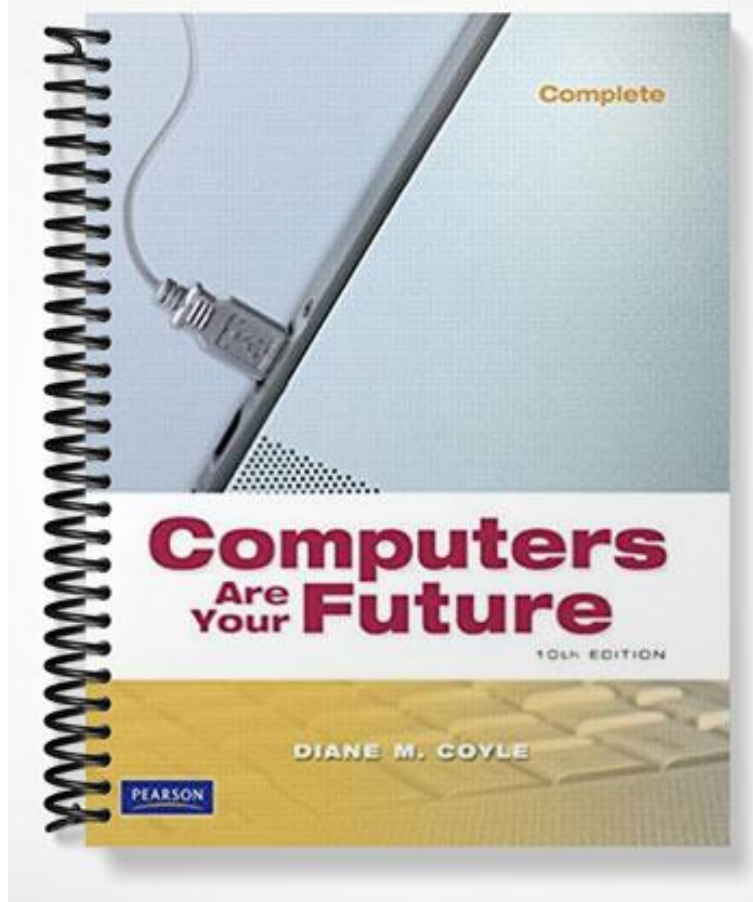


SOLUTIONS MANUAL



COMPUTERS ARE YOUR FUTURE

CHAPTER 2 THE INTERNET & THE WORLD WIDE WEB

The Internet and the Web

Discussion Questions: Be prepared to discuss the following questions in class.

1. Many people still access the Internet from home using a dial-up connection.
 - Why do you think that is?
 - What are the telephone companies and cable companies doing to make it more attractive to use high-speed connections?
2. Although Internet Explorer is still the most popular Web browser, there are many other options. Find at least two other Web browsers and describe how they differ from Internet Explorer. Which do you prefer?
3. Google has become a major player in the industry. Besides being a search engine, Google offers a number of varied services, many of which are free. Review the services offered by Google and select at least two that you might want to use. Describe them and explain why they would be helpful to students.
4. If you want to register a domain, how can you find out if the name is already taken? If it is, is there a way that you can still use the name? What role does ICANN play in the registration process?

COMPUTERS ARE YOUR FUTURE

CHAPTER 2 THE INTERNET & THE WORLD WIDE WEB

Internet Exercise: Internet Service Providers

An Internet service provider (ISP) is a business or organization (usually private) that offers consumers and businesses access to the Internet for a fee. The ISP provides access to its computer network from your personal computer. Its network then connects you to the Internet. Many ISPs also provide related services, such as domain name registration, hosting, and e-mail.

Providing Internet services is a growing business, and there are many national and regional ISPs. As a result, there are a wide range of pricing and service options available for consumers.

Using the Internet, prepare a spreadsheet that compares three national and/or regional ISPs. List their pricing options and packages, services offered, customer service, and the geographic areas they serve. Determine which provider offers the best array of services for the lowest cost in your area. Be able to explain your decision process to the class and defend your choice.

If you are unable to create a spreadsheet, compile your research results into a short paper.

Suggested Web sites:

www.thelist.com

www.barkers.org

www.magicyellow.com

Suggested keywords:

Internet provider, Internet access provider, ISP, Internet service provider, Internet access

COMPUTERS ARE YOUR FUTURE

SPOTLIGHT 2 E-COMMERCE

Internet Exercise: Global E-Commerce

The use of technology for electronic commerce has influenced organizations across the globe. The United States is not the only country in which e-commerce has boomed. Businesses are flourishing in countries in which we would have least expected it historically.

Using the Internet, identify and research e-commerce businesses that originated internationally. Choose one country from each of the following continents/regions:

- Africa/Middle East
- Asia
- South America
- Europe

Answer the following questions and summarize your findings in a report:

- What type of business are they in?
- What markets do they serve?
- How long have they been in business?
- Are their governments online?

Suggested Web sites:

www.ebusinessforum.com

www.google.com

www.dogpile.com

Suggested keywords:

(country) + e-business, e-commerce + global business, (country) + readiness + e-commerce

COMPUTERS ARE YOUR FUTURE

CHAPTER 2 THE INTERNET & THE WORLD WIDE WEB

Internet History

Short Answer Questions: Submit your written answers to the instructor.

1. The origin of the Internet is the ARPANET, which was a project sponsored by the government.
 - What government agency sponsored the Internet?
 - What was its purpose at the time?
 - Were there any commercial applications?
 - Does ARPANET own the Internet?
2. What was the first major Internet browser software?
 - What was the firm that developed the browser? Who was the lead developer?
 - Why was a browser necessary?
 - What type of success did this software enjoy?
 - What type of competition did this firm encounter?
 - Does this firm exist today, and what is its current situation?
3. The Internet is a global entity. As the use of the Internet grew, what standards and organizations emerged?
4. Some controversy has arisen about the content that is considered “acceptable” by some countries or groups, but not by others. Do some research and find a recent example of one or more countries trying to restrict access to Web sites that they deem to be inappropriate. What is your opinion about this practice?

Instructor's Manual Materials to Accompany COMPUTERS ARE YOUR FUTURE 2009

CHAPTER 2 THE INTERNET AND THE WORLD WIDE WEB

KEY TERMS

anonymous FTP—An Internet service that enables you to contact a distant computer system to which you have no access rights, log on to its public directories, and transfer files from that computer to your own.

Boolean search—A database or Web search that uses the logical operators AND, OR, and NOT to specify the logical relationship between search concepts

channel—In Internet Relay Chat (IRC), a chat group in which as many as several dozen people carry on a text-based conversation on a specific topic.

cyberspace—territory that isn't an actual, physical place and that is accessible only with computers.

dead link (broken link)—On the World Wide Web, a hyperlink that refers to a resource (such as a sound or a Web page) that has been moved or deleted.

distributed hypermedia system—A network-based content development system in which individuals connected to the network can each make a small contribution by developing content related to their area of expertise. The Web is a distributed hypermedia system.

domain name— On the Internet, a readable computer address (such as www.microsoft.com) that identifies the location of a computer on the network.

domain name registration—On the Internet, a process by which individuals and companies can obtain a domain name (such as www.c34.org) and link this name to a specific Internet address (IP address).

Domain Name System (DNS)—The conceptual system, standards, and names that make up the hierarchical organization of the Internet into named domains.

downloading—To transfer a file from another computer to your computer by means of a modem and a telephone line. See upload.

electronic mailing lists— Lists of e-mail addresses that automatically broadcast messages to all individuals on a mailing list. Because the messages are transmitted as e-mail, only individuals who are subscribers to the mailing list receive and view the messages.

e-mail (electronic mail)—Electronic mail; messages sent and received through the use of a computer network.

Chapter 2: The Internet and the World Wide Web

e-mail address—A series of characters that precisely identifies the location of a person’s electronic mailbox. On the Internet, e-mail addresses consist of a mailbox name (such as jsmith) followed by an at sign (@) and the computer’s domain name (as in jsmith@hummer.virginia.edu).

e-mail attachment—A computer file that is included with an e-mail message.

exclusion operator—In database and Internet searching, a symbol or a word that tells the software to exclude records or documents containing a certain word or phrase.

Fiber-Optic (FiOS) service—Fiberoptic lines that run directly to the home and provide users with incredibly fast Internet access, easily surpassing other methods.

