*Technology in Action*

Chapter 3

USing the internet:   
making the most of the web’s resources

# CHAPTER REVIEW

**Buzz Words/Word Bank**

|  |  |  |
| --- | --- | --- |
| AOL | cookie(s) | newsgroup |
| bookmark | dial-up | satellite |
| breadcrumb list | DSL | search engine |
| browser | hyperlink | spam |
| buddy List | Internet service provider | subject directory |
| cable modem | keyword | URLs |

**Instructions:** Fill in the blanks using the words from the Word Bank above.

The day finally arrived when Juan no longer was a victim of slow Internet access through a traditional **(1)** **dial-up** connection. He could finally hook up to the Internet through his new high-speed **(2)** **cable modem.** He had been investigating broadband access for a while and thought that connecting through his existing phone lines with **(3) DSL** would be convenient. Unfortunately, it was not available in his area. Where Juan lives, a clear southern exposure does not exist, so he did not even entertain the idea of a **(4) satellite** connection. Juan was looking forward to the speedy access provided by the cable company, his new **(5) Internet Service Provider**, but he was faced with the need to change his e-mail from **(6) AOL**, his old ISP, since he didn’t want to pay for duplicate services. Although he needed to change his e-mail address, he was glad he didn’t have to give up instant messaging, because his **(7)** **buddy List** of online contacts had grown to be quite extensive. With the new speed of his broadband connection, Juan especially liked being able to quickly scan the Internet with his preferred **(8)** **browser** Firefox.

Juan clicked on his list of favorite Web sites and found the movie review site he had saved as a **(9)** **bookmark** the day before. He prefers to use this browser feature rather than entering in the **(10)** **URLs** of the sites he visits often. Juan navigated through the site, clicking on the **(11) hyperlink** that took him immediately to the page he was most interested in. Finding the movie he wanted to see, Juan ordered tickets online. The account information he input during an earlier visit to the site automatically appeared. In this case, Juan is glad that Web sites use **(12)** **cookies** to capture such information.

Then, using the **(13)** **breadcrumb list** at the top of the Web site, he traced his steps back to his starting point. Juan next typed in the address for Google, his preferred **(14)** **search engine**, and typed the **(15)** **keyword** to begin his search for a good restaurant in the area.

**Self-Test**

**Instructions:** Answer the multiple choice and true/false questions below for more practice with key terms and concepts from this chapter.

**MULTIPLE CHOICE**

1. The Internet was initially created for the purpose of:
   1. online shopping.
   2. military communications.
   3. personal and family communications.
   4. e-commerce activities.

ANSWER: B

1. The main artery, or largest and fastest pathway, of the Internet is called the:
   1. TCP/IP line.
   2. fiber-optic network.
   3. Internet backbone.
   4. artery protocol.

ANSWER: C

1. Which Internet connections use regular phone lines to connect to the Internet?
   1. dial-up and cable
   2. satellite and DSL
   3. cable and DSL
   4. dial-up and DSL

ANSWER: D

1. Which of the following Internet connection options is most likely to result in slower data transfer speeds due to users sharing the same lines?
   1. dial-up
   2. cable
   3. DSL
   4. None of the above

ANSWER: B

1. The software that is necessary to locate, view, and navigate the Web is called a(n):
   1. Internet service provider.
   2. Web browser.
   3. Web viewer.
   4. Universal Resource Locator.

ANSWER: B

1. Which of the following is not a way to search for information on the Web?
   1. spider directory
   2. search engine
   3. subject directory
   4. meta search engine

ANSWER: A

1. An advantage of a Web-based e-mail account is that:
   1. you have access to organizational tools to manage your e-mail messages.
   2. your e-mail is more secure.
   3. you are less subject to spam and other online annoyances.
   4. you can access your e-mail from any computer with an Internet connection.

ANSWER: D

1. Weblogs are:
   1. private Web exchanges between two people.
   2. online advertisements.
   3. personal journal entries posted on the Web.
   4. harmful Internet viruses.

ANSWER: C

1. Phishing is:
   1. a way to get useful information from a Web site.
   2. a scam to obtain personal information.
   3. a means to compliment another party via e-mail.
   4. a type of chain letter sent over the Internet.

