Search Engine Savvy: Google and Beyond

Purpose
The purpose of the is workshop is to introduce you to various search engine tips and techniques, including when and how to use Google and other web search tools most effectively to find information, images and multimedia; how to develop basic and advanced Internet search strategies; and provide a survey of new, innovative Internet projects

Objectives

1. Learn how to find information, images and multimedia using Google and other search engines
2. Learn about the variety of search engines available and how to use them effectively
3. Learn how to develop basic and advanced search strategies in various search engines

Outline for Search Engine Savvy Workshop

I. Search Engines
   a. Definitions
   b. How search engines work
   c. Keeping up with search engines
II. Google
   a. Shortcuts, tips and tricks
   b. Other Google sites
   c. Keeping up with Google
III. Other search engines
   a. Metasearch engines
   b. Images and Multimedia
   c. Statistics and GIS
   d. Fun
IV. Web 2.0
   a. Search engine mash-ups
   b. Social networking

I. Search Engines

Definitions

> A **search engine** is a program designed to connect people to information through technology. Generally, search engines are programs that help users find information stored on the World

Wide Web. Sometimes this information is stored on a proprietary network and sometimes it may be stored on a personal computer. The search engine allows the user to ask for content meeting specific criteria and returns a list of references that match those criteria.

A **metasearch engine** is a search engine that sends user requests for content to several search engines and returns the results from each one. A metasearch engine allows users to enter their search criteria only one time and provides access to the results of several search engines simultaneously.

A **spider** is a small software program that runs off a search engine by finding web pages that match a search statement and feeding the results back to the search engine. Also called a **web crawler**.

An **operator** is a symbol that represents a specific action. For example, a plus sign (+) is an operator that represents addition. A proximity operator tells the spider to look for words that are within a short distance of each other in a document. A Boolean operator allows the spider to combine or leave out certain terms. Other tools that can be used to control search results are **filters** and **limits.**

The **Invisible Web** consists of pages that are linked to by other pages, such as dynamic pages that are returned in response to a submitted query. The invisible, or deep, web also includes sites that require registration or a password that limits a search engines ability to browse them.

A **portal** is a web page that works as a starting point for a user's session on the Internet. Portals typically include a directory of websites, access to web services and shopping sites, and search functionality powered by a search engine provider. Examples of portals are AOL and myWSU.

A **directory** is a compilation of websites reviewed and organized by human editors into useful categories and topics, similar to the organization of the Yellow Pages. An example of a directory is Yahoo.

Web 2.0 loosely refers to a second-generation of Internet-based services that let people collaborate and share information online in perceived new ways — such as social networking sites, wikis,

communication tools such as blogs, and folksonomy tagging as seen in **del.icio.us**

Web 1.0		Web 2.0
Ofoto	-->	Flickr
Akamai	-->	BitTorrent
Britannica Online	-->	Wikipedia
personal websites	-->	blogging
evite	-->	upcoming.org and EVDB
publishing	-->	participation
content management systems	-->	wikis
directories (taxonomy)	-->	tagging ("folksonomy")

from "What is Web 2.0" by Tim O'Reilly
http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html

How search engines work

Typically, a search engine works by sending out a spider to fetch as many documents as possible. Another program, called an *indexer,* then reads these documents and creates an index based on the words contained in each document. Each search engine uses a proprietary algorithm to create its indices such that, ideally, only meaningful results are returned for each query.

Keeping up with search engines

http://searchenginewatch.com/

http://www.searchengineshowdown.com/

II. Google

Shortcuts, Tips and Tricks

Google Help

Sample searches:

- movie: snakes on a plane 98686
- weather 98686
- define search engine
- [#] external hard drive $100..150 [#]

- safesearch:breast cancer
- 30% of 55
- 28C in F
- ~ wireless

Other Google sites

Froogle

Sample search: external hard drive AND 98685

Google Scholar

Sample search: multiple intelligences gender differences

Google Uncle Sam

Google Images

Sample search: Sunflowers

Google Maps

Sample search: 14204 NE Salmon Creek Avenue, Vancouver, WA

Google Earth

Sample search: 414 W 46th St, New York, NY

Sample search: 2211 NE 139th St Vancouver, WA 98686

Keeping up with Google

Google Trends

Sample search: Organic farming, buy local

Sample search: Snow patrol, death cab for cutie

Google Labs

III. Other search engines

Metasearch

     AlltheWeb – filter on

     Zapmeta

     Dogpile

     Vivisimo

     Ixquick

     Exalead

Images and Multimedia

     Kartoo

        Visual Thesaurus

     Oaister

        Hippies and Woodstock

     BlinkxTV

     3D Search Engine

     Retrievr

Statistics and GIS

     Statistics – government, health, education

     GIS

Fun

     A9

     Ujiko

     Findsounds.com

IV. Web 2.0

Antworld	Chicagocrime
OpenWorldCat	
Last.fm	Pandora
Ice Rocket	
Clusty	
Del.icio.us	
Tagnautica/Flickr	