File Transfer Protocol (FTP)—An Internet standard for the exchange of files between two computers connected to the Internet. With an FTP client, you can upload or download files from a computer that is running an FTP server. Normally, you need a user name and password to upload or download files from an FTP server, but some FTP servers provide a service called anonymous FTP, which enables anyone to download files made available for public use.

flame—In Usenet and e-mail, a message that contains abusive, threatening, obscene, or inflammatory language.

flooding—A type of antisocial behavior found on Internet Relay Chat characterized by sending repeated messages so that no one else can engage in the conversation.

history list—In a Web browser, a window that shows all the Web sites that the browser has accessed during a given period, such as the last 30 days.

home page (index page)—The start page that is automatically displayed when you start a Web browser or click the program’s Home button.

host name—The name of the group or institution hosting a Web site.

hyperlink (link)—In a hypertext system, an underlined or otherwise emphasized word or phrase that, when clicked, displays another document.

hypertext—A method of preparing and publishing text, ideally suited to the computer, in which readers can choose their own paths through the material. To prepare hypertext, you first “chunk” the information into small, manageable units, such as single pages of text. These units are called nodes. You then embed hyperlinks in the text. When the reader clicks a hyperlink, the hypertext software displays a different node. The process of navigating among the nodes linked in this way is called browsing. A collection of nodes interconnected by hyperlinks is called a web. The Web is a hypertext system on a global scale.

Hypertext Markup Language (HTML)—A language for marking the portions of a document (called elements) so that, when accessed by a program called a Web browser, each portion appears with a distinctive format. HTML is the markup language behind the appearance of documents on the Web. HTML is standardized by means of a document type definition in the Standard Generalized Markup Language (SGML). HTML includes capabilities that enable authors to insert hyperlinks, which when clicked display another HTML document. The agency responsible for standardizing HTML is the World Wide Web Consortium (W3C).

Hypertext Transfer Protocol (HTTP)—The Internet standard that supports the exchange of information on the Web. By defining uniform resource locators (URLs) and how they can be used to retrieve resources anywhere on

Chapter 2: The Internet and the World Wide Web

the Internet, HTTP enables Web authors to embed hyperlinks in Web documents. HTTP defines the process by which a Web client, called a browser, originates a request for information and sends it to a Web server, a program that responds to HTTP requests and provides the desired information.

inclusion operator—In database or Web searching, a symbol or keyword that instructs the search software to make sure that any retrieved records or documents contain a certain word or phrase.

instant messaging (IM) system—Software program that lets you know when a friend or business associate is online. You can then contact this person and exchange messages and attachments.

Internet—An enormous and rapidly growing system of linked computer networks, worldwide in scope, which facilitates data communication services such as remote logon, file transfer, electronic mail, the World Wide Web, and newsgroups. Relying on TCP/IP, the Internet assigns every connected computer a unique Internet address (called an IP address) so that any two connected computers can locate each other on the network and exchange data.

Internet Protocol (IP)— One of the two core Internet standards (the other is the Transmission Control Protocol, TCP). IP defines the standard that describes how an Internet-connected computer should break data down into packets for transmission across the network, and how those packets should be addressed so that they arrive at their destination. IP is the connectionless part of the TCP/IP protocols.

Internet Relay Chat (IRC)—A real-time, Internet-based chat service, in which one can find “live” participants from the world over. IRC requires the use of an IRC client program, which displays a list of the current IRC channels. After joining a channel, you can see what other participants are typing on-screen, and you can type your own repartee.

Internet service—A set of communication standards (protocols) and software (clients and servers) that defines how to access and exchange a certain type of information on the Internet. Examples of Internet services are e-mail, FTP, Gopher, IRC, and Web.

Internet Service Provider (ISP)—A company that provides Internet accounts and connections to individuals and businesses. Most ISPs offer a range of connection options, ranging from dial-up modem connections to high-speed ISDN and ADSL. Also provided are e-mail, Usenet, and Web hosting.

interoperability—The ability to work with computers and operating systems of differing type and brand.

Nesting— Using parentheses in a Boolean search to nest expressions. The search engine evaluates the expression from left to right and searches for the content within the parentheses first. It then uses the other keywords and operators to search these results and provide the final results.

netiquette—Short for network etiquette. A set of rules that reflect long-standing experience about getting along harmoniously in the electronic environment (e-mail and newsgroups).

newsgroup—In Usenet, a discussion group devoted to a single topic. Users post messages to the group, and those reading the discussion send reply messages to the author individually or post replies that can be read by the group as a whole.

phrase searching—In database and Web searching, a search that retrieves only documents that contain the entire phrase.

Chapter 2: The Internet and the World Wide Web

plug-ins— software programs that allow you to derive the full benefits of a Web site, such as sound or video.

portal—On the Web, a page that attempts to provide an attractive starting point for Web sessions. Typically included are links to breaking news, weather forecasts, stock quotes, free e-mail service, sports scores, and a subject guide to information available on the Web. Leading portals include Netscape's NetCenter (www.netcenter.com), Yahoo! (www.yahoo.com), and Snap! (www.snap.com).

search engine—Any program that locates needed information in a database, but especially an Internet-accessible search service (such as AltaVista or HotBot) that enables you to search for information on the Internet.

search operator—In a database or a Web search engine, a word or a symbol that enables you to specify your search with precision.

social networking— A method of creating and expanding online communities. For example, sites such as MySpace or Facebook, allow users to create online profiles, invite friends and acquaintances to join their network, and invite their friends to join too.

spam—Unsolicited e-mail or newsgroup advertising.

specialized search engines—Web location programs that index particular types of information, such as job advertisements.

subject guide—On the World Wide Web, an information discovery service that contains hyperlinks classified by subjects in broad categories and multiple levels of subcategories.

tabbed browsing— A type of internet browsing that enables a user to quickly switch between Web sites. You can customize your home page by adding tabs for sites that you frequently access.

thread—In Usenet, a series of articles on the same specific subject.

top-level domain (TLD) name—The last part of an Internet computer address. For computers located in the United States, it indicates the type of organization in which the computer is located, such as commercial businesses (com), educational institutions (edu), and government agencies (gov).

truncation— Using symbols such as ? and * , in a search engine, to take the place of zero or more characters. It allows you to search for various word endings and spellings simultaneously.

uploading —To send a file to another computer by means of a computer network.

URL (uniform resource locator)—On the World Wide Web, one of two basic kinds of Universal Resource Identifiers (URI), a string of characters that precisely identifies an Internet resource's type and location. For example, the fictitious URL <http://www.wolverine.virginia.edu/~toros/winerefs/merlot.html> identifies a World Wide Web document (<http://>), indicates the domain name of the computer on which it is stored (www.wolverine.virginia.edu), fully describes the document's location in the directory structure ([~toros/winerefs/](http://www.wolverine.virginia.edu/~toros/winerefs/)), and includes the document's name and extension ([merlot.html](http://www.wolverine.virginia.edu/~toros/winerefs/merlot.html)).

Usenet—A worldwide computer-based discussion system that uses the Internet and other networks for transmission media. Discussion is channeled into more than 50,000 topically named newsgroups, which contain original contributions called articles, as well as commentaries on these articles called follow-up posts. As follow-

Chapter 2: The Internet and the World Wide Web

up posts continue to appear on a given subject, a thread of discussion emerges; a threaded newsreader collates these articles together so readers can see the flow of the discussion.

Web 2.0— The next generation of the Web that provides even more opportunities for individuals to collaborate, interact with one another, and create new content by using applications such as blogs, wikis, and podcasts.

Web beacon— A graphic that alerts senders when a message has been opened.

Web browser—A program that runs on an Internet-connected computer and provides access to information on the World Wide Web (WWW).

Web page—A document you create to share with others on the Web. A Web page can include text, graphics, sound, animation, and video.

Web server—On the Web, a program that accepts requests for information framed according to the Hypertext Transfer Protocol (HTTP). The server processes these requests and sends the requested document.

Web site—A computer that is accessible to the public Internet and is running a server program that makes Web pages available.

wildcard—A symbol that stands for any character or any group of characters.

World Wide Web (Web or WWW)—A global hypertext system that uses the Internet as its transport mechanism. In a hypertext system, you navigate by clicking hyperlinks, which display another document (which also contains hyperlinks). Most Web documents are created using HTML, a markup language that is easy to learn and that will soon be supplanted by automated tools. Incorporating hypermedia (graphics, sounds, animations, and video), the Web has become the ideal medium for publishing information on the Internet. See also Web browser.

