

Search Engine

- A search engine is a tool that allows a user to enter keywords and retrieve information on websites contained in its catalog or database
- Search engine tools like Google are run by search-engine software that allows the database to be searched.

Features of Search Engine

- A true search engine is an automated software program that moves around the Web collecting WebPages to include in its catalog or database.
- It searches when an user requests information from a search engine; not the entire Web.
- Each search engine has its own catalog or database of collected WebPages, so you will get different results/hits by using different search engines.

Types of Search Engines

- There are three main types of search engine tools:
 - Search directories or indexes
 - Hybrid search engines
 - Meta search engines
 - All of these tools are often referred to as search engines
-

How Are These Tools Different?

- A search engine type is determined by how the information contained in its catalog or database is collected

Cont...

- The sites in the catalog or database of a search directory or index are compiled by humans; not an automated software program. The sites are submitted, then assigned to the appropriate category.
 - Some search directories or indexes do not consider content when adding pages to their catalog. Others collect, rate or rank materials. Some search directories include annotations that evaluate, review, or otherwise describe the content.
 - Yahoo and LookSmart are examples of search directories or indexes.
-

Cont...

- Hybrid search engines will present both crawler-based results and human-powered listings. Usually, a hybrid search engine will favor one type of listings over another.
- MSN Search is more likely to present human-powered listings over its crawler-based results especially for more obscure queries.

Multiple (Meta) Search Engines

- A meta search engine is a tool that helps to locate information available via the WWW.
- It provide a single interface that enables users to search many different search engines, indexes and databases.
- Thus Meta search engines are capable of searching several search engine databases at once.

The Three Parts of a Search Engine

- Spider, crawler or robot
- Index, catalog or database
- Search engine software

Cont...

- The first part of a search engine is called the spider. The *spider* (sometimes called a crawler or robot) is a program that moves around the World Wide Web visiting websites.
- It reads the webpages it finds and follows the links further down into the website.
- The spider returns from time to time and checks for changes. The pages that it finds are placed into the catalog.

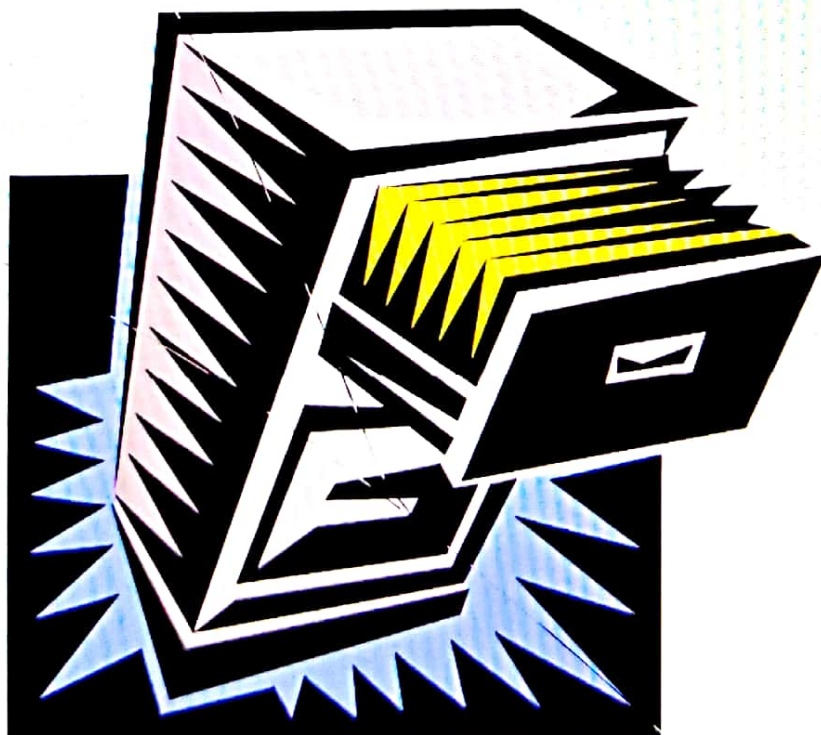
Part One: The Spider



Cont...

- The second part of a search engine is called the index, catalog, or database.
- This *index* contains a copy of each page that was collected by the spider.
- A spidered page must be indexed to become a search result.

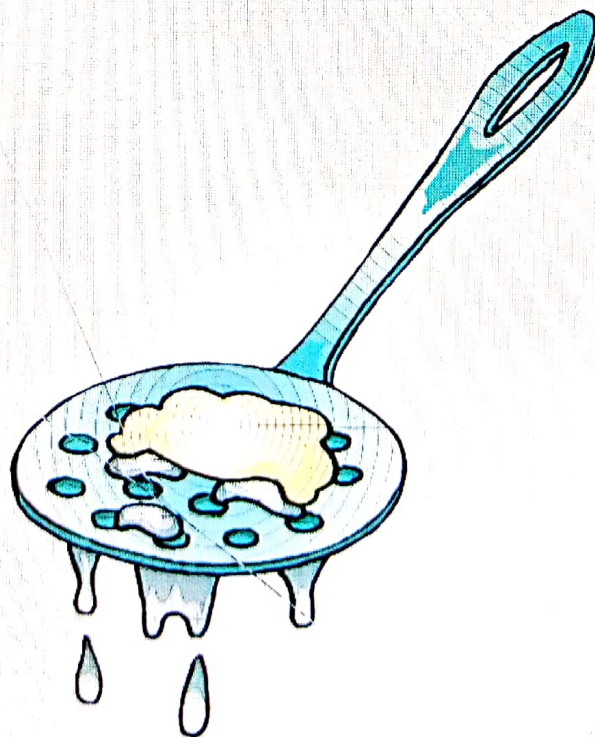
Part Two: The Index



Cont...

- When a user requests keywords from a search engine, the search engine software sifts through all the indexed pages to find matching keywords, then returns the results/hits to the user.

Part Three: Search Engine Software



Successful Search Skills

- Before you ever open your internet browser, prepare a list of keywords. This will help to eliminate being overwhelmed with millions of results/hits.
 - Follow these guidelines to create your list of keywords:
 1. Identify the main concepts of your topic
 2. List keywords for each concept
 3. Include synonyms and alternate spellings
 4. Determine the logical relationships between your keywords.
Example: searching for the phrase “river boats” will bring you more relevant results/hits than searching for river AND boats or +river +boats
-

Cont...

- Use the advance search in which we can search information in a particular format.
- Use image option for search only images about the specific topic.

Use the Boolean Logic

- AND
 - Requires all of the search terms to appear on a page
- OR
 - Allows any of the search terms to appear on a page
- NOT
 - Requires a search term to not be present on a page

Search Again in Different Search Engines

- Each search engine has its own database of cataloged webpages
- One search engine may return results/hits that another one doesn't
- No search engine covers the entire World Wide Web

Popular Search Engines

- AltaVista - <http://www.altavista.com>
- HotBot - <http://www.hotbot.com>
- Excite - <http://www.excite.com>
- Lycos - <http://www.lycos.com>
- Go - <http://www.go.com>
- Google - <http://www.google.com>
- All the Web – <http://www.alltheweb.com>

Popular Indexes or Directories

- Yahoo - <http://www.yahoo.com>
- LookSmart - <http://www.looksmart.com>
- Encyclopedia Britannica Online -
<http://www.britannica.com>

Popular Multiple (Meta) Search Engines

- Dogpile - <http://www.dogpile.com/>
- SavvySearch - <http://www.search.com/>
- MetaCrawler -
<http://www.metacrawler.com>