The Internet As An Information Resource



Lesson 2: How to search for information on the Internet

Learning outcomes

By the end of the lesson, students should be able to:

- Identify the Internet search tools and services
- Understand how to utilize the Internet tools and services
- Use the Internet search tools and services
- Locate tutorials and other Web based training materials on how to use the Internet as an information resource

Scope

- What are the ways to find information on the Internet?
- What are the Internet search tools and services?
- How to use the Internet tools and services?
- How to find information on the Internet?



What are the ways to find information on the Internet?

- Net surfing -involves scanning pages and clicking on links randomly
- Using an URL quickest way to find information on the Internet but you must know where it is located
- Use search tools and services can assist you in locating the information you need among the vast amount of information available on the Net

- Search engines
- Subject directories
- Invisible Web
- Meta-search engines
- Specialized search engines
- Other search tools



Search engines

- Websites that uses "bots" or "spiders" that periodically search the World Wide Web and automatically index and store the information in their database
- Examples
 - Google http://www.google.com
 - Alltheweb http://www.alltheweb.com
 - Altavista http://www.altavista.com

Subject directories

- Listings and directories of web page files that have been assembled manually, selected and evaluated by humans
- Examples
 - Yahoo http://www.yahoo.com
 - Librarian's Index http://www.lii.org
 - LookSmart http://www.looksmart.com

Invisible Web

- Web pages that cannot be ordinarily reached through search engines or subject directories
- Examples
 - Langenberg http://www.langenberg.com
 - Complete Planet http://www.completeplanet.com
 - Direct Search http://gwis2.circ.gwu.edu/~gprice/direct.htmg

Meta-search engines

- Send your search query to several search engines simultaneously and give you a consolidated report of their findings
- Examples
 - Metacrawler http://www.metacrawler.com
 - Dogpile http://www.dogpile.com
 - ProFusion http://www.profusion.com



Specialized search engines

- Search engines dedicated to indexing web pages on specific topics
- Examples
 - Locate mailing lists and newsgroups
 - The Lizt http://www.liszt.com
 - Mailbase http://www.mailbase.ac.uk
 - Dejanews http://www.dejanews.com
 - Google groups http://groups.google.com/

- Other search tools and services
- FTP archives locate files on anonymous FTP sites
 - Ex. ArchiePlex -http://archie.emnet.co.uk/form.html
- Web and e-mail people finder
 - Ex. Four11 http://people.yahoo.com
- Multimedia search
 - Ex. Webseek http://www.ctr.columbia.edu/webseek/



Other search tools and services

- Virtual Reference Libraries online dictionaries, indexes, etc.
 - Ex. Research-it http://www.iTools.com/research-it
- Virtual Reference Desks online reference services
 - Ex AskA+Locator http://www.vrd.org/locator/subject.shtml
- Z39.50 Gateways gateways to library catalogs
 - Ex LC Online Catalog -http://lcweb.loc.gov/z3950/gateway.html

- Most if not all of the Internet tools and services can be used through the World Wide Web
- To be able to use the search tools on the Web to find information resources on the Net one must first know how to use a browser
- Features and functions of available search tools and services vary accordingly, one must be familiar with at least two or more search tools to become effective in finding information

Browsers

- Programs used to access the World Wide Web
- Allows a user to access resources on a server
- Displays the contents of the web in multimedia format
- Examples of browsers
 - Netscape Navigator, Internet Explorer, America Online, Opera

Using a Browser

- You need to be familiar with the features of your web browser and know how to use it
 - enter a URL in the location or address bar to visit a particular web site
 - open, resize, close a browser window
 - locate and use the navigation tools on your browser ie., back, reload/refresh, home, print
 - identify and use hyperlinks to get around the web
 - download documents and files
 - use plug-ins like Adobe Acrobat or Macromedia Shockwave

