Part Four Finding Things on the Internet

CHAPTER 11

Searching for Information

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The Internet is the richest source of information on the planet. According to Bergman's (2000) Bright Planet white paper on the deep Web, there are more than 100,000 searchable databases containing nearly 550 billion documents, 95% of which are publicly available.

Just about anything you could ever want to know is available online. Especially for students and scholars conducting research, the Internet is a fantastic resource for finding out what has been done in your field.

Although so much information is available online, finding what you want to know is not always easy. That is because knowledge gets organized and stored in different ways. In order to find what you want, you need to understand how the different kinds of search engines work. Then you will be ready to conduct a search that has a better chance of finding what you seek.

Accordingly, this part of the book focuses on helping you find things on the Internet.



After completing this chapter, you will be able to:

- Conduct subject-oriented searches of World Wide Web directories.
- Search by keyword to find what you are looking for.
- Perform full-text searches of the Web's full-text indexes.
- Use the advanced search syntax to find what you are looking for efficiently.
- Perform concept searches based on ideas instead of specific keywords.
- Use metasearching to search via several search engines at once.
- Know how to get online help from human beings who will conduct searches on your hebalf
- Conduct scholarly searches across a broad range of academic disciplines.
- Use multimedia search engines to find pictures, audio, and video, in addition to text.
- Search Usenet newsgroups to find information in discussions of current research topics.
- Learn how to search the Web for people and find the person you are looking for.
- Get maps and driving instructions.
- Find out about new search engines and improved search strategies.
- The key to unleashing the research potential of the Internet is to know how to use the search engines. That is what this chapter is about. You will learn how to search subject-oriented directories that organize material according to topic. Then you will learn how to use full-text keyword searching that will enable you to find articles containing specific words or phrases in documents mounted on the Web. A tutorial on the advanced search syntax will refine your searching skills to make you more efficient in finding what you want on the Internet.

You will also learn how to do concept-oriented searching using search engines that can expand an idea into related topics and search them automatically. Metasearching will enable you to use one search engine to search several other search engines for the information you seek, collate the results of the searches, and return the results in a single organized report. You will also learn about human search services that use people to conduct searches. If you have trouble finding something on your own, you can pay a small fee, and a human being skilled at searching will conduct the search for you.

Some disciplines are ahead of others in terms of providing full-text source materials on the Internet, but online indexes make it quick and easy to create bibliographies of material

related to topics in any field. This chapter will enable you to use discipline-based academic search engines. You will also learn how to do multimedia searches that can find pictures, audio, and video content, in addition to plain text. You will even learn how to search Usenet newsgroups, which provide a rich source of information about current research in many fields.

As you study this chapter, you will notice that certain Web sites are featured in the discussion of each kind of searching. These sites were chosen because they pioneered in the development of the search technique and are considered to be the best in that kind of searching. When you visit one of these featured sites, however, you are likely to find other kinds of searching also available there. The most popular search sites, including Yahoo, AltaVista, Google, and Lycos, feature most if not all of the techniques featured in this chapter.

Subject-oriented Searching of Directories

When you research a topic, it is wise to begin by conducting a subject-oriented search of one or more of the Web's directories. This will tell you how much information is available about your topic as a subject that other people have written about. The subject-oriented directories use a combination of human beings and robots called *spiders* that search the Web continually, organizing what is found into a hierarchical directory of topics. When you conduct a subject-oriented search, the search engine searches this directory and provides you with a list of items related to your topic. To retrieve the item, you simply click it with your mouse.

Yahoo!



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As this book goes to press, Yahoo! is the most popular subject-oriented directory. Its Web address is http://www.yahoo.com. There is also a version for kids at http://www.yahooligans.com, whose directory indexes materials appropriate for the needs and interests of children. To perform a Yahoo search, follow the steps in Table 11-1.

