CSE 154

LECTURE 28: 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 tags**: 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

- **semantic web** / **microdata** attributes: `rel="..."`, `itemscope`, `itemtype`, `itemprop`
- **accessibility** features ("ARIA")
- embedding of rich XML-like formats such as **SVG** vector graphics
- other stuff: offline apps, **geolocation**, cross-document messaging, MIME type registration, history management, ...
Learn more about **CSS3**

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

This page demonstrates CSS3 multi-columns, 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 jQuery or Yahoo! UI (YUI)
- JS site frameworks such as Backbone.js or Twitter Bootstrap
- Yahoo! web developer videos featuring Douglas Crockford
- JS on the server, such as Node.js
Learn more about other topics

- **Web design and usability**
- **PHP objects/OOP**
- PHP web frameworks such as Zend, CakePHP
- **Supplemental book chapters** on *Taking a web site "live"*, Database Design, IE Hacks
- Macromedia Flash: [tutorial 1](#), [tutorial 2](#), [tutorial 3](#)
- 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
- **CSE 403** - software engineering (large software projects)
- **CSE 452** - distributed systems
- **CSE 498/499** - 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](http://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 data from OpenWeatherMap and feeds XML/JSON to a 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
<?php
error_reporting(E_ALL);  # makes UW server show error messages
...
```
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:**

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

**.htpasswd:**

```plaintext
username:encryptedPassword
```

- place these files in the top folder of the content you want to protect
- **htpasswd generator** (gives you the text to copy-paste into your .htpasswd file)
- or from *nix terminal: `htpasswd -c .htpasswd username`
MySQL on UW

- How to use MySQL on UW
- download our databases: simpsons.sql, world.sql, imdb_small.sql, imdb.sql
- 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: Linux (LAMP) server tutorial
  • Windows: XAMPP server software download
  • getting the helpful orange PHP error messages: Xdebug
Taking a web site "live"

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

<table>
<thead>
<tr>
<th>Top search queries</th>
<th>Average top position</th>
</tr>
</thead>
<tbody>
<tr>
<td>colanepot</td>
<td>1</td>
</tr>
<tr>
<td>henri boillot</td>
<td>11</td>
</tr>
<tr>
<td>bossi sierra</td>
<td>1</td>
</tr>
<tr>
<td>las charmes chardonnay</td>
<td>2</td>
</tr>
</tbody>
</table>

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