What's Next?

CSE 190 M (Web Programming) Spring 2008
University of Washington

Lecture outline

- final exam
- awesome student work
- what next?
- showing your work to others
- further learning
- teaching evaluations

Bandes TA Award nominations

- Did you have a great TA?
- Nominate him/her for the UW Bob Bandes TA award!

Final exam

- Thu, June 12, 2:30pm, GUG 220 (this room)
- 110 mins, 5 questions
- HTML/CSS, JS/DOM/Prototype, Ajax/XML, PHP, SQL, PHP+HTML+SQL
- open book/notes
    - print homework solutions, lecture slides, chapters, lecture code, ...
- practice tests posted on course web site

Review: Prototype's `$$` function

highlight all paragraphs inside of the section with ID `"footer"`

```js
var footerParas = $$("#footer p");
for (var i = 0; i < footerParas.length; i++) {
  footerParas[i].style.backgroundColor = "yellow";
}
```

- Prototype's $$ function will return the array of DOM elements that matches *any* CSS selector
- How would we select only `span` tags with a class of `zipcode` that are within table cells?

Review: regular expressions

- * means 0 or more occurrences, + means 1 or more, ? means 0 or 1
    - `/a.*a/` matches `"aa"`, `"aba"`, `"a8qa"`, `"a!?_a"`, ...
- { *min* , *max* } means between *min* and *max* occurrences (inclusive)
    - `/a(bc){2,4}/` matches `"abcbc"`, `"abcbcbc"`, or `"abcbcbcbc"`
- [ ] group characters into a set; will match any single char from set
    - `/[bcd]art/` matches strings containing `"bart"`, `"cart"`, and `"dart"`
- What regex matches phone numbers such as `206-685-2181` or `(206)685-2181`?

Review: SQL joins

- What courses have been taken by both Bart and Lisa?

```sql
SELECT DISTINCT c.name
FROM    courses c
JOIN    grades g1 ON g1.course_id = c.id
JOIN    students bart ON g1.student_id = bart.id
JOIN    grades g2 ON g2.course_id = c.id
JOIN    students lisa ON g2.student_id = lisa.id
WHERE   bart.name = 'Bart'
AND     lisa.name = 'Lisa';
```

- What `imdb` query will tell us which actors play more than one character in the same movie? Show the actor's name and the names of the character(s) he/she plays.

Showing your work to others

in a way that won't piss off Marty

We've come so far...

- web programming is now in your blood
- you now (probably) get these jokes:

Awesome student work!

- HW1: Grandma's estate sale, John M.'s home cookin', Rotating Pi
- HW2: TMNT review
- HW4: Disney, kitty, hard to solve, vg chars, animated
- HW5: multi-name
- HW6: paper, Jillyn's, draggable, surprise, superheroes, Schedulinator, fading

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 Dante web space
- your UW web site will be at http://students.washington.edu/YOUR_UWNETID
- put this line at the top of your PHP code:

  ```php
  <?php
  error_reporting(E_ALL);    # makes dante 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` and put them in your HW folder on Dante
    - doesn't require a UW NetID
    - can give password to friends / family / employers
    - `.htaccess` tutorial
    - `.htpasswd` generator #1, #2, #3

Example `htaccess`, `htpasswd` files

`.htaccess`:

```
AuthUserFile directory/.htpasswd
AuthGroupFile /dev/null
AuthName EnterPassword
AuthType Basic
require user USERNAME
```

`.htpasswd`:

```
USERNAME:ENCRYPTEDPASSWORD
```

- place these files in the root folder of the content you want to protect
- find out directory by typing `pwd` in SSH from your `public_html` folder

MySQL on dante

- How to install MySQL on Dante
- download our databases: simpsons.sql, world.sql, imdb_small.sql, imdb.sql
- importing a database into MySQL from a file:

  ```
  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: Ubuntu (LAMP) server tutorial
    - Windows: Apache (WAMP) tutorial; IIS tutorial

Further Learning

- Yahoo! web developer videos
- more Javascript
  - learn a Javascript effects library such as Scriptaculous
  - learn to write classes/objects in Javascript (tutorial #1, #2)
- make your assignments compatible w/ IE6, Opera, Safari, etc.
- Java-based web stuff
  - JSP / servlets (#1, #2)
  - applets (#1, #2)

Revisiting past homework assignments

- extensions to the assignments from this course:
  - HW1,2: Pick other web sites and try to mimic them
  - HW3: rewrite the `gallery.js` functionality yourself
  - HW4: use Scriptaculous to animate the movement of the tiles
  - HW5: write the PHP that reads `names.txt` and feeds XML to client
  - HW7: implement persistent data, uploading of images, a login system
  - HW8: implement the real 6 degrees of Kevin Bacon as seen at oracleofbacon

Courses you can/should take

- CSE 143 - learn more about structuring data and algorithms
- CSE 403 - software engineering (large software projects)
- CSE 498/499 - senior capstones and project courses
- INFO 344 - web tools and development
- ENTRE 475/476 - business aspects of web development