

ANNOUNCEMENTS

- ❖ Next lecture we will be talking about Project #2
- ❖ Free or almost free to build business web sites:

<http://www.cs.umd.edu/~nelson/links/SmallBusinessWebsites.html>

WEB SEARCH TOOLS

❖ 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
- ❖ Examples
 - ❖ <http://info.com/>
 - ❖ <http://us.ixquick.com/eng/>
 - ❖ <http://www.search.com/>
- ❖ MetaSearch Engine List
 - ❖ http://websearch.about.com/od/metasearchengines/Meta_Search_EnginesSearch_with_the_Best_Meta_Search_Engines.htm

WEB SEARCH TOOLS

- ❖ Invisible Web

- ❖ Example – searchable databases

- ❖ Deep web search engines

- ❖ <http://websearch.about.com/od/invisibleweb/tp/deep-web-search-engines.htm>

- ❖ Great References

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

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

WEB DIRECTORIES

- ❖ Human-powered search engines
 - ❖ It is maintained by humans rather than software
- ❖ Organizes web sites by topic
- ❖ 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/>
 - ❖ Eureka → <http://www.eureka.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*”
 - ❖ http://en.wikipedia.org/wiki/File:Internet_dog.jpg
- ❖ 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://guides.library.jhu.edu/evaluatinginformation>
- ❖ 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>

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
- ❖ Example using <http://www.internic.net/whois.html>
Domain option and umd.edu

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.

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
- ❖ Check style guide at
 - ❖ <http://www.cs.umd.edu/~nelson/classes/utilities/JavaScript/JavaScriptStyleGuide/>

CODING EXAMPLE (PASSWORD READING)

- ❖ Let's write a program that reads a password and allows a maximum of two attempts
 - ❖ We will start with just reading the password and looping until a valid password is provided (completed last time)
 - ❖ Let's now process the number of attempts