ANSWER: B

1. To view and hear some multimedia files on the Web, you might need:
   1. a browser.
   2. a plug-in.
   3. a player.
   4. All of the above

ANSWER: D

**TRUE/FALSE**

**False** 1. The Web is a large network of networks, connecting millions of computers from around the world.

**False** 2. Satellite Internet connection is perfect for those users living in the city.

**False** 3. All search engines display the same results when the same keyword is used.

**True** 4. Cookies are small text files stored on your computer, intended to make your return visit to a Web site more efficient and better geared to your particular interests.

**True** 5. Internet2 is a project currently underway to explore expanding the capacity of the Internet.

**Critical Thinking Questions**

**1. Internet and Society**

The Internet was initially created in part to enable scientists and educators to share information quickly and efficiently. The advantages the Internet brings to our lives are evident, but does Internet access also cause problems?

1. What advantages and disadvantages does the Internet bring to your life?
2. What positive and negative effects has the Internet had on our society as a whole?
3. Some people argue that conducting searches on the Internet provides answers but does not inspire thoughtful research. What do you think?
4. Should use of the Internet be banned, or at least limited, for research projects in schools? Why or why not?

*Students will likely feel that the Internet offers more advantages than not, despite several negative societal effects, such as privacy concerns, Internet addiction, and so on. Although some information on the Internet may not be factual, it is doubtful that students would like to see it banned as a source of research due to ease of searching and convenient access.*

**2. File Swapping Ethics**

The original file-swapping site Napster’s unprecedented rise to fame came to a quick halt because of accusations of copyright infringements. However, downloading free music from the Internet still occurs.

1. What’s your opinion on having the ability to download free music files of your choice? Do you think the musicians who oppose online music sharing make valid points?
2. Discuss the differences you see between sharing music files online and sharing CDs with your friends.
3. The current price to buy a song online is about $1. Is this a fair price? If not, what price would you consider to be fair?

Most students enjoy the ability to download free music, and many will believe that they have been paying too much for too long for their music. They may see sharing music files versus loaning a friend a CD as similar acts. However, most will probably agree that paying $1 for a song is a relatively fair price.

**3. The Power of Google**

Google is the largest and most popular search engine on the Internet today. Because of its size and popularity, some people claim that Google has enormous power to influence a Web user’s search experience solely by its Web site ranking processes. What do you think about this potential power? How could it be used in negative or harmful ways?

1. Some Web sites pay search engines to list them near the top of the results pages. These sponsors therefore get priority placement. What do you think of this policy?
2. What effect (if any) do you think that Google has on Web site development? For example, do you think Web site developers intentionally include frequently searched words in their pages so that they will appear in more hits lists?
3. When you “google” someone, you type their name in the Google search box to see what comes up. What privacy concerns do you think such “googling” could present? Have you ever googled yourself or your friends?

Many students will feel that some companies may get a competitive edge by influencing how their Web sites are ranked. Savvy Web site developers are likely aware of which terms are frequently searched. Students tend to feel that big businesses are using questionable tactics. Most students have probably googled themselves, friends, and family, and possibly others as well. Some students may believe that Google’s mapping and phone/address listing capabilities represent a privacy threat, although this information is available through many other public resources as well.

**4. Charging for E-Mail?**

Should there be a charge placed on sending e-mail or on having IM conversations? What would be an appropriate charge? If a charge is placed on e-mail and IM conversations, what would happen to their use?

Students will likely disagree with charges made for individual IMs or e-mails. They are accustomed to paying one lump sum for unlimited access.

**Team Time**

**Comparing Internet Search Methods**

*This exercise gives students the opportunity to explore various search tools and techniques. The following rubric may be useful for grading purposes.*