Table 11-1 How to Perform a Yahoo Search

- ▶ Point your Web browser at http://www.yahoo.com; the Yahoo home page appears.
- If you want to search all of Yahoo, type your search term(s) into the blank search field and click the Search button.
- If you want to search within a Yahoo subject area, scroll down through the subjects listed on the Yahoo home page, and click on the subject area you want; the Yahoo subject area page appears.
- If subtopics are listed on the subject area page, scroll down through the subtopics, and select the one you want. Repeat this process until you have narrowed the subject area of your search.
- ▶ When you are ready to conduct a search, type your search term(s) into the blank search field.
- Click the option to search all of Yahoo, or just the subject area you have chosen.
- ▶ Click the Search button; Yahoo will perform the search and display the items that match your search terms.
- Scroll down through the matches to see what Yahoo found. All of the matches are hotlinked; to see an item, click on a highlighted word.
- ▶ If there are more matches to be displayed, you will find "Next 20 matches" printed at the bottom of the search results. Click "Next 20 matches" if you want to see more.



Figure 11-1 The advanced search options screen in Yahoo. Reproduced with permission of Yahoo! Inc. Copyright © 2002 Yahoo! Inc. YAHOO! and the YAHOO! logo are trademarks of Yahoo! Inc.

By default, Yahoo combines your search terms with the Boolean AND, which means that you will get a match only when all of the search terms are found together in an item. If you want a Boolean OR done instead, click the Advanced Search option that you will see printed next to the Search button, and the Advanced Search screen appears, as shown in Figure 11-1. In addition to letting you set the Boolean OR option, the advanced options let you search for an exact phrase. If you want only recent listings, you can pull down the new listings menu and set the number of days or months to search. You can also change the number of entries that Yahoo will return on each Web page of your search results; the default number is 20 entries per page.

Keyword Searching

Like subject-oriented directories, keyword search engines have "spiders" that are constantly combing the Web and feeding information into a database. Instead of organizing the Web according to subject areas, however, keyword search engines let you search for keywords in documents, regardless of the subject of the documents. Therefore, keyword search engines are likely to find more than subject-oriented searches, but what is found may not be as relevant to your subject. For this reason, most keyword search engines also provide you with a subject-oriented directory.

AltaVista



AltaVista is a search engine that was invented by the Digital Equipment Corporation (DEC) as the Web's first full-text keyword search engine. Now a freestanding company, AltaVista's Web address is http://www.altavista.com. AltaVista has been awarded more search-related patents than any other company. According to DEC, AltaVista is the fastest search service available (0.4 to 0.5 seconds average response time), with the most up-to-date content (refreshed every 28 days). When this book went to press, AltaVista's index included 350 million Web pages.

Because you are likely to get thousands of hits when you search AltaVista for a keyword, AltaVista sorts the hits according to the relevance or level of importance of the information found. This is done through statistical analysis that organizes pages with similar content into groups.

While conducting searches at the AltaVista site, you may notice how the commercial ads that appear onscreen often relate to the keywords for which you are searching. This is done by matching the content of the ads to the concept analysis of your keywords. This kind of concept mapping is used at many commercial search sites. Advertisers pay to have their ads come onscreen when someone conducts a search in the product's concept area.

Advanced Search Syntax

To make the most effective use of keyword search engines like AltaVista, you need to know how to do an advanced search that enables you to combine keywords with logical operators such as AND, OR, NOT, and NEAR to narrow the scope of your search. To perform an advanced search with AltaVista, follow the steps in Table 11-2.

Table 11-2 How to Perform an Advanced Search with AltaVista

- ▶ Point your Web browser at http://www.altavista.digital.com; the AltaVista home page appears.
- ▶ Click the Advanced Search option; the advanced search screen appears as shown in Figure 11-2.



Figure 11-2 AltaVista's advanced search screen.

- ▶ In the Boolean Query field, type your search terms using advanced search syntax, which allows you to:
 - Put quote signs around phrases you want treated as search terms; for example, "Martin Luther" will search for the words Martin and Luther appearing next to each other.
 - Use the operators AND, OR, NOT, and NEAR; for example, to search for Martin Luther but not Martin Luther King, you would enter "Martin Luther" AND NOT "Martin Luther King"
 - Use parentheses to group-search terms, such as "Martin Luther King" AND ("I Have a Dream" OR "Letter from a Birmingham Jail")
 - In the Sort by field, you have the option of specifying words for AltaVista to use in sorting the matches it finds; if you do not want the matches sorted, leave this field blank.

