Announcements

- Project #2 has been posted
- Research Paper assignment will be posted soon
- We will begin Javascript on Friday...
Review – Identifiers and Classes, and CSS Rules

Let’s look at a solution to the in-class exercise from last time...

(Next slide please...)
Snorkeling

Introduction

Snorkeling is really a lot of fun! Even if you’re not a great swimmer, you can see a lot of interesting life underwater by snorkeling. Although scuba divers can explore further down in the depths of the ocean, snorkeling still allows you to explore the surface of the ocean without the expense and complexity of scuba diving. Even little children can enjoy snorkeling.

Fun Facts

- Snorkels were used 5000 years ago by sponge farmers in Crete.
- There are three kinds of snorkel: dry, semi-dry, and wet.
- Snorkeling is a lot easier with fins!

Equipment

Typical Snorkeling Equipment

<table>
<thead>
<tr>
<th>name</th>
<th>purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>snorkel</td>
<td>allows you to breathe</td>
</tr>
<tr>
<td>mask</td>
<td>keeps water out of your eyes and also keeps water from going up your nose</td>
</tr>
<tr>
<td>fins</td>
<td>allow you to propel yourself more easily</td>
</tr>
<tr>
<td>wet suit</td>
<td>optional – keeps you warm</td>
</tr>
<tr>
<td>booties</td>
<td>optional – protects your feet while entering/exiting the water</td>
</tr>
<tr>
<td>camera</td>
<td>optional – let’s you document what you’ve seen</td>
</tr>
</tbody>
</table>
Authoritative Web Resources

Great examples:

http://www.dhmo.org/

Web Page Authors
The Web is Not Reliable

Be Careful!

- Anybody can create a web page
- Web sites are not typically reviewed by experts
- Information may be inaccurate, biased, out-of-date, propaganda, or just plain lies!
Evaluating Web Sources

• Does the URL look like a personal page?
• Is it written by an expert?
  – Is information included about the author?
  – Try doing a search for the author’s name
• Is the domain name a known entity?
  – www.wallstreetjournal.com
  – www.nih.gov
• Is it current? (Look for “last updated...”)
• Are sources cited?
• Does it appear biased?
• What is the author’s motivation? Conveying information? Selling something? Political agenda?
Evaluating Web Sources

Lookup useful info about a website here:
https://www.whois.com/whois/

Excellent resource for more information:
http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/Evaluate.html
## Doing Research: Advantages of the Library

<table>
<thead>
<tr>
<th>Library</th>
<th>World Wide Web</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal cataloging/classification systems</td>
<td>No universal organization</td>
</tr>
<tr>
<td>Almost everything has been edited and reviewed prior to publication</td>
<td>Anybody can create a web site!  (Scary.)</td>
</tr>
<tr>
<td>Free information</td>
<td>Some resources only available through paid subscription</td>
</tr>
<tr>
<td>Knowledgeable librarians on site</td>
<td>You are on your own</td>
</tr>
<tr>
<td>Frequently has materials dating back many years</td>
<td>Typically only newer resources are available</td>
</tr>
</tbody>
</table>

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# Doing Research: Advantages of the WWW

<table>
<thead>
<tr>
<th>World Wide Web</th>
<th>Library</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information instantly at your fingertips</td>
<td>Requires you to physically walk around searching for materials</td>
</tr>
<tr>
<td>Enormous amount of material available</td>
<td>Limited amount of material available</td>
</tr>
<tr>
<td>Available 24 hours a day</td>
<td>Only open during certain times</td>
</tr>
<tr>
<td>Constantly updated to provide most current information</td>
<td>Updates tend to come slowly</td>
</tr>
<tr>
<td>Complete multi-media experience</td>
<td>Mostly just books and printed materials</td>
</tr>
<tr>
<td>Resources do not disappear on you</td>
<td>Books can be checked out by other patrons</td>
</tr>
</tbody>
</table>
Search Engines

- Google
- Yahoo!
- Bing
- Ask Jeeves
- Many others...
Search Engine

Behind the Scenes:
• Maintains database of on WWW (presently about 200 trillion web pages)
• Constantly “crawls” the WWW looking for new pages

When you “search”:
• Ranks pages that you are seeking
  – Word occurrence and placement
  – Popularity of page
  – Much more (over 200 factors for Google search!)
Effective Searching

Be specific:

• cat food vs. cat food nutrition recommended
• art vs. modern art colorful

For academic research, try including terms like:
  database, directory, association, center, institute, etc.
More Tips

Use “or” to find webpages with one or more of your terms:
politician (Delaware or Maryland or Virginia)

Use quotes for exact phrase:
best cat food ever vs. “best cat food ever”

Use ‘–’ to exclude a word
best cat food ever –dry
JavaScript Overview

• HTML/CSS is not really “programming”
• JavaScript is a “scripting” (lightweight programming) language.
• JavaScript programs can be embedded into web pages
• Web pages become “dynamic” (interactive)
  – Perform calculations
  – Respond to user’s actions
  – Modify behavior based on circumstances
  – Repeat tasks/outputs
  – Communicate with server
• JavaScript is not Java
Quiz #2

Please clear your desk...