Sample Syllabus: 8 week

[Course Title]

Course Syllabus

[Course Date]

Class Chat Meetings: Time/ Days of the week

Required Texts: *Computers Are Your Future, Complete*, Tenth Edition, by Bill Daley and Diane Coyle

Instructor: Name
Office:
Office Hours:
Phone:
E-mail:

Course Description: This course serves as an introduction to computer terminology and computer equipment and provides fundamental concepts for using PC-based software. Topics covered include computer hardware and its operation, operating systems, application software, and the Internet. Emphasis is placed on the use of computers to assist with business issues. The impact of computers on our lives is also explored.

Course Policies:

1. Grading:

- Examinations (two exams): 60%
- Hands-on experience: 40%

2. Grading Scale:

<u>Letter Grade</u>	<u>Numeric Average</u>
A	90 and above
B	80 – 89.9
C	70 – 79.9
D	60 – 69.9
F	Under 60

3. Testing:

Students are required to take examinations on the day and time they are scheduled. If special circumstances require a modification to the test schedule, this must be worked out in advance with the instructor, or students will need to present a University/College valid excuse. If a student misses an exam and is entitled to make it up, it is the student's obligation to contact the instructor in order to make the necessary arrangements.

4. Hands-on Experience:

It is anticipated that students will spend at least 9 hours per week researching information on the Internet and working on the class assignments.

Copyright © 2009 Pearson Education, Inc. Publishing as Prentice Hall

5. Assignments:

In addition to any homework assignment given during class, the student must read each chapter of the book prior to the class discussion. Following the class, a student should reread the material and work with the End of Chapter (EOC) questions in the text. Hands-on assignments must be completed as well. Unexcused late work may be turned in the following week with a 10% point deduction, and two weeks late with a 20% point deduction. Thereafter, the assignment will not be accepted.

6. Students with Special Needs:

All students who have been officially accepted by the University as a student with disabilities should present to their instructor the official documents indicating the special accommodation they require.

7. Ethics / Academic Honor Code:

All students should carefully read and understand the code and policies available in the University Student Handbook. Any violation of the code and policies may be presented to the University Academic Honesty Committee.

Course Schedule:

Date	Topic	Reading Assignment
Week 1	Computers & You Ethics	Chapter 1 Spotlight 1 EOC Exercises
	The Internet & the World Wide Web E-Commerce	Chapter 2 Spotlight 2 EOC Exercises
Week 2	Wired & Wireless Communication Home Networks	Chapter 3 Spotlight 3 EOC Exercises
	System Software File Management	Chapter 4 Spotlight 4 EOC Exercises
	Application Software: Tools for Productivity Microsoft Office	Chapter 5 Spotlight 5 EOC Exercises
Week 3	Inside the System Unit Buying and Upgrading Your Computer System	Chapter 6 Spotlight 6
	Input/Output and Storage	Chapter 7 EOC Exercises

Sample Syllabus

Week 4	Test Chapters 1, 2, 3, 4, 5, 6, and 7 Spotlights 1, 2, 3, 4, 5, 6, and 7	
---------------	---	--

Sample Syllabus

Date	Topic	Reading Assignment
Week 5	Networks: Communicating & Sharing Resources	Chapter 8
	Privacy, Crime, & Security	Chapter 9 EOC Exercises
	Careers & Certification	Chapter 10 EOC Exercises
Week 6	Programming Languages & Program Development	Chapter 11 EOC Exercises
	Databases & Information Systems	Chapter 12 EOC Exercises
	Systems Analysis & Design	Chapter 13 EOC Exercises
Week 7	Enterprise Computing	Chapter 14 EOC Exercises
	Multimedia Devices Emerging Technologies	Spotlight 7 Spotlight 8
Week 8	Test Chapters 8, 9, 10, 11, 12, 13, and 14 Spotlights 7 and 8	

Sample Syllabus: 16 week

[Course Title]

Course Syllabus

[Course Date]

Class Chat Meetings: Time/ Days of the week

Required Texts: *Computers Are Your Future, Complete*, Tenth Edition, by Bill Daley and Diane Coyle

Instructor: Name
Office:
Office Hours:
Phone:
E-mail:

Course Description: This course serves as an introduction to computer terminology and computer equipment and provides fundamental concepts for using PC-based software. Topics covered include computer hardware and its operation, operating systems, application software, networks and computer communications, the Internet and the World Wide Web, development of information systems, and programming. Emphasis is placed on the use of computers to assist with business issues. The impact of computers on our lives is also explored.

Course Policies:

1. Grading:

- Examinations (three exams): 70%
- Hands-on experience: 30%

2. Grading Scale:

<u>Letter Grade</u>	<u>Numeric Average</u>
A	90 and above
B	80 – 89.9
C	70 – 79.9
D	60 – 69.9
F	Under 60

3. Testing:

Students are required to take examinations on the day and time they are scheduled. If special circumstances require a modification to the test schedule, this must be worked out in advance with the instructor, or students will need to present a University/College valid excuse. If a student misses an exam and is entitled to make it up, it is the student's obligation to contact the instructor in order to make the necessary arrangements.

4. Hands-on Experience:

It is anticipated that students will spend at least 8 hours per week researching information on the Internet and working on the class assignments.

5. Assignments:

In addition to any homework assignment given during class, the student must read each chapter of the book prior to the class discussion. Following the class, the student should reread the material and work with the End of Chapter (EOC) questions in the text. Hands-on assignments must be completed as well. Unexcused late work may be turned in the following week with a 10% point deduction, and two weeks late with a 20% point deduction. Thereafter, the assignment will not be accepted.

6. Students with Special Needs:

All students that have been officially accepted by the University as a student with disabilities should present to their instructor the official documents indicating the special accommodation they require.

7. Ethics / Academic Honor Code:

All students should carefully read and understand the code and policies available in the University Student Handbook. Any violation of the code and policies may be presented to the University Academic Honesty Committee.

Course Schedule:

Date	Topic	Reading Assignment
Week 1	Computers & You Ethics	Chapter 1 Spotlight 1 EOC Exercises
Week 2	The Internet & the World Wide Web E-Commerce	Chapter 2 Spotlight 2 EOC Exercises
Week 3	Wired & Wireless Communication Home Networks	Chapter 3 Spotlight 3 EOC Exercises
Week 4	System Software File Management	Chapter 4 Spotlight 4 EOC Exercises
Week 5	Application Software: Tools for Productivity Microsoft Office	Chapter 5 Spotlight 5 EOC Exercises
Week 6	Test Chapters 1, 2, 3, 4, and 5 Spotlights 1, 2, 3, 4, and 5	

Sample Syllabus

Date	Topic	Reading Assignment
Week 7	Inside the System Unit Buying and Upgrading Your Computer System Input/Output and Storage	Chapter 6 Spotlight 6 Chapter 7 EOC Exercises
Week 8	Networks: Communicating & Sharing Resources Privacy, Crime, & Security	Chapter 8 Chapter 9 EOC Exercises
Week 9	Careers and Certification	Chapter 10 EOC Exercises
Week 10	Test Chapters 6, 7, 8, 9, and 10 Spotlight 6	
Week 11	Programming Languages & Program Development	Chapter 11 EOC Exercises
Week 12	Databases & Information Systems	Chapter 12 EOC Exercises
Week 13	Systems Analysis & Design	Chapter 13 EOC Exercises
Week 14	Enterprise Computing	Chapter 14 EOC Exercises
Week 15	Multimedia Devices Emerging Technologies	Spotlight 7 Spotlight 8
Week 16	Test Chapters 11, 12, 13, and 14 Spotlights 7 and 8	

Instructor's Manual Materials to Accompany COMPUTERS ARE YOUR FUTURE

CHAPTER 2 THE INTERNET & THE WORLD WIDE WEB

Student Lecture Notes for the Distance Learning Environment

Objective: *Explain how the Internet works.*

The **Internet** is best thought of as the overarching network of networks. In this network of networks, every connected computer can directly exchange data with any other computer on the network. The Internet is also referred to as **cyberspace**—territory that isn't an actual physical place and that is only accessible with computers. The networks that make up the Internet are maintained by large organizations, such as corporations and universities, as well as by service providers that sell Internet subscriptions to the public.