Almost anything in the world that you want to know is retrievable once you develop skill at using the advanced search syntax. The exercises at the end of this chapter will help you develop this skill. For more information about advanced searching, click the Help option on the AltaVista advanced search screen.

Lycos



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Another popular keyword search engine is Lycos, which was invented at Carnegie Mellon University. The search engine's name *Lycos* is the Latin word for wolf spider. The spider is a good metaphor for thinking about how a search engine's robots crawl around the Web, following links from site to site while collecting information into an index. When you conduct a search, you are actually searching the index, which in turn links you to the source documents on the Web.

Lycos is located at http://www.lycos.com. In addition to searching Web pages, Lycos has a multimedia section that lets you search for pictures, movies, streams, and sounds.

Concept Searching

Some users are better at keyword searching than others. Finding the right combination of keywords and logical operators (AND, OR, NOT) to get a search engine to find the kind of information you seek can be time-consuming and tedious. Concept-oriented search engines can help users who have difficulty with keyword searching.



Excite

Excite is a concept-based search engine that you will find at http://www.excite.com. It uses a search technology called Excite Precision Search to analyze more than 250 million Web pages in the Excite search index. Evaluations of link authority and Web page popularity combine with text indexing, semantic matching, and link analysis to select the most relevant and popular Web pages that match your search query.

But Excite is much more than a search engine. There are also customizable news feeds and stock reports, shopping and weather, live chats, and bookmarks. Quick Tools include a personal address book, calendar, horoscopes, maps/directions, and yellow pages. Excite also offers a free start page that includes e-mail, clubs, chat, and your own personal portfolio. Perhaps even more than being a search engine, Excite wants to become your personal portal to the Internet. To check out its wide range of Internet services, follow the *Interlit* Web site link to Excite.



Google

The Google search engine adds a new twist to searching by using an automated method that ranks relevant Web sites based on the link structure of the Internet itself. When you conduct a search, Google sorts the results in order of importance, based on how the site is linked to and referred to by other sites. The assumption is that the more a site is linked, the more of an authority it is. Google certainly takes a lot of Web pages into consideration; when this book went to press, Google indexed more than 2 billion Web pages. To search them, go to http://www.google.com.

Metasearching

By now you may be getting overwhelmed by the number of different search engines and the subtle distinctions in how they work. Metasearching provides an alternative to trying many individual search engines to find the information you seek. Metasearching means to use a search engine that invokes the other search engines automatically, conducting different kinds of searches for you, collating the results into one list of hits, and reporting back to you.

metacrawler .

MetaCrawler

MetaCrawler conducts searches by sending your queries to several Web search engines, including AltaVista, FindWhat, LookSmart, Google, OpenDirectory, Kanoodle, Overture, MetaCatalog, Sprinks, and DirectHit. MetaCrawler organizes the results into a uniform format and displays them in the order of the combined confidence scores given to each reference by the services that return it. You also have the option of scoring the hits, enabling what is found to be sorted in a number of different ways, such as by date, locale, and organization. MetaCrawler supports the advanced search syntax, which was explained previously in Table 11-2. MetaCrawler is on the Web at http://www.metacrawler.com.

Dogpile



Research attorney Aaron Flin created Dogpile when he got frustrated finding too few results with subject-oriented directories like Yahoo, and then trying keyword search engines like AltaVista that returned 30,000 or more documents in response to the same query. Dogpile is a metasearch engine that sends your Web queries to all of the search engines listed in Table 11-3. As you study the table, notice how Dogpile also searches FTP sites, newsfeeds, yellow pages, white pages, classifieds, auctions, audio, and image files. You can find Dogpile on the Web at http://www.dogpile.com.

