CSE 154

LECTURE 27: WHAT'S NEXT

Congratulations!

- You now know more than the average web developer. (Really!)
- You know an introductory amount about many topics/languages
- You're capable of teaching yourself more...



Learn more about HTML5

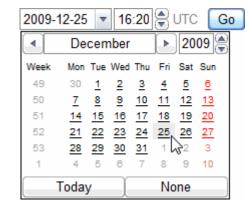
- semantic <u>tags</u>: nav, aside, header, footer, section, aside, article
- Forms 2.0: sliders, search bars, color/number/email/url/date/time, placeholders, ...



• audio and video tags for embedding multimedia

```
<video src="video.ogv" width="425" height="350"></video>
```

 canvas tag for drawing 2D shapes in HTML/JS (like DrawingPanel) (ref 1, 2, 3)





Learn more about HTML5, continued

• <u>semantic web</u> / <u>microdata</u> **attributes**: rel="...", itemscope, itemtype, itemprop

About Mark Pilgrim Anytown PA - Developer advocate - Google, Inc. Excerpt from the page will show up here. diveintohtml5.org/examples/person-plus-microdata.html - Cached

- accessibility features ("ARIA")
- embedding of rich XML-like formats such as <u>SVG</u> vector graphics
- other stuff: offline apps, <u>geolocation</u>, cross-document messaging, MIME type registration, history management, ...



Learn more about CSS3

- new selectors: nth-child, inline-block, :not, +
- ability to embed fonts in a page (yay)
- easy built-in support for multi-column layouts

T his page demonstrates CSS3 multicolumns, rounded corners, text & box shadows, HSL/HSLA colour selection, nth-*

be floated or positioned (Bug 238072). Column text flow is much improved and border-radius is now antialiased.

of the CSS2 or CSS3 specifically tested. Lack of support for position:fixed and PNG alpha transparency renders the header and footer

transparency/opacity, color gradients, shadows



- animations and transitions (like Scriptaculous)
- affine transformations (scaling, rotation, perspective)



Learn more about JavaScript

- JavaScript objects/OOP; JS form validation; more JS syntax
- JS libraries such as <u>jQuery</u> or <u>Yahoo! UI (YUI)</u>
- JS site frameworks such as <u>Backbone.js</u> or <u>Twitter Bootstrap</u>
- Yahoo! web developer videos featuring Douglas Crockford
- JS on the server, such as <u>Node.js</u>



Learn more about other topics

- Web design and usability
- PHP objects/OOP
- PHP web frameworks such as <u>Zend</u>, <u>CakePHP</u>
- <u>Supplemental book chapters</u> on <u>Taking a web site "live"</u>, Database Design, IE Hacks
- Macromedia Flash: <u>tutorial 1</u>, <u>tutorial 2</u>, <u>tutorial 3</u>
- server-side web programming in Java
 - JSP / servlets (#1, #2), applets (#1, #2)

Courses to take

- CSE 143 learn more about structuring data and algorithms (if you haven't taken it yet!)
- INFO 343 / 344 / 340 web design, web tools/development, databases
- ENTRE 475/476 business aspects of web development
- <u>CSE 403</u> software engineering (large software projects)
- <u>CSE 490H</u> distributed systems
- <u>CSE 498/499</u> senior capstones and project courses

Revisiting past homework assignments

- come up with your own web project and build it (anything!)
- create a personal web site with info about you, your resume, etc.
- try writing extensions to the assignments from this course:
 - HW1-3: Pick other web sites and try to mimic them
 - HW4: implement persistent dating data, uploading of images, a login system, cookies/localStorage
 - HW5: add use Scriptaculous/jQuery to add effects; save to-do items using Ajax
 - HW6: implement the real 6 degrees of Kevin Bacon as seen at oracleofbacon
 - HW7: write code to read/write ASCII art to the server using Ajax
 - HW8: use Scriptaculous/jQuery to add effects and animate the tiles
 - HW9: write the PHP that reads names.txt and feeds XML/JSON to client
- make your assignments compatible w/ IE, Opera, Safari, etc.
- go back and look at the "extra session" notes

Sharing your work with others

- show off your awesome programs to your friends!
- put your web dev skillz (and links to your programs) on your resume!
- set up your UW web space
- your UW web site will be at http://students.washington.edu/YOUR_UWNETID
- Suggestion: put this line at the top of your PHP code:

```
<?php
error_reporting(E_ALL);  # makes UW server show error messages
...
PHP</pre>
```

Protecting web resources

- Please don't post your HW solutions on the web unprotected!
 (we want to be able to assign some of these programs again)
- posting resources with a shared password:
 - create files named .htaccess and .htpasswd with proper contents and put them in your HW root folder on UW
 - doesn't require a UW NetID
 - can give password to friends / family / employers

Example htaccess, htpasswd files

.htaccess:

```
AuthUserFile full/path/to/.htpasswd
AuthName "Restricted Access"
AuthType Basic
require user username
```

.htpasswd:

```
username:encryptedPassword
```

- place these files in the top folder of the content you want to protect
- <a href="https://
- or from *nix terminal: htpasswd -c .htpasswd username

Getting Ajax to work

- Ajax (XMLHttpRequest, Ajax. Request) can only connect to the same server as where your .html and .js files are located
- If you put your work up on UW, your Ajax code will be unable to reach Webster!
- Solution: Put <u>proxy.php</u> in the same folder as your UW code, and change any Ajax URLs
 - from: http://webster.cs.washington.edu/dir/file.ext
 - to: proxy.php?url=http://webster.cs.washington.edu/dir/file.ext
 - if URL has parameters, encode the query string with JS <u>escape</u> function

MySQL on UW

- How to use MySQL on UW
- download our databases: <u>simpsons.sql</u>, <u>world.sql</u>, <u>imdb_small.sql</u>, <u>imdb.sql</u>
- importing a database into MySQL from a file:
 - upload one of the above .sql files to your UW space
 - open an SSH terminal window on UW server and type:
- mysql -u username -p databaseName < filename.sql
- exporting a database from MySQL to a .sql file:mysqldump -u username -p databaseName > filename.sql

Setting up your own web server

- why?
 - test your web apps locally without needing to upload them to Dante
 - host your own projects from your house and connect to them
 - other useful services: SSH, VNC, SMB (Samba), CVS, ...
- how?
 - Linux: <u>Linux (LAMP) server tutorial</u>
 - Windows: XAMPP server software download
 - getting the helpful orange PHP error messages: <u>Xdebug</u>

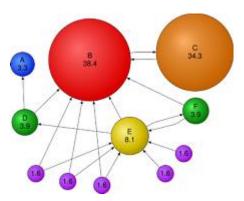
Taking a web site "live"

- buy your own domain name (e.g. allisonobourn.com): <u>DreamHost</u>
- learn about (stalk) your users with <u>Google Analytics</u>

Top search queries	Average top position
1. cellarspot	1
2. henri boillot	11
3. bossi siena	1
4. les charmes chardonnay	2

- improve your page / improve <u>PageRank</u>: <u>SEO</u>, <u>meta tags</u>
- make a few bucks with ads: <u>Google AdSense</u>
- get the word out: <u>Google AdWords</u>, <u>Webmaster Tools</u>







Ads by Google

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