The Internet does more than merely allow any one of millions of computers to exchange data with any other. It enables any connected computer to operate a remote computer by sending commands through the network. One key to the Internet's success is called **interoperability**, the ability to work with a computer even if it is a different brand and model. One of the more recent successes of interoperability is the ability to share files between Mac and PC models. One of the areas that is still an issue is the lack of interoperability between iTunes and other manufacturers of MP3 players.

Objective: *Describe methods for accessing the Internet.*

Users access the Internet by way of a public or private **Internet Service Provider (ISP)**. Public providers include libraries and schools; private providers are those that provide access for a fee. You can connect to your ISP by way of a telephone modem, a Digital Service Line (DSL) connection, a cable modem, a satellite connection, or a fiber-optic service. The type of connection you select is often based on the priority you assign to price and the criticality of speed. In some areas, dial-up is still the only option.

Objective: *Define and differentiate between the Internet and the World Wide Web.*

The **World Wide Web** is a global hypertext system that contains billions of documents and uses the Internet as its transport mechanism. The Web uses the Internet for its existence, but it's a separate entity. The **Internet** is the physical connection of millions of networks, whereas the Web consists of hypertext embedded in Web pages that are hosted on Web sites.

Chapter 2: The Internet & the World Wide Web

Objective: *Explain the concept of hypertext.*

Hypertext is a method of preparing and publishing text that is ideally suited to use with a computer. With hypertext, the reader determines the sequence of the information—the order in which it is read. In hypertext, related information is referenced by means of links instead of being fully explained or defined in one location. On the Web, authors can link to information created by others. Hypertext works by means of hyperlinks. **Hyperlinks** (also called links) are words that the user can click to bring another document into view. The Web is a **distributed hypermedia system**, or a system where the responsibility for creating content is distributed among many people.

Objective: *Contrast Web browsers and Web servers.*

A **Web browser** is a program that displays a Web document and enables the user to access linked documents. Browsers transformed the Internet into something more than a communication and file exchange network; they became a medium for discovering and exploring information that even novices could enjoy. There are several popular Web browsers used today, including Internet Explorer and Firefox.

Content on the Web is made available by means of more than one million Web servers located all over the world. When a user clicks on a hyperlink, the browser sends a message to a Web server, asking the server to retrieve the requested information and send it back to the browser through the network. A **Web server** is a computer running server software that accepts requests for information, processes these requests, and sends the requested document. If the file isn't found, the server sends an error message.

Objective: *Explain the parts of a URL and how to access Web pages.*

A URL consists of the protocol (such as <http://>), the server (such as www.prenhall.com), the path (such as [cayf](http://www.prenhall.com/cayf)), and the resource name (such as [cayf10_sm_notes_02](http://www.prenhall.com/cayf10_sm_notes_02)). URLs enable Web authors to provide the exact location of a resource available on the Internet. If you want to share a Web page with someone, it is easy to copy and paste its exact address into an e-mail so that the recipient can simply click on the link and go directly to the page on the Web site that you want him or her to see.

To access a Web page, you can click a hyperlink, type a URL into a browser's Address box, or click a button on the Links toolbar.

Objective: *Contrast Web subject guides and search engines.*

Web subject guides index a limited number of high-quality pages, whereas full Web search engines enable the user to search huge databases of Web documents.

Visit the UC Berkeley tutorial (www.lib.berkeley.edu/TeachingLib/Guides/Internet/SubjDirectories.html) for a listing and explanation of subject guides or directories.

Chapter 2: The Internet & the World Wide Web

Visit the UC Berkeley tutorial (www.lib.berkeley.edu/TeachingLib/Guides/Internet/SearchEngines.html) for a listing and explanation of search engines.

Objective: *Explain how search operators can improve Web search results.*

Most Web searches retrieve too many irrelevant documents. Search results can be improved by using inclusion and exclusion operators, phrase searches, and Boolean operators.

In many search engines, a user can improve search performance by specifying an **inclusion operator**, which is generally a plus (+) sign. This operator states that a page should not be retrieved unless it contains the specified word.

If the list of retrieved documents contains many items that the user doesn't want, he or she can use the **exclusion operator**, which is generally a minus (–) sign.

Another way to improve the accuracy of searches involves **phrase searching**, which is generally performed by typing a phrase within quotation marks. This tells the search engine to retrieve only those documents that contain the exact phrase (rather than some or all of the words anywhere in the document).

Some search engines enable the user to perform Boolean searches. **Boolean searches** use keywords (*AND*, *OR*, and *NOT*) to link the words used in the search. By using Boolean operators, the user can gain more precise control over searches.

Objective: *Evaluate the reliability of information on a Web page.*

After the user has found information on the Web, he or she will need to evaluate it critically. Anyone can publish information on the Web. Web pages are not subjected to the fact-checking standards found in newspapers or magazines, let alone the peer review process that safeguards the quality of scholarly and scientific publications. Wikipedia has faced harsh criticism regarding its open policy on editing articles. The company has adapted stricter methods of enforcing quality control; how confident are you that information on Wikipedia is objective? Although a user can find excellent and reliable information on the Web, he or she can also find pages that are biased and self-serving.

As you're evaluating a Web page, carefully consider the following:

1. Who is the author of this page? Is the author affiliated with a recognized institution, such as a university or a well-known company? Is there any evidence that the author is qualified with respect to this topic? A page that isn't signed may signal an attempt to disguise the author's lack of qualifications.
2. Does the author cite his or her sources? If so, do they appear to be from recognized and respected publications?

Chapter 2: The Internet & the World Wide Web

3. Who provides the server for publishing this Web page? Who pays for this page? Do they have a commercial interest in the product/service it is describing?
4. Does the presentation seem balanced and objective, or is it one-sided?
5. Is the language objective and dispassionate, or is it strident and argumentative?
6. What is the purpose of this page? Is the author trying to sell something or push a biased idea? Who would profit if this page's information was accepted?
7. Does the information appear to be accurate? Is the page free of sweeping generalizations or other signs of shoddy thinking? Do you see many misspellings or grammatical errors that could indicate a poor educational background?
8. Is this page up to date? When was the page last maintained?

Objective: *List the most popular Internet services and explain what they do.*

Popular Internet services include e-mail (communication), instant messaging, Internet relay chat (text chatting), social networking, File Transfer Protocol (file exchange), Usenet, and electronic mailing lists.

The most popular application on the Internet is **e-mail (electronic mail)**. To send e-mail, a user needs to know the recipient's e-mail address. An **e-mail address** includes a unique cyberspace identity for the recipient, such as myname@someserver.com. When receiving an e-mail, the user can reply to the message, forward it to someone else, store it for later action, or delete it. In addition to sending text messages, attachments may be included, such as a word-processing document or a photo. **Spam** is unsolicited e-mail advertising. Tools are available to help detect spam and direct it to a special file that the user can simply delete to avoid wasting time with these unsolicited emails.

Instant messaging systems (IM) let the user know when someone he or she knows is online and also using the IM system (a buddy or contact). The user can then contact this person and exchange messages and attachments, including sound files.

Internet relay chat (IRC) is an Internet service that enables the user to join chat groups, called *channels*, and get into real-time, text-based conversations. IRC servers typically make thousands of channels available; some cover a specific topic, whereas others are gathering places for groups of friends.

Read "Internet Relay Chat information" on www.hut.fi/~jlohikos/IRC.html, a site that provides a wealth of information on IRC.

Social networking is a way to build online communities. MySpace and Facebook are two examples of social networking sites. Professionals also use social networking through sites such as LinkedIn.

FTP (File Transfer Protocol) provides a way to transfer files via the Internet. With an FTP client, the user can transfer files from an FTP server's file directories in an operation called *downloading*. In *uploading*, files can be transferred to the server and written into a directory on the remote computer. FTP

Chapter 2: The Internet & the World Wide Web

can transfer two types of files: *ASCII* (text files) and *binary* (program files, graphics, or documents saved in proprietary file formats).

Usenet is a discussion system accessible through the Internet. It consists of thousands of topically named **newsgroups**, which are discussion groups devoted to a single topic. Each newsgroup contains articles that users have posted for all to see. Users can respond to specific articles by posting follow-up articles, and in time, a thread of discussion develops as people reply to the replies. A **thread** is a series of articles that offer a continuing commentary on the same general subject.

Visit Google Groups (<http://groups.google.com/>) to view a couple of newsgroups related to your favorite topic.

An **electronic mailing list** is an automatic mailing list. Listserv was the electronic mailing list server developed by Eric Thomas for BITNET in 1986. When e-mail is addressed to an electronic mailing list, it is automatically broadcast to everyone on the list.