Table 11-3 Search Engines Used by Dogpile

Internet Resource	Search Engines
World Wide Web	About, Ah-ha, Direct Hit, Dogpile Web Catalog, ePilot, FindWhat, Kanoodle, LookSmart, Open Directory, Overture, RealNames, SearchHippo, Sprinks, and Yahoo!
News	Dogpile Web Catalog
Files	Yaga
Audio/MP3	Astraweb, Audio Galaxy, MP3Board
lmages	Ditto.com

CNET Search.com



CNET's Search.com is a metasearch engine that searches more than 800 engines, including Yahoo!, AltaVista, Magellan, Lycos, Inktomi, Direct Hit, and Snap. A special feature is the channel, which lets you customize the search engines used to look for information in different content areas. Channels include categories such as automotive, business, computing, entertainment, government, music, people, shopping, and travel.

Human-based Searching

When you do not have time to wade through the tens of thousands of documents that a keyword search engine can return in response to a search, you may wish to consider using a human-based search service. A person skilled in searching published information sources, proprietary databases, and the Internet will find an answer and e-mail you the results.

Ask an Expert!



Pitsco's Ask an Expert! site is a free searching service that connects you to hundreds of real-world experts, ranging from astronauts to zookeepers. You can ask questions in 14 different categories, including Science/Technology, Animals, Education, Career/Industry, Health, Internet/Computer, Recreation/Entertainment, International/Cultural, Resources, Money/Business, Arts/Humanities, Law, Home Improvement, and Repair/Trades. Figure 11-3 shows the steps involved in submitting a question. The answers come to you from real-world experts who have volunteered to answer your questions. The Ask an Expert site is on the Web at http://www.askanexpert.com.

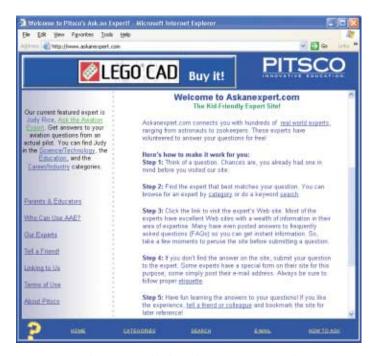


Figure 11-3 The steps involved in asking a question at Askanexpert.com.

Other Expert Sites

Search services that connect you to a human being are increasing in popularity among people who have trouble finding an answer to their questions. Allexperts.com, for example, claims to be the oldest and largest free Q&A service on the Internet. Thousands of volunteers include lawyers, doctors, engineers, and scientists who are waiting to answer your questions. All answers are free and most come within a day. Another human-based search service called Keen.com has registered more than 6 million users who search for an expert and then connect via phone to talk about their question in person. Follow the *Interlit* Web site links to these and other human-based search services.

Scholarly Searches

One of the problems with searching for information on the Internet is that the Web is a public resource. Anyone can create a Web page about any topic, regardless of how much (or how little) the Web page author knows about the subject. When you use a search engine such as AltaVista to find information about that topic, the results will contain a mix of pages written by people who know a lot about their subject areas, as well as people who may not know much and may even write misleading or false information.

One way of filtering out the bad information is to use one of the search engines that restrict themselves to scholarly information that has been published in refereed journals.

ERIC



ERIC stands for Educational Resources Information Center. It searches education journals and other scholarly documents, including books, conference proceedings, symposia, studies, and tests. When this book went to press, the ERIC database had grown to contain more than a million abstracts. Figure 11-4 illustrates how you can access ERIC at http://www.eric.ed.gov, where you can search the database by keyword, author, title, or topic. If you are unsure of your topic, you can use the ERIC thesaurus to select a topic.



Figure 11-4 You can search the ERIC Database online at http://www.eric.ed.gov.

Northern Light



At http://www.northernlight.com, you can limit your search to a special collection comprising more than 7,000 trusted, full-text journals, books, magazines, newswires, and reference sources. Full-text sources include the *American Banker, Business Week, ENR: Engineering News Record, The Lancet, PR Newswire, and ABC News Transcripts.* You pay a small fee, normally in the range of \$1 to \$4, to download the documents. Unlike subscription services that require you to pay in advance, Northern Light only asks you to pay for what you actually read.

