently decided to take advantage of the Internet by creating a site on the World Wide Web (WWW) to market their products and advertise the company. In addition to the traditional commercial aspects of the site, such as a catalog of products, online order forms, and location information, they have included the first issue of *The Sports Company Update,* the monthly newsletter, to provide customers with health- and fitness-related information.

Your supervisor has asked you to look at the online newsletter and to make suggestions for improvements that would take better advantage of the Web.



Concept Overview

The following concepts will be introduced in this lab:

1. Web Page	A Web page is a text file that has been created using a special programming language, called HyperText Markup Language, and that contains links to other Web pages and graphics.
2. Uniform Resource Locator	A Uniform Resource Locator (URL) provides location information that is used to navigate through the Internet to access a page.
3. Hypertext Link	A hypertext link, also called a hyperlink or simply a link, is a connection to another Web page or to another location on the current page.
4. Frame	Frames divide the Web browser's display into windows. Each window is a frame that can contain a separate, scrollable page.
5. Cache	A cache is a location in your computer system that stores the page information when it is downloaded from the network.
6. Favorite	A favorite permanently stores the URL of a page so that you can easily access the page again by selecting the favorite from the Favorites list.
7. HyperText Markup Language	All Web pages are written using a programming language called HyperText Markup Language (HTML).
8. Security	Security is low on transmissions of information over the Internet. To make transmissions secure, certificates, encryption, decryption, and digital signatures are used.

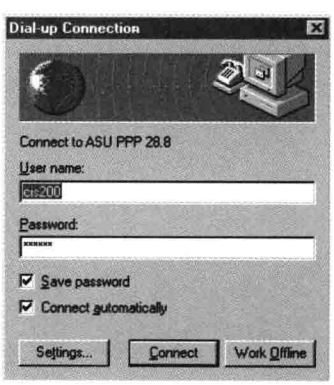
Exploring the Browser Window

To view the newsletter on the WWW, you will use the Microsoft Internet Explorer 4 (IE4) browser program. A **browser** program is used to move to and display information located on the WWW.

- If necessary, turn on your computer.
- Double-click Internet Explorer Internet Explorer.

If a Dial-up Connection dialog box appears, you will need to provide the required information to establish your Internet connection. This may require that you enter a user name and password.

- If necessary, enter the information needed by your school to establish your Internet connection.
- Click Connect.



If the Internet Explorer 4 shortcut is not on your desktop, choose Start / Programs/Internet Explorer/Internet Explorer to load the program, or follow the directions provided by your school.

If you are using Windows 98 in Web style view, single click Internet Explorer.

Your screen should be similar to Figure 1-1.

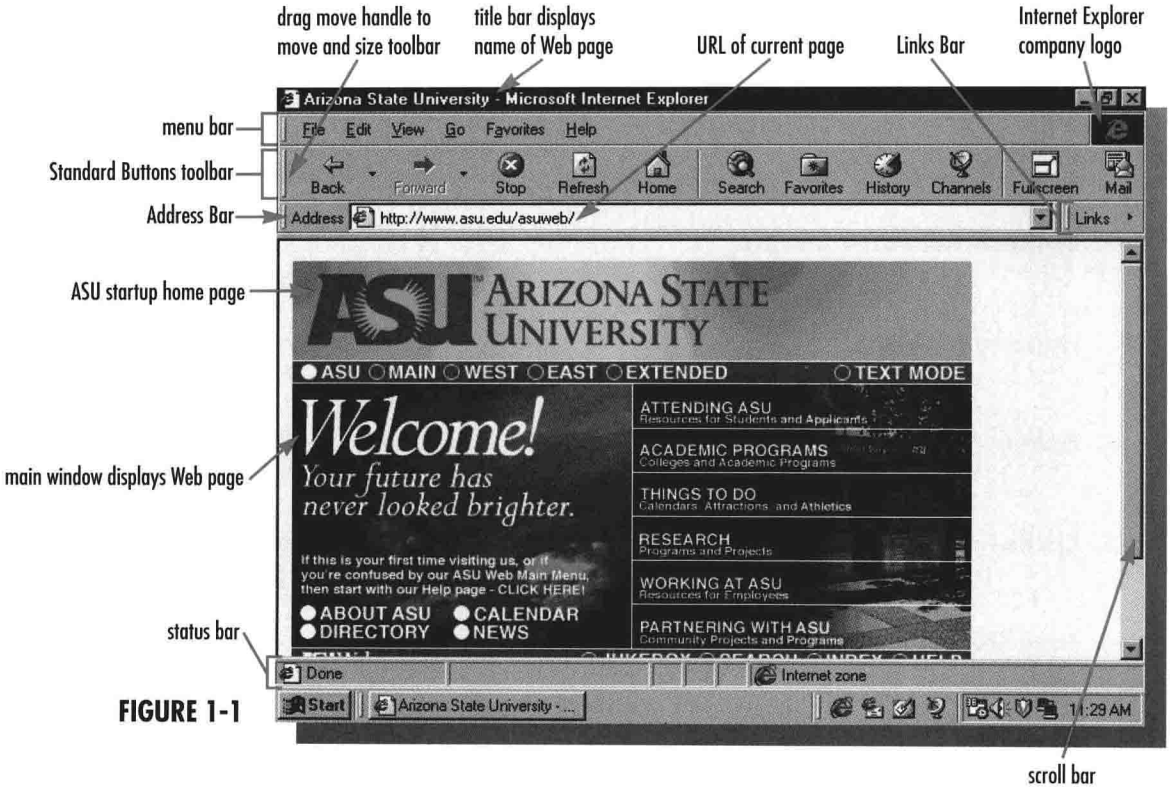


FIGURE 1-1

If necessary, click ▣ to maximize the window.