To find an online study guide to help practice for a test, visit the Companion Web site at www.pearsonhighered.com/cayf.

Instructor's Manual Materials to Accompany COMPUTERS ARE YOUR FUTURE

SPOTLIGHT 2 E-COMMERCE

Student Lecture Notes for the Distance Learning Environment

Electronic commerce (e-commerce) is the use of networks or the Internet to carry out business.

I. Business-to-Business E-Commerce

Business-to-business (B2B) e-commerce occurs when a business uses the Internet to provide another business with the materials, services, and/or supplies it needs to conduct its operations.

Visit B2BToday.com (www.b2btoday.com) and explore the services and opportunities available for businesses that seek to do business online.

II. Consumer-to-Consumer E-Commerce

Consumer-to-consumer (C2C) e-commerce is the online exchange or trade of goods, services, or information between individual consumers. C2C often involves the use of an intermediary such as eBay—the most popular online auction destination.

III. Business-to-Consumer E-Commerce

Business-to-consumer (B2C) e-commerce occurs when a business uses the Internet to supply consumers with services, information, and/or products.

A. Online Shopping

Online shopping is e-commerce dedicated to business-to-consumer transactions. What are your experiences with sites such as Amazon.com and eBay? Have you encountered problems in purchasing items online? Have you been pleased with the experience? What are your concerns about online shopping? Be careful when buying from an unknown Web merchant. This is especially true of consumer electronics. When first dealing with an online merchant, a good Web site to check for any complaints is www.resellerratings.com.

B. Online Grocery Shopping

Companies such as Peapod.com and Netgrocer.com provide online grocery and sundries shopping. Online grocery shopping accounted for over \$3.3 billion in revenues in 2005.

Spotlight 2: E-Commerce

C. The Dot-Com Phenomenon

The **dot-com world** is the universe of Web sites with the suffix *.com* appended to their name. The dot-com crash of 2000 made it clear that not every dot-com is able to succeed. **Click-and-brick** retailers are those retailers that have both an online and a traditional retail store presence, such as Barnes & Noble, Best Buy, and Wal-Mart. **Disintermediation** is the process of removing an intermediary—for example, a bookseller, car salesperson, or auctioneer—and providing a customer with direct access to information and products.

D. Building Your Own Online Business

One of the tremendous advantages of B2C e-commerce is the low capital investment needed to start an online business. For less than \$50, a person can open a Web storefront and start selling products online. In contrast, a brick-and-mortar business requires land, a building, utility costs, display shelving, and salespeople. A Web-based storefront only requires an ISP, a Web site, a Web site administrator, and the ability to ship goods or services to customers.

E. Online Travel Reservations

Sites such as Travelocity, CheapTickets, and Expedia enable leisure travelers to book flights, hotels, and car rentals online, as well as find the cheapest fares based on their trip's parameters.

Visit <http://travelocity.com>, www.cheaptickets.com, www.expedia.com, or other travel sites to explore online travel reservations.

F. Online Banking

Online banking enables you to use a Web browser to access your accounts, balance your checkbook, transfer funds, and even pay bills online. More than 40 million Americans used online banking services by the end of 2005.

Read “What Is Online Banking?” at (www.bankrate.com/brm/olbstep2.asp) for a very good discussion and history of online banking and its advantages and disadvantages.

Security is still a top priority when people consider banking online. When you bank online, you are using your browser's **secure mode**, in which the browser scrambles and encodes the data when it communicates with the bank's server.

An **electronic vault** is the server that stores the account holder's information.

Active monitoring involves a security team constantly monitoring the vault for signs of unauthorized access.

G. Online Stock Trading

Online stock trading (also referred to as e-trading) is the purchase or sale of stock through the Internet.

Spotlight 2: E-Commerce

Visit www.estocktrading.net for a guide to online stock trading.

H. Nonretail Online Services

Many nonretail sites provide dating services; credit reports; health and medical advice; news, weather, and sports information; real estate listings (for homes and apartments); and insurance products (for car or home). These sites offer various levels of access and services for members and nonmembers.

I. Avoiding E-Commerce Hazards

Although there are many benefits to engaging in e-commerce, it also entails risks. These risks include identity theft, personal information exposure, money loss, and being ripped off by unscrupulous charlatans. Study the ways to protect yourself when online. They include carefully creating user names and passwords, knowing the companies you are dealing with, checking retailer ratings, looking for the *https://* or lock icon in the browser, and using PayPal or another online transaction processing system.

Instructor's Manual Materials to Accompany COMPUTERS ARE YOUR FUTURE

CHAPTER 2 THE INTERNET & THE WORLD WIDE WEB

WEB RESOURCES

- www.lib.berkeley.edu/TeachingLib/Guides/Internet/SubjDirectories.html: This UC Berkeley tutorial provides a listing and explanation of subject guides related to the Internet.
- www.lib.berkeley.edu/TeachingLib/Guides/Internet/SearchEngines.html: This UC Berkeley tutorial provides a listing and explanation of search engines.
- www.lib.berkeley.edu/TeachingLib/Guides/Internet/Style.html: UC Berkeley provides examples and rules for citing sources using MLA, APA, and Chicago-Turabian style manuals.
- www.wordspy.com/: The Word Spy Web site “is devoted to *lexpionage*, the sleuthing of new words and phrases.”
- www.aim.com/get_aim/express/aim_expr.adp?aolperm=h: This site is the AIM Express Web page for AOL Instant Messenger.
- www.hut.fi/~jlohikos/IRC.html: This page provides a wealth of information on Internet Relay Chat (IRC).
- <http://earth.google.com>: You can explore rich geographical content, save your toured places, and share with others.
- www.google.com: Google is an example of a search engine.
- <http://webopedia.com>: This site is an online dictionary and search engine related to computer and Internet definitions.
- www.webpagesthatsuck.com: Although the name of this Web site is a bit over the top, the contents of the site help Web designers understand good design by experiencing bad design.
- www.snopes.com: You can research urban legends on the reference pages included on this Web site.
- www.isoc.org/internet/history: This is the Web page for the Internet Society, an international organization for the Internet.
- www.thelist.com: This Web site provides a listing of Internet service providers (ISPs).

Chapter 2: The Internet & the World Wide Web

- www.mozilla.com/en-US/: This Web site provides the latest version of the Firefox Web browser for download.
- www.opera.com: The Opera Software Web site provides an example of the Opera Web browser, which is available for many platforms.
- www.blogsearchengine.com: This Web site is an engine for searching blogs.
- www.topix.net: This Web site provides the latest news throughout the world.
- www.microsoft.com/outlook: This Web page provides online information and assistance for the Microsoft Outlook e-mail application.
- www.refdesk.com/: This site compiles a vast number of resources all in one spot. It provides direct links to sites that can answer very specific questions.

Instructor's Manual Materials to Accompany COMPUTERS ARE YOUR FUTURE

SPOTLIGHT 2 E-COMMERCE

WEB RESOURCES

- www.b2btoday.com: The B2B Today Web site provides information about services and opportunities available for businesses that seek to do business online.
- www.cheaptickets.com/: This is an online travel reservation Web site.
- www.expedia.com/: This is an online travel reservation Web site.
- <http://travelocity.com>: This is an online travel reservation Web site.
- www.bankrate.com/brm/olbstep2.asp: This Web page features an article by Bankrate.com, “What Is Online Banking?”
- www.ebusinessforum.com: This Web site from the Economist Intelligence Unit (EIU) (www.eiu.com) is designed to provide you with all the information and analysis you need to hone your business strategy for the global digital economy.
- www.scambusters.org/reports/walker.html: This report provides tips to prevent credit card fraud.
- www.staplescentral.com: The Staples Contract Division e-commerce Web site serves over 14,000 companies and 3.3 million individuals.
- www.pricegrabber.com: This Web site is a shopping portal.
- www.NexTag.com: This Web site is a shopping portal that allows you to comparison shop and search for the best prices.
- www.shopzilla.com: This Web site is a shopping portal.
- www.amazon.com/gp/yourstore/ref=tab_gw_yourstore_2/103-9249414-1414205: This Web page provides a variety of products and services available online by category.
- www.ebay.com: eBay is the largest online auction site, where you can buy and sell items.
- www.craigslist.org/about/sites: Localized online, this Web site tells you where you can buy and sell items; find jobs, services, and housing; and even barter your skills in exchange for services or products.