About.com



Formerly known as The Mining Company, About.com takes a unique approach to providing access to scholarly sources. It hires real scholars to serve as guides in more than 700 subject areas. (The author was invited to be the educational technology guide, for example, but had to decline due to other writing commitments, such as this book.) The guides at About.com organize the links, keep them updated, write new articles, host discussions and chats, and answer questions online. To find out more and to search your subject area, go to http://about.com.

Britannica.com



Britannica.com is a Web-based knowledge and learning center that includes the complete, online version of the *Encyclopaedia Britannica*. The obvious advantage of the online version is that you have access to all the latest information at once, without needing to conduct separate searches through the 32 printed volumes and the annual *Book of the Year*. The online version also includes hundreds of articles not found in the printed encyclopedia, including selected articles from *Newsweek*, *Discover*, and *The Economist*. There are also thousands of links to Web sites selected by Britannica editors.

To search the *Encyclopaedia Britannica* online, go to http://www.britannica.com, where you will also find a broad range of other online services, including wireless downloads that let you search the complete *Encyclopædia Britannica* from a handheld Palm VII personal digital assistant. *Note:* You must pay a subscription fee in order to view the full text of encyclopedia articles over the Internet. Free trial subscriptions are available that permit you to try out the service before you begin paying for it.

XanEdu

XanEdu offers access via the Web to thousands of publications indexed by ProQuest, which is a global leader in the collection, organization, and distribution of value-added information to researchers, faculty, and students in libraries, government, universities, and schools in more than 160 countries. In addition to providing a search tool for the entire ProQuest database, XanEdu has created a special Education ReSearch Engine. Created especially for teachers, it keys to education standards and textbooks. The content is updated daily from more than 2,000 journals, magazines, and newspapers. A special section on "Teaching as a Profession" helps teachers keep up with the latest news and issues including school reform, labor issues, and certification standards. For more information, visit http://www.xanedu.com, where you can get a free trial subscription to try out the service.

Multimedia Searches

Multimedia is becoming increasingly popular on the Internet. There are millions of pictures, audio files, animations, and videos that can play on your computer. The challenge is to find the ones you are interested in. Happily, most of the search engines provide ways for you to search for multimedia.

Lycos MultiMedia



At the Lycos Web site at www.lycos.com, you can click the multimedia option, or you can go directly to multimedia.lycos.com. Figure 11-5 shows how you enter your key words, select the kind of media you are looking for, then press the Search button. The



Figure 11-5 The MultiMedia Search screen at http://multimedia.lycos.com.

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Figure 11-6 Previewing pictures at the Lycos MultiMedia Search site.

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Lycos search engine will return a list of pictures, movies, streams, or sounds dealing with your topic. You then preview the objects and download the ones you want, as illustrated in Figure 11-6.

If your intended use of a picture or a sound found on the Internet is not a fair use, you will need to seek copyright permission by contacting the administrator of the Web site where the object was found. Chapter 25 provides detailed information and guidelines regarding the fair use of multimedia.

AltaVista Multimedia Search



AltaVista has a multimedia section that lets you search for images, audio, and video. The audio search includes MP3, which is a very popular audio file format for sharing music over the Internet and downloading it to play on your computer or a portable digital audio device. To perform a multimedia search, go to http://www.altavista.com. In the Multimedia section of the menu, click either Images, MP3/Audio, or Video.

The Images search enables you to look for photos, graphics, or buttons and banners, either in color or in black and white. The audio search lets you specify whether you want MP3, WAV, Windows Media, or Real audio, lasting for more or less than a minute. The video search finds movies lasting more or less than a minute in AVI, MPEG, QuickTime, Windows Media, or Real video formats. You will learn more about these file formats in the next chapter, which covers commonly found Internet file types.

Singingfish

Singingfish specializes in the development and delivery of search engines that can find streaming media content on the Web. Included is access to music, news, movies, sports,

TV, radio, finance, and live events. Singingfish is a wholly owned subsidiary of Thomson multimedia. To check out their services or to conduct a multimedia search, go to http://www.singingfish.com.