- Generally there are two ways of using search tools and services
 - Browsing usually applied to directories where subjects are arranged hierarchically
 - Keywords search search box is provided for entering keywords to search the database
 - Simple search search on the keywords
 - Advanced search search can be refined using various techniques



- Browsing subject directories
- From the home page you start with a broad subject area and follow the links to more specific areas until you reach the subject you wish to explore, then you click on one of the displayed results to go to the selected page (document)

Yahoo! Directory

World Wide Web > Beginner's Guides

<u>Home</u> > <u>Computers and Internet</u> > <u>Internet</u> > <u>World Wide Web</u> > **Beginner's Guides**

- Simple keywords search
- Type keywords on the search box, press Enter on the keyboard and then select from the results





- Advanced search
- Most search engines allow you to refine your search





- Meta-search engines, invisible web, specialized search engines and other search tools and services use the same basic principles in locating your information need
- Ideally combinations of both browsing and keyword searching (simple and advanced) will yield more accurate results

 Each Internet tool and service provides help files that can guide you in utilizing it more effectively

Yahoo! Search Help

Yahoo! Search > Search Help

Top 5 Questions

1. How exactly do I search Yahoo!?

Searching Yahoo!

How do I search Yahoo!?



Advanced Search

Home

All About Google

Help Central

Search Help

Basics of Search

 Advanced Search Interpret Results Customize

Advanced Search Made Easy

You can increase the accuracy of your searches by adding operators that fine-tune your keywords. Most of the options listed on this page can be entered directly into the Google search box or selected from Google's <u>Advanced Search page</u>.

Additionally, Google supports several **advanced operators** which are query words that have special meaning to Google. For a complete list, <u>click here</u>.



- Analyze your topic
- Choose the search tool you need
- Learn how to use the search tools
- Formulate your search strategy
- Search with a question in mind



- Analyze your topic
- What are you searching? for what purpose?
- What type of information do you want?
- The purpose is to determine what terms to use in your search and what search tool features you need to search successfully

- Choose the search tool you need
- Search tools find documents matching your information need
- Every search tool is different. They vary in features and size/comprehensiveness
- The most important features in selecting a search tool are those which allow you to refine or focus your search when you need to



- Learn how to use the search tools
- Being familiar with most of the major search tools and their capabilities allows you to zero in on your search
- Learn how to use Boolean logic, phrase searching, truncation, field searching, etc.
- Spend time reading the Help files to know its features and capabilities



- Formulate your search strategy
- Formulating your search strategy beforehand allows you to search for information systematically
- It also saves you a lot of time and money if you are paying for Internet access by the minute
- Your search strategy should be based on your information need

- Search with a question in mind
- How am I going to use this?
- Do I have enough or too much information?
- Scan the content of the material to find out if it has anything of value
- Evaluate the website for accuracy and authority



Simple search strategy

- pick your site
- learn to use the search tools
- choose your words carefully
- vary your spelling
- know how to widen your search

- know how to use the refining techniques
- use multiple search engines
- use meta-search engines
- use specialized search engines
- reuse your search

Tips in finding information on the Internet

- Learn the features and functions of your browser
- If you know the URL go directly to it
- Always check for typing errors
- Define the topic in terms of concepts
- Express each concept using keywords multiple keywords or phrases
- Search multiple terms or exact phrase and not single words

Tips in finding information on the Internet

- Read the help screens and search tips
- Utilize two or more search tools
- Use any advanced features of the search engine
- Use services which index quality sites
- Evaluate the results
- Download the information
- Cite your source properly



Pitfalls

- endless links that leads to getting lost
- data traffic takes eternity to download
- too many; too few; many irrelevant sites
- information overload

Solutions

- stop / try another search
- try it another time / site; change ISP
- refine or vary your search
- search with a more specific question in mind

To effectively find information we must:

- Clearly define what we are looking for
- Become familiar with the information resources and different search tools available via the Internet
- Learn how to use at least one or two of the search tools effectively
- Create and try our own search strategy
- Evaluate retrieved information and cite the source properly