The Internet Explorer 4 browser window is displayed on your screen. The information displayed in the window will most likely be different than that shown in Figure 1-1. Your screen will probably display information about your school. This is because Internet Explorer can be customized to display on startup different information than is specified in the program's setup procedure. In a few moments you will learn how to change the information displayed in Internet Explorer so that it is the same as the figures in the text. Even though at present your screen displays different information, the components of the browser window are the same.

As in other Windows 98 applications, the window has a title bar, Minimize ▁ and Maximize/Restore buttons ▣, Close button ☒, menu bar, toolbars, status bar, and scroll bars. The large center area of the window is the **main window** where the contents of a Web page are displayed.

Concept 1: Web Page

A **Web page** is a text file that has been created using a special programming language called HyperText Markup Language, and that contains links to other Web pages and graphics. The Web page is stored on a computer called a **server,** where it can be accessed and displayed using a browser program. A server may contain several Web sites. A **Web site** consists of interconnected pages that have a common theme and design. Each Web page is designed by the people at the Web site and will contain information unique to that site.

Web pages are different from other types of text documents in two ways. First, they are interactive. This means the user can send information or commands to the Web site, which control a program running on the Web server, and receive a response from the site. Second, Web pages can use multimedia. This includes the ability to add animation to a page, display video, and run audio files.

When Internet Explorer first loads, it displays the **startup home page.** This is a page that the Internet Explorer program has been set to load by default. As mentioned earlier, most likely this is your school's home page. A **home page** is the first page of information for a Web site. Generally home pages include a brief welcome with information about the site and a table of contents that will take you to other pages of information within the Web site.

The title bar displays the name of the page you are currently viewing. The six pull-down menus below the title bar when selected display Internet Explorer (IE) commands that allow you to control the screen appearance and how IE performs, as well as provide Help information and general file utilities such as saving and printing. The general features in each menu are described below.

Menu	Use
File	Used to open, save, print, and perform other tasks related to files as well as provide a list of the last visited sites.
Edit	Used to cut, copy, paste, and search within the displayed window.
View	Controls the display of onscreen features such as toolbars, fonts, page content, and page information.
Go	Used to navigate among pages and to open supplementary applications.
Favorites	Lists of user-defined favorite sites.
Help	Provides documentation and support services for using Internet Explorer.

The logo may be another company's logo (such as an Internet service provider), and clicking on it will take you to that organization's home page.

On the right edge of the menu bar is the Internet Explorer company logo . Clicking will display Internet Explorer's home page. It also animates whenever a page transfer is in progress. The toolbar buttons activate the most commonly used IE features. By default the three toolbars, Standard Buttons toolbar, the Links Bar, and Address Bar, are displayed when IE is first opened. Notice the move handle to the left of each toolbar. Dragging the move handle up or down allows you to change the order of the toolbars. If multiple toolbars share the same row, dragging the move handle left or right adjusts the size of the toolbar. If you right-click on a toolbar, the toolbar shortcut menu is displayed. Using this menu you can specify which toolbars are displayed and turn on or off the display of the button labels to allow more space to display page content. You will try out several of these features.

- Right-click on the menu bar or any toolbar to display the shortcut menu.

All four options should be preceded with a ✔, indicating they are enabled.

- If necessary, choose any options that are not preceded with a ✔ to turn them on.
- Choose Text Labels from the toolbar shortcut menu.

The menu equivalent is View/Toolbars/Text Labels.

Now the buttons on the Standard Buttons toolbar are smaller in size and do not display the button name. You can display the button name by pointing to the button.

- Point to any button on the Standard Buttons toolbar to see the ToolTip displaying the button name.
- Choose Text Labels from the toolbar shortcut menu to redisplay the button names.

The menu equivalent is View/Toolbars/Standard Buttons.

- Display the toolbar shortcut menu again and choose Standard Buttons to hide the toolbar.
- Redisplay the toolbar.

The mouse pointer appears as ↔ when you point to the of any toolbar, and as ✣ when you click on it to drag the toolbar to move and size it.

- Point to the of any toolbar and drag it up or down to move it to a new position.
- Rearrange the toolbars until each occupies a separate row.
- Move the Links Bar into the Standard Buttons row.
- Drag the of the Links Bar to the right or left until it occupies approximately half the row space.
- Double-click the of the Links Bar to size it.
- Move the toolbars into the position and size as shown in Figure 1-1.

When a toolbar is not fully displayed, you can use ◂ or ▸ to scroll additional buttons into view.