Spotlight 2: E-Commerce

- www.flashbannernow.com/: This Web site provides information on using banner ads to increase Web traffic to a particular site.
- www.register.com: Use this Web site to register your business domain name.
- www.goodpractices.com: This Web site provides guidelines for, and links to information on, Web site design and development.
- <http://smallbusiness.yahoo.com/>: Use this Web page to help set up your business Web page. Yahoo! will host a trial business site free for 30 days.
- www.bankrate.com/brm/news/ob/20060222a1.asp: This Web page provides information on security and online banking in an article titled, "Online Banking: A Better Security Bet?"
- <https://us.etrade.com/e/t/home>: Use this Web page to buy and sell stocks online without going through a broker.
- www.insurancequotes.com: Use this Web site to locate insurance information.
- www.weatherbug.com/weather/my/signup?from=hat_customize: Use this Web page to set up your personal online weather reports.
- www.peapod.com: This is the home page of an online grocer.
- www.netgrocer.com: This is the home page of an online grocer.

Instructor's Manual Materials to Accompany COMPUTERS ARE YOUR FUTURE

CHAPTER 2 THE INTERNET & THE WORLD WIDE WEB

TEACHING NOTES

I. How the Internet Works

To understand the Internet, it is important to begin with a solid grasp of what differentiates the Internet from other networks such as WANs. Be certain students understand that the **Internet** is defined as the overarching network of networks. You should also discuss the term *cyberspace*.

A. Interoperability

Using Figure 2.3, explain how the Internet also allows **interoperability**, the ability to work with a computer even if it is a different brand and model.

Teaching Tips

Ask students if any of them recall the difficulty that was encountered back in the “old days” when trying to share data files between a Mac and a PC. If nobody raises his or her hand, describe when it was impossible for a Mac to read a file created by a PC and vice versa. Explain that one of the major reasons for this incompatibility was that the computers were unable to read media created by each other. Today, data files are routinely shared across platforms through Internet connections. Lead students in a discussion regarding the impact that this alone has had on the world. One example you may want to use is the fact that students may generate their homework assignments using a Macintosh, and you may receive and grade their assignments on a PC and return the documents to them without any problems in the translation.

Discuss the relationship between music downloading services such as iTunes and Yahoo! Music Jukebox. Can you download a track from the iTunes store into any type of MP3 player? This is an example of lack of interoperability.

II. Accessing the Internet: Going Online

Explain to students that you need two things to *go online*—an Internet account and a method of connecting or gaining access.

A. Internet Service Providers and Online Services

Chapter 2: The Internet & the World Wide Web

Explain the difference between **Internet service providers** and **online services**. ISPs are companies that sell Internet accounts, which usually include a user name and a password. They primarily offer access to home and business users. An online service is a for-profit firm that provides a proprietary network (use is limited to authorized subscribers only) that offers e-mail, chat rooms, discussions, and fee-based content, such as magazines and newspapers.

Describe the equipment that students will need to access the Internet: a telephone line, a DSL or cable modem, an ISDN adapter, or an Ethernet card.

Describe the five different types of Internet access:

1. Dial-up
2. Digital subscriber line (DSL)
3. Cable access
4. Satellite access
5. Fiber-optic service

Discuss why one type of access might be preferable over another, depending on which factor is more critical to the needs of the user. For example, DSL might cost more than dial-up, but speed is more important than the higher price for some users. Dial-up may be the only choice in some rural areas.

III. The Internet and the Web: What's the Difference?

Explain the difference between the **Internet** and the **Web**. Explain that a collection of Web pages is called a **Web site** and that the **home page**, or **default page**, of the Web site is called the **index**.

A. The Hypertext Concept

Explain **hypertext**, **hyperlink**, **hypermedia**, and **distributed hypermedia system**.

Hypertext—A way of presenting information so that the order in which it is read is left up to the reader.

Hyperlinks—Underlined or highlighted words that can be used to view another document or Web page.

Hypermedia—Refers to a link to multimedia, such as music and movies.

The Web is a **distributed hypermedia system**, or a system in which the responsibility for creating content is distributed among many people.

Teaching Tips

Engage students in a discussion of **dead links (broken links)**. Certainly anyone who has used the World Wide Web has encountered links that do not work. What are some of the things that can cause stale or broken links? What kind of impression do you have of a Web page that provides links that do not work? Mention that when we

Chapter 2: The Internet & the World Wide Web

discuss the credibility of a Web site, we will consider the appearance of stale links as indicative of a Web page's credibility. Are there any dead links on our school's Web site? See if you can find any.

Chapter 2: The Internet & the World Wide Web

B. Web Browsers and Web Servers

Use this section of the lecture to compare and contrast **Web browsers** (client software) with **Web servers** (server software). Define a *browser* as software that displays a Web document, hyperlinks and all. Define a *Web server* as a program that answers a request from a browser to deliver a Web page.

C. Web Addresses (URLs)

Using Figure 2.12 describe the four parts of a URL: **protocol**, **domain name**, **path**, and **resource name**. Also discuss the **Domain Name System**.

Teaching Tips

Most of your students have seen and used URLs often in the past, but very few may be able to break one down. Write the URL for your college or university home page on the board. Ask students to identify each part of the URL. Give students examples of URLs that indicate different countries of origin and see if they can identify the country. Examples: www.energieinfo.de (Germany), www.foodlovers.co.nz (New Zealand)

D. Browsing the Web

Demonstrate the methods used to access a Web page by clicking on a **hyperlink**, typing a URL in the **Address box (Internet Explorer)** or **Location box (Netscape Navigator)**, or clicking a button on the **Links toolbar**.

Explain that your Web browser keeps a list of the pages you have accessed as you browse the Web. This is called the **history list**. Demonstrate how to use the history list to return to a previously viewed site.

Explain the difference between **uploading** and **downloading**.

Downloading—A document or file is transferred from another computer to your computer

Uploading—Files transferred from your computer to another computer

IV. Finding Information on the Web

Define *subject guide* as a directory organized into subject categories and classifications by humans, not computers. They are often carefully evaluated and annotated, and they serve as a good place to start searching for information. An example of a subject guide is Yahoo!

Teaching Tips

Chapter 2: The Internet & the World Wide Web

Visit the UC Berkeley tutorial (www.lib.berkeley.edu/TeachingLib/Guides/Internet/SubjDirectories.html) for a listing and explanation of subject guides.

Chapter 2: The Internet & the World Wide Web

A. Using Search Engines

Define a **search engine** as a listing of Web sites built by computer programs called *spiders*, not by human selection. They are not organized by categories, but return all instances of the words you have used in your search. Google is an example of a search engine. Ask students to come up with a list of search engines other than Google. Examples: Yahoo!, MSN, Lycos, Dogpile, and Ask.com.

Teaching Tips

Refer to *Word Spy* (www.wordspy.com/words/google.asp) for a description of using the Google search engine for *lexpionage*, sleuthing out new words and phrases. Engage students in a discussion about **googling**. Note that the term **google** has entered the general lexicon as a verb meaning “to use an Internet search engine.”

Teaching Tips

Visit the UC Berkeley tutorial (www.lib.berkeley.edu/TeachingLib/Guides/Internet/SearchEngines.html) for a listing and explanation of search engines.

B. Using Search Techniques

This section offers an explanation of a few important search techniques that will help students increase the accuracy of their Web searches. Techniques covered include inclusion and exclusion, wildcards, phrase searches, and Boolean searches.

Teaching Tips

Although students may already be familiar with many of the topics covered to this point, effective search techniques are skills that will help them in school and in the business world.

Explain that the **inclusion operator** is generally a plus (+) sign, which means that a specific word must be included on the pages in your search results. Explain that the **exclusion operator** is generally a minus (-) sign, which means that you do not want a page returned to you that contains this word.

Ask students if they recall using **wildcards** in searching for files on their computers. Explain that search engines recognize the same wildcards. Define the wildcard *asterisk* (*) as a symbol that replaces a string of characters and the wildcard *question mark* (?) as a symbol that replaces a single character in the position in which it is used.

Explain that you can search for phrases, called **phrase searching**, by enclosing a phrase in *quotation marks* (“ . . .”), which tells the search engine to retrieve only those documents that contain the exact phrase.

Chapter 2: The Internet & the World Wide Web

Define a ***Boolean search*** as one that uses the **keywords** *AND*, *OR*, and *NOT* to link the word or words you are searching for.

