

Announcements

- ❖ Check announcements daily

Web Search Tools

- ❖ Subject (Web) Directories

- ❖ Search Engines

 - ❖ Based on “spider” gathering information

 - ❖ Search Engine List

 - ❖ <http://websearch.about.com/od/enginesanddirectories/tp/search-engine-list.htm>

- ❖ MetaSearch Engines

 - ❖ Rely on several search engines to get results.

 - ❖ MetaSearch Engine List

 - ❖ http://websearch.about.com/od/metasearchengines/Meta_Search_EnginesSearch_with_the_Best_Meta_Search_Engines.htm

- ❖ Invisible Web

 - ❖ Example – searchable databases

- ❖ Great References

 - ❖ <http://websearch.about.com/od/internetresearch/a/whatissearch.htm>

 - ❖ <http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/FindInfo.html>

Web Directories

- ❖ Organizes web sites by topic
- ❖ It is maintained by humans rather than software
- ❖ Smaller than search engines' databases
- ❖ How to search a web directory
 - ❖ A provided term is search in the directory's indexed categories
- ❖ Examples
 - ❖ Open Directory - <http://www.dmoz.org/>
 - ❖ Yahoo - <http://dir.yahoo.com/>
 - ❖ Mahalo - <http://www.mahalo.com/>

Trustworthiness of Web Data

- ❖ How can we verify the data/information from the web is valid?
- ❖ Cartoon – *“On the Internet, Nobody Knows You’re a Dog”*
- ❖ How can we verify the data validity and integrity?
- ❖ Remember anyone can write a web page!
- ❖ Example:
 - ❖ Wikipedia – who writes it?
 - ❖ How can we know a web site is legit?
- ❖ You need to carefully evaluate what you find in the web

Criteria to Evaluate Web Data

- ❖ Excellent Reference:
<http://www.library.jhu.edu/researchhelp/general/evaluating/>
- ❖ Criteria
 - ❖ Authorship
 - ❖ Who wrote the document?
 - ❖ Do you recognize the author (e.g., someone in your field)?
 - ❖ Is the document linked to a document you trust?
 - ❖ Is biographical information provided?
 - ❖ Is the author referred to by a trust authority (persons)?
 - ❖ Publishing Entity
 - ❖ Any organization name provided in the document?
 - ❖ Can you contact the web master?
 - ❖ Are any parts of the document (headers, images, etc.) associated with an organization?
 - ❖ Is the URL associated with an organization you trust?
 - ❖ Can you verify the identity of the server via whois servers or dnslookup?
 - ❖ Point of view – Examine who is providing the information and what might be their point of view
 - ❖ Is the document part of an organization with a philosophical or political agenda?

Criteria to Evaluate Web Data

- ❖ Criteria
 - ❖ Context author situates the work
 - ❖ Author displays knowledge or sources, theories, techniques
 - ❖ Document includes a bibliography
 - ❖ Accuracy
 - ❖ Document relies on sources listed in a bibliography
 - ❖ Background information used can be verified for accuracy
 - ❖ Methodology presented is appropriate for the topic and allows for study duplication
 - ❖ Currency (Timeliness of Information)
 - ❖ Keep in mind that for some documents this is not an issue
 - ❖ Document refers to clearly dated information
 - ❖ Document includes a publication date
- ❖ Guide to evaluating web pages
 - ❖ <http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/Evaluate.html>
- ❖ Bibliography on Evaluating Web Information
 - ❖ <http://www.lib.vt.edu/help/instruct/evaluate/evalbiblio.html>
- ❖ Librarian Internet Index
 - ❖ <http://lii.org/>

Web Site Validation (whois servers)

- ❖ Importance of finding owner of web site
 - ❖ <http://www.dhmo.org/>
- ❖ Whois servers → databases that keep track of owners of domains
- ❖ Unix whois → provides domain information
 - ❖ Domain name
 - ❖ Registrar → Organization which registered the domain
 - ❖ Whois server → where you can find information about the domain
- ❖ Example using <http://www.internic.net/whois.html> , Domain option and umd.edu
- ❖ Example using umd.edu and the Unix command
 - ❖ Run Unix whois command to determine whois server
 - ❖ Run Unix whois command with the -h option on whois server

Web Site Validation (whois servers)

```
[loompa 11] whois umd.edu
```

```
Whois Server Version 2.0
```

```
Domain names in the .com and .net domains can now be registered  
with many different competing registrars. Go to http://www.internic.net  
for detailed information.
```

```
Domain Name: UMD.EDU  
Registrar: EDUCAUSE  
Whois Server: whois.educause.net  
Referral URL: http://www.educause.edu/edudomain  
Name Server: NOC.UMD.EDU  
Name Server: NS1.UMD.EDU  
Name Server: NS2.UMD.EDU  
Status: ok  
Updated Date: 01-aug-2008  
Creation Date: 31-jul-1985  
Expiration Date: 31-jul-2009
```

```
>>> Last update of whois database: Thu, 16 Jul 2009 18:14:01 UTC <<<
```

ICANN

- ❖ ICANN → Internet Corporation for Assigned Names and Numbers
- ❖ <http://www.icann.org/>
- ❖ Responsibilities
 - ❖ Coordinates internet naming system
 - ❖ Ensures every IP address is unique
 - ❖ Oversees distribution of IP addresses and domain names
 - ❖ Accrediting domain name registrars

InterNIC web site

- ❖ Operated by ICANN
- ❖ www.internic.net
- ❖ Provides public information regarding Internet domain name registration services
 - ❖ Find registrar's details
 - ❖ Search domain information
 - ❖ Report incorrect whois data
 - ❖ File a registrar complaint
- ❖ whois server for .mil domains – whois.nic.mil
- ❖ Whois server for .gov domains – whois.nic.gov
- ❖ <http://www.internic.net/faqs/domain-names.html>
 - ❖ Provides great information about domain names, ICANN and registrars.

Link/CSS Example

❖ **Example:** links.html, links.css

Conventions to Use From Now on

- ❖ Variable/Function names
 - ❖ We will use lowercase
 - ❖ If multiple words are associated with a variable name then capitalize the first letter of second word on
waterTemperature
globalWarmingIndex
- ❖ Curly Brackets
 - Use a particular style
- ❖ Comparisons
 - Use `===` rather than `==`
- ❖ No global variables!
- ❖ Good indentation

Testing/Debugging

- ❖ Testing
 - ❖ Remember to test your code as you develop it
 - ❖ First use simple data sets
- ❖ Debugging
 - ❖ Make sure your input is correct
 - ❖ Use Error Console to track down problems
 - ❖ Use lint to check the syntax
 - ❖ Use alert to display values and identify the execution path
 - ❖ Use trace tables
 - ❖ When writing trace tables create a column for each variable
 - ❖ Define the columns as you see find the variables
- ❖ When writing functions
 - ❖ Test each function individually with its own driver
- ❖ Let's see an example

 vs. \n

- ❖ What is the difference between the two?
- ❖ When should we use them?
- ❖ **Example: Brvsnewline.html**

document.writeln/write

❖ **Example: WriteInVsWrite.html**

Coding Example (Cashier)

- ❖ Let's write pseudocode for a program that reads items and computes a total. The program will stop reading items when "quit" is entered
- ❖ Items: milk → \$1.0, paper → \$3.0, water → \$2.0, other → 1.0
- ❖ Let's now expand the program so we can compute a receipt
- ❖ Let's now expand the program so we can compute a summary of the number of items we have sold for each category (along with the total contribution)
- ❖ Using "\n" to define menu entries