



WWW Search Engines in a Nutshell

What is a search engine?

A search engine is a program available on the World Wide Web that allows you to perform keyword searches scanning the whole of the Web (or at least a portion of it) to retrieve web sites matching the parameters of your search. This has the effect of casting a net into the vast sea of the World Wide Web and seeing what items you pull in.

Because each search engine works a little differently and has established different criteria for its retrieval methods, you get different results for each engine you use. This is a good reason to search on several of them when you are looking for something on the web. A few search engines have been created that can search many engines for you simultaneously; these are called meta-search engines.

Relevancy or How are your results displayed?

Most search engines rank the sites they retrieve by relevancy; that is, the web sites that are most relevant to your search will be displayed first and a percentile of relevancy will be assigned to each to help indicate how closely that result matches your request. For example, if you were to search for "Aquinas College," the home page for Aquinas might bring a result of 100% and be first on your results list. Further down on your list may be information about St. Thomas Aquinas or other colleges that have nothing to do with Aquinas. This is important to keep in mind when your results list has over 250,000 items in it. Often, it is unclear how rankings are determined; each search engine uses its own formula to determine a site's relevance to your request.

Keyword Searching

All search engines allow keyword searching; they do not require that you use specific words to search. Some search engines will adapt your keywords to include permutations of those words. For example, if you search for "child" in some engines, the program will slightly modify the search on its own and look for "children" or "childs," etc. Some, like AskJeeves.com, use natural language. That is, you can type in your search as a question: "who was the first president of the united states".

Simple vs. Advanced Searching

Simple or basic searching is when you type your keywords into the first search screen that appears when you go to a search engine. Most search engines offer more sophisticated, advanced searching so that you can focus and narrow your search, and each provides different tools for doing this. Hotbot, for example, allows you to limit by language, date of publication, type of material, domain of the URL, etc.

Limiting your search

Boolean operators: Most search engines allow you to limit or expand your searching using Boolean operators. This include AND, OR and NOT (sometimes AND NOT). However, not every search engine uses the same method. Altavista likes users to use "AND" to link terms; Yahoo requires a "+" between terms, with no spaces in between. To make sure, review the engine's help screen.

Truncation: allows you to search for a term and its variations by entering a the first few letters of the term followed by a symbol. The truncation symbol is often an asterisk, but could be a !, ? or %. For example, you could type in "econ*" and the engine would search for such variations econometrics, economics, economist, etc.

Case sensitive: Search engines are usually case sensitive only in special situations, such as if you are searching for a personal name. There is quite a bit of variation in this across the different search engines, so be sure to check the help screens to determine how best to type in your search.

Phrases: Most engines allow you to search for specific phrases (as opposed to individual words). A phrase is most often designated by quotation marks, as in "Aquinas College," or parentheses. Each engine has its own rule on this, consult the help screens for information.

Hints for searching

- Each engine defaults to a certain type of search if you don't use any of the above tools. For example, if you type in Aquinas College, some engines will search this as Aquinas AND College and others will search it as Aquinas OR College. Without the quotation marks or another phrase designator, most will not search it as a phrase. Check the help screens for information on what the default search is.
- If your search retrieves too many items, refine it by using the tools mentioned above or changing to the search engine's advanced search.
- If you're not happy with your results, search another search engine or try a meta-search engine.
- To search an engine most efficiently, read the help screens – they can save you a lot of time.

WWW Search Engines

Basic Search Engines	Boolean	Plus /Minus	Phrase*	Natural Language	Stemming/ Truncation	Case Sensitive
AllTheWeb (FAST Search) www.alltheweb.com	No	Yes	Q	Yes	No	No
AltaVista www.altavista.com	No	Yes	Q	Yes	Yes	No
Google** www.google.com	Automatic AND	Yes	Q	No	Yes	No
HotBot** www.hotbot.com	Yes (also, automatic AND)	No	Q	No	No	No
Directories						
Ask Jeeves www.askjeeves.com	Yes	No	--	Yes	No	No
Look Smart www.looksmart.com	Yes (automatic AND)	No	No	No	Yes (automatic)	no
Lycos www.lycos.com	Yes	No	Q	No	No	No
Open Directory dmoz.org	Yes (automatic AND)	No	Q	No	Yes	No
Yahoo! www.yahoo.com	Yes	Yes	Q	No	Yes	No
MetaSearch Engines						
Dogpile** www.dogpile.com	Yes	Yes	Q	Yes	Yes	No
IxQuick www.ixquick.com	Yes	Yes	Q	Yes	Yes	No
Profusion** www.profusion.com	Yes	Yes	Q	No	No	No
Vivisimo** vivisimo.com	Yes	Yes	Q	No	Yes	No

*For Phrase searching: Q = uses quotation marks to indicate an exact phrase

P = uses parenthesis to indicate an exact phrase

**Provides a form of advance searching

For detailed information about search engines, see Search Engine Watch at www.searchenginewatch.com