Teaching Tips

Provide examples of using Boolean operators to narrow down searches.

Use Google's Scholar search function to locate academic articles and decrease the number of commercial sites that would typically be part of the retrieved site listing.

C. Evaluating Information

Discuss the rules provided in the text for evaluating Web pages.

Teaching Tips

Do a search of a topic of interest to students. Then, together, evaluate the credibility of the information based on the criteria provided in the chapter.

1. **Author**—Who is the author?
2. **Sources**—Where does the information come from?
3. **Server**—Who provides the server for the page?
4. **Objectivity**—Is the information objective or one-sided?
5. **Style**—Is the language objective or argumentative?
6. **Purpose**—What is the purpose of the page?
7. **Accuracy**—Is the information accurate?
8. **Currency**—Is the page up to date?

D. Using the Web for Schoolwork

Discuss how the Web can help students with their schoolwork.

Teaching Tips

Discuss Wikipedia and the level of accuracy this site may have. Compare the different types of information you can find when searching the question, "Is eating red meat good for you?" Discuss the various answers and try to determine which is the most accurate source of facts versus opinion.

V. Exploring Internet Services

A. E-mail: Staying In Touch

Most students are already familiar with e-mail, and many use it every day. Take a few minutes to identify the components of an **e-mail address** and the process of sending e-mail. You should also discuss spam.

B. Instant Messaging: E-mail Made Faster

Many of your students will be very familiar with instant messaging, particularly IM, the instant messaging service provided by AOL or Windows Live Messenger.

Discuss how IM has impacted the way students communicate with each other and with their professors. Do their professors use IM? How does it differ from text messaging on their cell phones? Which do they prefer and why?

C. Internet Relay Chat: Text Chatting in Real Time

Define **IRC** as an Internet service that enables you to join chat groups for real-time conversation.

Teaching Tips

Encourage students to read the *Internet Relay Chat Information* provided at www.hut.fi/~jlohikos/IRC.html, a site that provides a wealth of information on IRC.

D. Social Networking

Define *social networking* as a way to build ever-expanding online communities.

Teaching Tips

Ask students to talk about the social networking sites they visit, including MySpace and Facebook. Encourage them to use safe practices when accessing these sites. Also note professional networking sites, such as LinkedIn or others you might use.

E. File Transfer Protocol: Transferring Files

Define **FTP** (*file transfer protocol*) as a method of transferring files using the Internet. Explain that, like all services, FTP requires a client to allow you to perform this task on your computer. Current browser suites have an FTP client bundled with the browser and other clients. Discuss **anonymous ftp**.

Teaching Tips

Use Figure 2.29 to talk through using an anonymous ftp.

F. Usenet: Joining Online Discussions

Define **Usenet** as a discussion system accessible through the Internet. The system consists of thousands of **newsgroups** that contain articles for all to read. Using Figure 2.30, review the descriptions and contents of the standard newsgroup subcategories.

Teaching Tips

Ask students to go to *Google Groups* (<http://groups.google.com/>) and visit a couple of newsgroups related to a movie they have seen or a book they have read. Give the class at least 30 minutes to explore the newsgroups feature. Ask students to summarize their experiences with newsgroups.

G. Electronic Mailing Lists

Define *electronic mailing lists* as being an automatic mailing list server. When e-mail is addressed to an electronic mailing list, it is automatically broadcast to everyone on the list. The result is similar to a **newsgroup**, except that the messages are transmitted as e-mail and are therefore available only to individuals on the list.

Listserv was the first electronic mailing list server. Majordomo is the most common electronic mailing list manager.

Instructor's Manual Materials to Accompany COMPUTERS ARE YOUR FUTURE

SPOTLIGHT 2 E-COMMERCE

TEACHING NOTES

Define *electronic commerce (e-commerce)* as the use of telecommunications or the Internet to carry out business of any type.

I. Business-to-Business E-Commerce

Explain that **business-to-business (B2B) e-commerce** occurs when a business uses the Internet to provide another business with the materials, services, and/or supplies needed to conduct its operations.

Teaching Tips

Encourage students to visit B2BToday.com (www.b2btoday.com) and explore the services and opportunities available for businesses that seek to do business online.

II. Consumer-to-Consumer E-Commerce

Explain that **consumer-to-consumer (C2C) e-commerce** is the online exchange or trade of goods, services, or information between individual consumers. Also point out that C2C often involves the use of an intermediary such as eBay—the most popular online auction destination.

Teaching Tips

III. Ask if any students have a Favorites or Bookmark for eBay on their computers. If students have used eBay, ask them to talk about their experiences. Highlight ways that students can protect themselves from unscrupulous vendors if they use such sites.

IV. Business-to-Consumer E-Commerce

Explain that **business-to-consumer e-commerce** occurs when a business uses the Internet to supply consumers with services, information, and/or products.

A. Online Shopping

Define *online shopping* as e-commerce dedicated to business-to-consumer transactions. Discuss getting good deals online and online grocery shopping.

The trend is for Web users to make purchases online. Many use the Web to research options before making purchases from brick-and-mortar stores. Shopping portals (PriceGrabber.com, Shopzilla, and NexTag) let you comparison shop online.

Teaching Tips

Engage students in a discussion of online shopping. Ask the class for their experiences with sites such as Amazon.com and eBay. Have they encountered problems in purchasing items online? Have they been pleased with their experiences? Ask if there are students who have not purchased anything online. What are their concerns? Caution students to be careful when buying from an unknown Web merchant. This is especially true of consumer electronics. When first dealing with an online merchant, a good Web site to check for any complaints is www.resellerratings.com.

B. Online Grocery Shopping

Companies such as Peapod.com and Netgrocer.com provide online grocery and sundries shopping. Online grocery shopping accounted for over \$3.3 billion in revenues in 2005.

C. The Dot-Com Phenomenon

Define the *dot-com world* as the universe of Web sites with the suffix .com appended to their name. Discuss the fact that the dot-com crash of 2000 made it clear that not every dot-com is able to succeed. Define *click-and-brick* as retailers that have both an online and a traditional retail store presence, such as Barnes & Noble, Best Buy, and Wal-Mart. Define *disintermediation* as the process of removing an intermediary—for example, a bookseller, car salesperson, or auctioneer—and providing a customer with direct access to information and products.

D. Building Your Own Online Business

One of the tremendous advantages of B2C e-commerce is the low capital investment needed to start an online business. For less than \$50, a person can open a Web storefront and start selling products online. In contrast, a brick-and-mortar business requires land, a building, utility costs, display shelving, and salespeople. A Web-based storefront only requires an ISP, a Web site, a Web site administrator, and the ability to ship goods or services to customers.

E. Online Travel Reservations

Sites such as Travelocity, CheapTickets, and Expedia enable leisure travelers to book flights, hotels, and car rentals online, as well as find the cheapest fares based on their trip parameters.

Teaching Tips

Refer students to <http://travelocity.com>, www.cheaptickets.com, www.expedia.com, and other travel sites to explore online travel reservations.

F. Online Banking

Spotlight 2: E-Commerce

Online banking enables you to use a Web browser to access your accounts, balance your checkbook, transfer funds, and even pay bills online. Approximately 40 million Americans used online banking services by the end of 2005.

Teaching Tips

Refer students to the Bankrate.com article “What Is Online Banking?” at www.bankrate.com/brm/olbstep2.asp for a very good discussion and history of online banking, including its advantages and disadvantages.

Security is still a top priority when people consider banking online. When you bank online, you are doing so in your browser’s **secure mode**, in which the browser scrambles and encodes the data when it communicates with the bank’s server.

An **electronic vault** is the server that stores the account holder’s information.

Active monitoring involves a security team that constantly monitors the vault for signs of unauthorized access.

G. Online Stock Trading

Online stock trading (also referred to as e-trading) is the purchase or sale of stock through the Internet. Have students visit www.estocktrading.net for a guide to online stock trading.

H. Nonretail Online Services

Many nonretail sites provide dating services; credit reports; health and medical advice; news, weather, and sports information; real estate listings (for homes and apartments); and insurance products (for car or home). These sites offer various levels of access and services for members and nonmembers.

I. Avoiding E-Commerce Hazards

Although there are many benefits to engaging in e-commerce, it also entails risks. These risks include identity theft, personal information exposure, money loss, and being ripped off by unscrupulous charlatans.