| **Rubric** | **Beginning**  **1 point** | **Developing**  **2 points** | | **Proficient**  **3 points** | | **Exemplary**  **4 points** | **Score** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Individual Effort** | There was very little effort or understanding of the topic shown. | There was evidence of effort but it lacked in preparation and understanding. | | Clear learning on the topic has occurred. | | A sound understanding of the topic was exhibited with enthusiasm and creativity. |  |
| **Team Effort** | Team members did not function as a group when given the opportunity. There was only individual work with no evidence of collaboration. | Team members had some major problems working as a group. There was little collaboration and teamwork evident. | | The team members mostly worked well together, with few problems. There could have been improvement in the level of teamwork that was utilized. | | The team worked as a cohesive unit. There was mature collaboration, compromise, and discussion evident at all times. |  |
| **Final Product** | The final presentation had major factual, grammatical, spelling, and formatting errors. It seemed rushed and incomplete. | The final presentation had factual, grammatical, spelling, or formatting errors but was complete. | | The final presentation was a carefully developed product with few factual, grammatical, spelling, or formatting errors. | | The presentation was developed with care and creativity making it interesting, polished, and error-free. |  |
| **Instructor Feedback** | Little or no attempt was made to receive or incorporate feedback from the instructor. | Feedback was received, but none of the suggestions were incorporated into the presentation. | | Feedback was received and some suggestions were incorporated into the presentation. | | Feedback was received and the suggestions were incorporated into the presentation. |  |
| **Evaluation** | 0 points  No assessments were completed and handed in to the instructor. | | 1 point  One assessment was completed and handed in to the instructor. | | 2 points  All assessments were completed and handed in to the instructor. | |  |

**Multimedia**

In addition to the review materials presented here, you’ll find additional materials featured with the book’s multimedia, including the *Technology in Action* Student Resource CD and the Companion Web site ([www.prenhall.com/techinaction](http://www.prenhall.com/techinaction)), which will help reinforce student understanding of the chapter content. These materials include the following:

**ACTIVE HELPDESK**

These exercises are designed to provide the student with an interactive experience that will help them to extend their knowledge of topics in this chapter. The student plays the “role” of a Helpdesk analyst and provides answers to *commonly* asked questions in a rich, simulated online experience. Helpdesk calls can be found on the Train and Assess IT Web site, through your online course, or on the Student CD. After successfully completing the Helpdesk call, students will be able to access the Helpdesk Cheat Sheet, which summarizes the key points in each call.

The Helpdesk calls related to this chapter are:

* Staying Secure on the Internet
* Getting Around the Web
* Using Subject Directories and Search Engines
* Connecting to the Internet

***Staying Secure on the Internet******Help Desk Cheat Sheet***

***A. Secure Online Shopping***

*When shopping online, look for the following indications that your transactions are secure:*

* 1. *When the beginning of the URL changes from http:// to https://, the Web site is secure.*
  2. *If the Web site displays a seal from a reputable Web security company, the information you submit to the site is most likely protected.*
  3. *When**an icon of a closed padlock or a key appears on the status bar, the site is secure.*
  4. *In addition to these methods, use your common sense and shop at well-known, reputable sites. If you aren’t familiar with a site, investigate it with the Better Business Bureau. Print a copy of all online orders, make sure you receive a confirmation number, check that the company has a phone number and street address, pay by credit card, and check the return policy.*

***B. E-Commerce Terms***

*E-commerce is the business of conducting business online for purposes ranging from fund-raising to advertising to selling products. B2B is an e-commerce term that refers to transactions that take place between businesses and other businesses. C2C refers to transactions that take place between consumers themselves, such as on eBay. B2C refers to transactions that take place between businesses and consumers, such as purchases made at online stores.*

***C. Cookies***

1. ***Definition****: Cookies are small files that some Web sites automatically store on your computer’s hard drive when you visit the site. They provide Web sites with information about your browsing habits and may customize your return visits.*
2. ***Risks****: Because cookies pose no security threat, take up little room on your hard drive, and offer you conveniences on return visits to Web sites, there is no great reason to delete them. However, some sites sell the information their cookies collect to companies, which may use that information indiscriminately. Therefore, some people prefer to delete their cookies.*
3. ***Deleting Cookies****: If you’re uncomfortable with the accessibility of your personal information, you can (1) periodically delete cookies, (2) configure your browser to block certain types of cookies, and (3) use software programs such as Cookie Pal to monitor cookies.*

***Getting Around the Web******Helpdesk Cheat Sheet***

***A. URLs***

*A URL (Uniform Resource Locator) is a Web site’s address. It is made up of parts that help identify the Web document for which it stands:*

1. *The set of rules (or the protocol) used to retrieve the specified document.*
2. *The domain name. The first part of the domain name indicates who the site’s host is. The second part (such as .com or .edu) is called the top-level domain (TLD).*
3. *When the URL is only the domain name (such as www.nytimes.com), you are requesting a site’s home page. However, if a forward slash and additional text follow the domain name, the information after the slash indicates a particular file or path (or subdirectory) within the Web site.*

