**Getting Help with Your Browser**

Although most browsers are easy to use, you may need help a t some point. Browsers provide comprehensive Help systems, which can answer many of your questions about browsing and the World Wide Web. Open the browser’s Help menu, and then choose Contents and Index. (Depending on your browser, this option may be called Contents, Help Contents, or something similar.) A Help window appears, listing all the topics for which help o r information is available. Look through the list o f topics and choose the one that matches your interest. When you are done, click the Close button on the window's title bar. To get help from your browser maker's Web site, open your browser's Help menu and look for an option that leads you to the product's Web site. The resulting Web page will provide access to lists of frequently asked questions, links to help topics, and methods for getting in-depth technical support.

**Searching the Web**

It is not always easy to find what you want on the Wei). That is because there are tens of millions of unique Web sites, which include billions o f unique pages! This section explains the basics o f Web search tools and their use. However; there are many more specific search tools available than can lie listed here. To search the Web successfully, you should use this section as a starting point; then spend some time experimenting with a variety o f search tools.

The two most basic and commonly used Web-based search tools are

» Directories. A directory enables you to search for information by selecting categories o f subject matter. The director)' separates subjects into general categories (such as "companies"), which are broken into increasingly specific subcategories (such as "companies—construction—contractors—builders and designers"). After you select a category or subcategory, the director)1 displays

a list of Web sites that provide content related to that subject. The 1-ookSmart directory a t http://www.looksmarT.com is shown in.

» Search Engines. A search engine lets you search for information by typing one or more words. The engine then displays a list o f Web pages that contain information related to your words. (This type o f look-up is called a keyword search.) Any search engine lets you conduct a search based on a single word. Most also let you search for multiple words, such as “ scanner A N D printer."Many search engines accept “plain English” phrases or questions as the basis for your search, such as “movies starring Cary Grant" o r “How do cells divide?"

Note that both types of search tools are commonly called search engines. While this terminology is not technically correct, the differences between the two types are blurring; most Web-based search tools provide both directories and keyword search engines. In fact, you will see that LookSmart provides a box for performing keyword searches as well as its list of categories for performing directory-style searches.

Using a Search Engine

Suppose you want to find some information about jet ink printers. You know there are many different types of printers that are available at a wide range of prices. You also know that you want a printer that prints in color rather than in black and white only. In the following exercise, you will use a search engine to help you find the information you need.

1. Launch your Web browser.
2. In the Location/Address bar, type[**http://www.lycos.com**](http://www.lycos.com) and press ENTER the Lycos homepage opens in your browsers window.
3. In the Search textbox, type “ink jet printer” (include the quotation marks) and click the search button. A new page appears, listing Web pages that contain information relating to ink jet printers. Note, however, that the list includes hundreds of thousands of pages. This happens because search engine assumes that a Web site is relevant to your needs if it contains terms that match the keyword you provide.
4. To narrow the search result, you must provide more specific search criteria. Click in the search textbox and type “ink jet printer” “color” (include the quotation marks); then click the Search button. Another page appears, listing a new selection of Web sites that matches your keywords. Note that this list is shorter than the original one, by thousands of matches.
5. Scroll through the list and notice if it contains any duplicate entries. How many of the suggested pages actually seem irrelevant to your search criteria? Duplicate and useless entries are two significant problems users encounter when working with search engines.

The preceding examples showed quotation marks surrounding some keywords. Many search engines require you to place quotation marks around multiple-word phrases. The marks tell the engine to treat the words as a phrase (“ink jet printer " ), rather than as individual words ( “ ink ,” “ jet,” “ printer” ) . You can use quotation marks to separate parts of a multiple-part keyword ( “ ink jet printer" “ color " ) . Here, the marks tell the engine that the word “color” is separate from the phrase “ink jet printer.” Fortunately, most search engines provide other tools to help you search more accurately and find Web pages that are more relevant to your interests. These include Boolean operators and advanced search tools, which are discussed in the following sections.

**Using Boolean Operators in Your Searches**

Many—but not a l l —search engines accept special words, called Boolean operators, to modify your search criteria . Boolean operators are named after George Boole, a 19th century British mathematician. Three basic Boolean operators are sometimes used in Web searches: AND, OR, and NOT. To use an operator, simply include it in the text box where you type your keywords. The following table shows simple examples o f keyword searches that include the operators, and it explains how the operator affects each search. A few search engines also support a fourth operator NEAR. This operator determines the proximity, o r closeness, o f your specified keywords. F o r example, you may specify “printer NEAR color,” with a closeness o f 10 words. This tells the search engine to look for pages that include both terms, where the terms are no more than 10 words apart.