Teaching Tips

Engage students in a discussion on ways to protect yourself when doing business online. Some ideas include creating secure usernames and passwords, knowing the company you are dealing with, looking for *https://* or a lock icon in the browser, and using an online transaction processing system like PayPal.

COMPUTERS ARE YOUR FUTURE

CHAPTER 2 THE INTERNET & THE WORLD WIDE WEB

The Internet

Discussion Questions: Be prepared to discuss the following questions in class.

1. Internet cookies are used frequently by Web sites collecting information about the user. Are all cookies “bad”? What type of information do cookies collect?
2. What type of information do you think Web sites should track about their users? Is it ethical to gather information about all users? If so, how should that information be used? If not, what are some ways to prevent information from being gathered? Identify a Web site that uses cookies in a way that is very helpful for its customers. Describe how it does so.
3. When a user browses the Internet, many times banner ads appear on sites. One purpose of a banner ad is to entice users to go to the advertiser’s site. Are banner ads effective? Do you ever follow banner ads to another Web site? How can you prevent pop-up ads?
4. The Internet is rich with information. However, most information is free to anyone able to browse. This has caused a dilemma because many people cannot afford to maintain Web sites and would like to charge others for access to the information. Would you be willing to pay a fee to access an Internet page?
5. If you decided to create a Web site, how much would you have to pay to have it displayed? Find an example of a service that would host the Web site and register your domain name. What is the average cost of these services?

COMPUTERS ARE YOUR FUTURE

SPOTLIGHT 2 E-COMMERCE

E-Commerce

Short Answer Questions: Submit your written answers to the instructor.

1. There are three major categories of e-commerce: B2B, B2C, and C2C.
 - Define each of the categories, provide an example of each, and explain the differences among the categories.
 - Which would account for the largest volume of transactions?
 - Which would account for the largest dollar-amount transactions?
 - Explain your answers.
2. To conduct any type of business e-commerce, a number of capabilities must be in place. Some examples are login, security, online catalog, payment options, and shopping cart.
 - List two additional capabilities that a company must have in place to do e-commerce.
 - Explain why these capabilities are essential.

Instructor's Manual Materials to Accompany COMPUTERS ARE YOUR FUTURE

CHAPTER 2 THE INTERNET & THE WORLD WIDE WEB

CHAPTER ANSWERS TO END-OF-CHAPTER QUESTIONS

Matching

1. Nesting
d "Using Search Techniques"
2. subject guide
g "Finding Information on the Web"
3. netiquette
n "Usenet: Joining Online Discussions"
4. dead link
a "The Hypertext Concept"
5. tabbed browsing
l "Web Browsers and Web Servers"
6. interoperability
j "Interoperability"
7. exclusion operator
h "Using Search Techniques"
8. channel
b "Internet Relay Chat: Text Chatting in Real Time"

Chapter 2: The Internet & the World Wide Web

9. Domain Name System

o “Web Addresses”

10. Portal

c “Using Search Engines”

11. Boolean search

f “Using Search Techniques”

12. e-mail address

k “E-mail: Staying In Touch”

13. social networking

e “Social Networking: Helping People Connect”

14. Web server

m “Web Browsers and Web Servers”

15. spam

i “E-mail: Staying In Touch”

Multiple Choice

1. Which of the following is an example of a wildcard?

- a. (
- b. +
- c. *
- d. @

c “Using Search Techniques”

2. Which of the following is *not* an example of a top-level domain?

- a. asp
- b. org
- c. biz
- d. gov

a "Web Addresses"

3. Which of the following items can be used as a tool by spammers?

- a. flame
- b. channel
- c. TLD
- d. Web beacon

d "E-mail: Staying In Touch"

4. The Internet standard that supports the exchange of information on the Web is which of the following?

- a. Hypertext Markup Language
- b. TLD
- c. Hypertext Transfer Protocol
- d. Domain Name System

c "Web Addresses"

5. Using a wildcard in a search term supports which of the following?

- a. exclusion operators
- b. truncation
- c. Boolean operators
- d. Usenet

b “Using Search Techniques”

6. Which of the following does the World Wide Web use as its transport mechanism?

- a. Uniform Resource Locator
- b. Internet
- c. Internet Relay Chat
- d. Usenet

b “The Internet and the Web: What’s the Difference?”

7. Which of the following is the term for transferring files from your computer to another computer?

- a. downloading
- b. flaming
- c. blogging
- d. uploading

8. Which of the following develops as people respond to a newsgroup discussion?

- a. Listserv
- b. IRC
- c. thread
- d. channel

c “Usenet: Joining Online Discussions”

9. Which of the following describes material specially prepared and published to be read by a computer?

- a. hyperlinks
- b. hypertext
- c. index page
- d. protocol

b “The Hypertext Concept”

10. Which of the following automatically broadcasts messages to subscribers?

- a. Instant messenger service
- b. wiki
- c. newsgroup
- d. electronic mailing list

d “Electronic Mailing Lists”

Fill-In

In the blanks provided, write the correct answer for each of the following.

1. A(n) _____ site permits users to upload or download files without a user name and password.

anonymous FTP

“File Transfer Protocol: Transferring Files”

2. Web browsers maintain a(n) _____ of all the sites that have been visited.

history list

“Browsing the Web”

3. A top-level _____ indicates the type of organization in which a computer is located.

domain name

“Web Addresses”

4. A for-profit firm that uses a proprietary network and limits access to subscribers is known as a(n) _____.

online service

“Internet Service Providers and Online Services”

5. Also known as the Internet, _____ is the nonphysical place that is accessible only by computer.

cyberspace

“How the Internet Works”

6. A(n) _____ uses special keywords to provide more precise control of search results.

Boolean search

“Using Search Techniques”

7. _____ often result when a Web page is moved or a site closes down.

Chapter 2: The Internet & the World Wide Web

Dead links

“The Hypertext Concept”

8. Every computer, server, or device connected to the Internet has a numeric address known as a(n) _____, which uniquely identifies it to the network.

Internet protocol address

“Web Addresses”

9. If an e-mail containing a(n) _____ is opened, it could alert a spammer.

Web beacon

“E-mail: Staying in Touch”

10. A network-based content development system that uses resources such as sound, video, and text as a means of navigation is known as a(n) _____.

distributed hypermedia system

“The Hypertext Concept”

11. Someone who violates netiquette rules on a newsgroup may receive a(n) _____.

flame

“Usenet: Joining Online Discussions”

12. A URL consists of a protocol, _____, path, and resource name.

domain name

“Web Addresses”

13. Surrounding a series of search terms with quotation marks is known as _____.

phrase searching

“Using Search Techniques”

14. A(n) _____ provides individuals and businesses with access to the Internet via phone, DSL, cable, satellite, or fiber-optic lines for a fee.

Internet service provider

“Internet Service Providers and Online Services”

15. A(n) _____ displays Web pages and enables users to access linked documents.

Short Answer

1. Describe your experiences with the Internet. Specifically, identify the browser and e-mail software applications that you have used. Have you used other Internet-related software? If you have, describe these applications.

Students' answers will vary.

2. Explain the difference between downloading and uploading files. Have you used the Internet to transfer files? What types of files did you transfer? What type of software did you use?

With **downloading**, a document or file is transferred from another computer to your computer. With **uploading**, you transfer files from your computer to another computer.

Students' answers will vary. Most students more than likely will have used the Internet to transfer files, though some may not have. Various types of files that students may have downloaded include graphic files (.gif or .jpg), music files (.mp3), data files (.doc or .docx, .xls or .xlsx, and so on), or program files. The software that students may have used will vary.

3. Are you a member of a social networking site? How often do you use it? Do you take any special precautions to maintain your safety online?

Students' answers will vary.

4. What are some rules of thumb for evaluating content on the Web?

As you're evaluating a Web page, carefully note:

- Who the author is
- Whether he or she cites references
- Who hosts the page the article appears on
- Whether the presentation seems balanced and unbiased
- Whether the language is objective and dispassionate, or strident and argumentative
- What the page was written for
- Whether the information appears to be accurate
- Whether the page is up to date

5. Now that you have completed this chapter, you should be able to conduct more effective searches. List three search engines that you frequently use and explain why you prefer these search engines over others. Explore the advanced search options that these sites offer and explain what you find.

Students' answers will vary. Search engines used could include Google, Yahoo!, Mama, Dog Pile, AltaVista, CareerBuilder.com, AOL, MSN, Vivisimo, Topix, and Feedster.