***B. Web Browser Features***

*A Web browser is software installed on your computer system that allows you to locate, view, and navigate the Web.*

* 1. ***Favorites:*** *If you want an easy way to return to a specific Web page, you can do so by using your browser’s Favorites (or Bookmark)**feature. These features place a marker of the site’s URL in an easily retrievable list.*
  2. ***History List:*** *History lists show all the Web pages users have visited over a certain period of time—organized by day—and usually going back as far as three weeks.*
  3. ***Navigational Tools.*** *Browsers come with many navigational tools, and include the Back and Forward, Refresh, and Home button, among others.*

***C. Alternative Web Browsers***

*Although Internet Explorer is currently the most used Web browser, it does not mean it is the best browser for all users. Alternative browsers include Netscape, Lynx, Mozilla, Opera, and Firefox.*

***Using Subject Directories and Search Engines******Helpdesk Cheat Sheet***

***A. Boolean Operators***

*Boolean operators are words or symbols—AND/+, NOT/-, and OR—you use to refine your searches, making them more effective.*

* 1. ***Boolean AND/+.*** *Narrows the results of your search by returning only those documents that include both keywords (not just one).*
  2. ***Boolean NOT/–.*** *Also narrows the results of your search by not returning the results of any pages containing the word following NOT/-.*
  3. ***Boolean OR.*** *Expands a keyword search so that the search results include one or both keywords.*
  4. ***Other Helpful Search Tips.*** *Combine Boolean terms, use quotation marks around words to search for an exact phrase, and use wildcards to take the place of a letter or letters in keywords.*

***B. Search Engine Basics***

*A search engine searches the Web for keywords and returns a list of the Web sites on which those words are found. Search engines have three parts: (1) a spider that collects data on the Web; (2) an indexer program that organizes the data into a database; and (3) software that searches the data, pulling out relevant information according to your search.*

* 1. ***Meta search engines:*** *Search other search engines rather than Web sites.*
  2. ***Specialty search engines:*** *Search only sites that are deemed relevant to the particular subject.*

***C. Subject Directory Basics***

*A subject directory is a guide to the Internet organized by topics and subtopics. You do not use keywords. Instead, after selecting the main subject from the directory, you narrow your search by successively clicking on subfolders until you reach the appropriate information.*

***D. Evaluating Web Sites***

*Always (1) verify information you find on the Web in other online sources and non-Web sources (such as scholarly magazines), (2) determine the reliability of the author/sponsor of the site, (3) determine whether the information presented is biased, and (4) determine the timeliness of the information presented.*

***Connecting to the Internet******Helpdesk Cheat Sheet***

1. ***Connecting to the Internet***
   1. ***Dial-Up Connection.*** *Often a good choice for casual Internet users who do not need a very fast connection. It is the least expensive method of connecting to the Internet and requires only a standard phone line and a modem. With devices such as Catch-A-Call, you can avoid tying up your phone line with a dial-up connection.*
   2. ***Broadband Connections.*** *The two leading broadband technologies are DSL, which uses a standard phone line to connect your computer to the Internet, and cable, which uses your TV’s cable service provider to connect to the Internet. Some users, especially those in rural areas, connect to the Internet via satellite.*
      1. ***Cable:*** *Cable Internet service is available in some areas. To provide cable Internet capabilities, cable companies must upgrade their networks to support two-way data transmission. A cable Internet connection requires an external cable modem and a network interface card (NIC).*
      2. ***Satellite****: Satellite Internet is a way to connect to the Internet that most people choose when other high-speed options are not available. To take advantage of satellite Internet, you need a satellite dish.*
      3. ***DSL:*** *Digital Subscriber Line, or DSL, is available in some areas. It uses a phone line to connect to the Internet and allows you to be on the phone and the Internet at the same time. You need a DSL modem to connect.*

***B. Accessing the Internet***

*Once users have chosen how they’ll connect to the Internet, they need a way to access the Internet. Internet service providers (ISPs) are companies that connect individuals to the Internet. Researching and trying out different ISPs is a good way to decide on which ISP is best. Users should find out such things as monthly costs, service programs, and whether the ISP lets users check e-mail from the Web.*