A good way to determine whether you need to use operators is to phrase your interest in the form of a sentence, and then use the important parts of the sentence as your key\* words along with the appropriate operators. A few (but not all) search engines will let you use multiple operators and set the order in which they are used. Suppose, for example, that you want to want to find information about cancer in dogs. You might set up your search criteria like this:

(dog OR canine) AND cancer

This tells the engine to look for pages that include either “dog,” “canine,” or both, and then to search those pages for ones that also include “cancer". A few search engines accept symbols to represent operators. For example, you may be able to use a plus sign (+) to represent the AND operator, and a minus sign (-) to represent NOT .

Many search engines use implied Boolean logic by default, meaning you may not need to include an operator in some searches. For example, if you type the following search criteria:

dog canine

Some search engines will assume that you want to find pages that include either term (using the OR operator by default). Others will assume you want pages that include both terms (using the AND operator by default), as was the case in your Lycos searches.

When dealing with implied logic, remember that each search engine operates in a slightly different way. F o r example, in some engines, you should use quotation marks when searching for a phrase o r when you want all words to be included, as in

“ink jet printer”

Without the quotation marks, some engines will return pages that include the word “ink”. Others that include “jet ", and others that include “ printer,” as well as pages that include a l l three.

The best way to determine how any search engine works is to study its Help-related pages. The Help section will tell you whether or how you can use operators with that particular engine.

Note, however, that all search engines do not support Boolean searches and multiple-word searches in the same way. Some engines will not even accept Boolean operators. In these cases, a better approach is to use the engine's advanced search tools, which are explored next.

**Using Advanced Search Options**

To overcome the problems of duplicate and irrelevant results, many search engines provide a set o f advanced search options, sometimes called advanced tools. It is important to remember that each engine’s advanced tool set is somewhat different from the tool set of another, but they all have the same goal of helping you refine your search criteria to get the best results. In some engines, advanced search options include support for phrase-based searching or Boolean operators, as already discussed. In other engines, an advanced search provides you with customized tools. At Yahoo!, for example, if you select the Advanced link, you can work in a special form to structure your search criteria. The form lets you use multiple words and phrases and specify whether any or a l l of the terms should be included in or omitted from the results. The form also provides tools that let you filter adult-oriented content (such as pornographic Web sites) from your results and search for information in a different language or from a given country. While some advanced tool sets allow you to use Boolean operators in their search forms, some do not. This is because some advanced search forms are based on Boolean logic and arc designed to help you create complex Boolean-based searches without deciding which operators to use o r where to use them.

**Using a Metasearch Engine**

In addition to the tools described in the preceding sections, another type o f Web-based search engine is also popular. These sites, called metasearch engines, use multiple search engines simultaneously to look up sires that march your keywords, phrase, or question. Examples o f metasearch engines include Mamma ( http://www.mamma.com) and Dogpile ( http://www.dogpile.coin). Metascarch engines arc helpful if you are not certain which keywords to use or if you want to get a very long list o f Web sites that meet your search criteria.

**Sponsored versus Nonsponsored Links**

A growing number o f Web search engines allow Web sites to pay for preferential listings. In other words, a Web site's owner can pay a search engine to place the site at the top of the list of search results. These purchased listings are called sponsored links, and they have become the subject o f some controversy.

Suppose, for example, that you need information about a specific kind of printer; so you use a search engine and conduct a search on the term “ printer.” The search engine displays a list o f Web sites that match the term, but you notice that the first dozen sites in the list are a ll retailers—not printer manufacturers, reviewers, or technical experts. In this ease, it’s a good bet that some or all of these retailers paid the search engine to place their sites at the top o f the list.

Sponsored links have become controversial because they are not always most relevant to the user's needs. Instead, they are a way for search engines to generate revenues. Some search engines display sponsored links in a special way—putting them in boxes or separate lists—so users can identify them. Should you avoid sponsored links? No, especially if they are relevant and helpful to you. Be aware, however, that some search engine results may be sponsored; take care to look through search results carefully to find the sites that arc most useful. If your favorite search engine docs not highlight sponsored links in some way, consider using an engine that does.

**Using Site-Specific Search Tools**

Many high-volume Web sites feature built-in search tools o f their own, enabling you to look for information on the Web site you are currently visiting. Sites such as Microsoft Corporation (http://www.microsoft.com), CNN (http^/www.cnn.com), Netscape Communications ( http://www.netscape.com), and many others feature such tools.

Suppose, for example, you are visiting the Microsoft Web site and want to find information about Flight Simulator, which is a popular Microsoft game. Instead of jumping from one page to another looking for information, you can click in the Search box, type the words Flight Simulator, and click the Go button. The site's search engine displays a list of pages on the Microsoft site that are related to

Flight Simulator

Some site-specific search tools also let you search outside that particular site. At ZDNet’s site (http://www.idnet.com) , for example, you can type one or more keywords in the Search box and then decide whether you want to search only die ZDNet site or the entire Web for related information before clicking the Search button.