Newsgroup Searches

Newsgroups are a rich source of information about current research in progress. Most disciplines have active newsgroups where current research topics are discussed. Some of the keyword-oriented search engines discussed earlier in this chapter have options you can choose to search newsgroups as well as Web pages. For example, AltaVista, Dogpile, Excite, Google, InfoSeek, and Yahoo provide a newsgroup search option.

Google Groups



At http://groups.google.com, for example, you can perform keyword searches of information written in more than 700 million Usenet messages over the past 20 years. The search terms can include the names of the people who wrote the messages. You can also search only on a name to get an index of all of the topics and messages a given person may have written in a newsgroup.

Hiding Messages from Newsgroup Searches

Some users have expressed surprise upon learning that it is now possible for other users to search through newsgroups and find out what has been written by specific people about specific topics. Some consider this to be a retroactive invasion of privacy. If you want to prevent messages you write in newsgroups from being visible to search engines, you must set the x-no-archive flag when you write the message. You can set this flag by making the first line in the body of your message read as follows:

x-no-archive: yes

File Searches

As you learned in Chapter 1, *FTP* stands for File Transfer Protocol. There are millions of files that you can download to your computer from FTP sites all over the Internet. Many of these files are Web pages that you can find with the Web-based search engines discussed earlier in this chapter. There are other kinds of files, however, that are not in Web page format. To find these other kinds of files, you need to use a search engine that can do FTP file searches.

Archie



Archie is a search tool for FTP servers. The name *Archie* is easy to remember because it is very close to the word *archive*, which refers to the collection of files in the FTP database. Archie searches this archive, which consists of the millions of files that are available on anonymous FTP sites. If you follow the links to Archie at the *Interlit* Web site, you will find several Web sites that make it easy for you to conduct Archie searches.

Download.com



CNET's Download.com is a handy site for finding and downloading useful files to your computer. The file categories include MP3/audio, business/finance, desktop enhancements, development tools, games, Internet, multimedia/design, Web authoring,

utilities, and drivers. The menus make it easy to drill down to the file you want to download. There are in-depth reviews and spotlight articles highlighting featured downloads of the day. To peruse the latest list of downloads, follow the *Interlit* Web site link to CNET Download.com.

How to Find People

In addition to helping you find Web pages, newsgroups, and scholarly documents, the Internet can also help you locate people.



Bigfoot

Located at http://www.bigfoot.com, Bigfoot offers a huge catalog of e-mail addresses and white page directories. As illustrated in Figure 11-7, you can search for someone's e-mail address or white page street address.



Figure 11-7 Bigfoot enables you to search for a person's e-mail address or white page street address.

WhoWhere

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WhoWhere lets you look up e-mail addresses, residential listings, toll-free 800 numbers, and millions of businesses, including maps and directions. Now that WhoWhere has become part of the Lycos network, you will find WhoWhere at http://www.whowhere.lycos.com.

Switchboard

Switchboard.com

Switchboard is a white pages service that enables you to find people and businesses. It handles more than 5 million look-ups for people and businesses each week. You can find Switchboard at http://www.switchboard.com.



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People.yahoo.com

There is a free online white pages search and listing service at http://people.yahoo.com. You can search by the person's name, city, or state to find out the person's e-mail address or street address. You can also search thousands of public databases with one click to find addresses, property records, licenses, and court records.

Finding Places

Have you ever gotten lost driving somewhere? Have you encountered road closings or construction delays that you wish you had known about in advance? The next time you plan a trip, treat yourself by getting a map and list of specific driving instructions before you take to the roads.

MapQuest

@MAPQUEST.COM

You can visit the most popular interactive mapping service on the Web at http://www.mapquest.com. It enables you to find more than 3 million locations worldwide, print driving directions, and create and save personalized maps. Live traffic updates are a popular feature that can save you time when roads close or traffic snarls. Figure 11-8 shows how MapQuest consists of tools that provide maps and directions tailored to different types of travelers. MapQuest's clients include Yahoo, Lycos, the National Geographic Society, the American Auto Association, Fodor's, and many yellow page directories. As a personal user of MapQuest, the author can attest to the quality and accuracy of its maps and driving instructions. Best of all, MapQuest is free.



