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, ...

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

- **audio** and **video** tags for embedding multimedia

- **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`  

  About Mark Pilgrim  
  Anytown PA - Developer advocate - Google, Inc.  
  Excerpt from the page will show up here.  
  diewintohtml5.org/examples/person-plus-microdata.html - Cached

- **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 selectors**: 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-*

- **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, htpassword 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
- **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](https://www.dreamhost.com)
- learn about (stalk) your users with [Google Analytics](https://analytics.google.com)

<table>
<thead>
<tr>
<th>Top search queries</th>
<th>Average top position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. collantspot</td>
<td>1</td>
</tr>
<tr>
<td>2. henri boillot</td>
<td>11</td>
</tr>
<tr>
<td>3. bossi siena</td>
<td>1</td>
</tr>
<tr>
<td>4. las champes chardonnay</td>
<td>2</td>
</tr>
</tbody>
</table>

- make a few bucks with ads: [Google AdSense](https://www.google.com/adsense)
- get the word out: [Google AdWords](https://ads.google.com), [Webmaster Tools](https://www.google.com/webmasters/tools)