Figure 11-8 The MapQuest interactive mapping service at http://www.mapquest.com.

Index of Collected Search Engines

Search engines are undergoing a lot of research and development on the Internet. By the time you read this, new search engines will be announced that were not available when this book went to press. You can use Yahoo to find out the latest information about new search engines and what they do. At http://www.yahoo.com, go to the section on Computers and Internet, and do a search for the keyword *search*.

Another good place to learn about search engines is the Search Engine Watch, where you will find announcements of the latest search services and Web searching tips. Hosted by Internet.com, you will find the Search Engine Watch at http://searchenginewatch.internet.com.

exercises

- 1. Use your Web browser to go to http://www.yahoo.com. Set a bookmark there. In the future, whenever you want to go to Yahoo, you can get there quickly via the bookmark.
- 2. Use Yahoo to conduct a subject-oriented search for the topic "Martin Luther King" and make a note of the number of items found. You will need this number to conduct the comparison in exercise 4.
- **3.** Use your Web browser to go to http://www.altavista.com. Set a bookmark there. In the future, whenever you want to go to AltaVista, you can get there quickly via the bookmark.
- **4.** Use AltaVista to conduct a full-text search for the topic "Martin Luther King" and make a note of the number of items found. How does this compare to the number of hits you got when you searched Yahoo in exercise 2? Why did AltaVista find so much more than Yahoo?
- **5.** Use AltaVista advanced search to perform the following searches. How many matches does each search find? Can you explain why these particular searches find progressively fewer matches?
 - "Martin Luther" AND NOT "Martin Luther King"
 - "Martin Luther King" AND ("I Have a Dream" OR "Letter from a Birmingham Jail")
 - "Martin Luther King" AND "Letter from a Birmingham Jail"
- **6.** At the *Interlit* Web site, follow the links to the people-finder search engines listed in the section on how to find people. Look yourself up in the different directories. Does Bigfoot find you? How about WhoWhere? Do you find yourself listed in Switchboard and Yahoo! People Search? How do you feel about being included or excluded from these people finders? If you are not included, and you would like to be, follow the onscreen instructions for getting yourself listed.
- 7. Use MapQuest to get driving instructions from your home to 1 Times Square in New York City. Does MapQuest know where you live? Can you see any errors in the driving instructions for the roads near your home? What does MapQuest tell you is the total distance from your home to Times Square, and what is the total estimated travel time?

PROGRESSIVE CASE PROJECTS

Episode 11: Adopting a Search Engine

An important key to the success of any Web site is how quickly surfers can find what they are looking for. Imagine that you work for a school or company that has a large Web site. There are hundreds or thousands of Web pages at the site, and some users have complained that it takes too long to find what they are looking for. Your employer has heard that some of the leading search engines have a search button that you can put on your organization's Web page. When this book went to press, for example, there was a Google button at w3.org, which is the worldwide Web consortium (W3C) site. The W3C is a huge site, and the Google search button really helps you find what you are looking for. Your employer wants you to look into which search button would work best at your school or company Web site. In selecting a search engine, consider these issues:

- Does the search engine work well for the kinds of information stored at your site?
- 4 How much does it cost to license the search button to put at your site? Is it free, or is a licensing fee required?
- Will the search engine push commercial ads onto your users' screens? If so, will your school or company accept that? Some schools, for example, have policies against displaying ads onscreen. If ads are not suitable in your workplace, check to see if there is a version that does not display ads, and find out the cost of the ad-free version.
- 4 Are any resources or system-related tasks required on your Web server, or is everything handled by the third-party search engine site?

Use a word processor to write up your search button recommendation in the form of a brief essay. Describe the search engines you compared, citing their comparative advantages or disadvantages for use in your workplace. Be sure to mention whether the one you recommend comes free or costs money, and mention any work your local server administrator may need to do to support the search button. If your instructor has asked you to hand in the recommendation, make sure you put your name at the top of the document, then save it on disk or follow any other instructions you may have been given for submitting this assignment.