IO Lab: Introduction

September 4, 2013

INFO 290TA (Information Organization Lab)
Kate Rushton & Raymon Sutedjo-The
Goals
Hands-On Experience

With concepts explored in INFO 202
Class Format

M Lecture
W Lab
(for the most part)
Grading

Class participation (15%)

Homework (20%)
   4 homeworks
   5% each

Project (65%)
   4 projects
   P1 = 10%
   P2 & P3 = 15% each
   P4 = 25%
Grading

Homework

Criteria vary by homework

Project

Concept (50%)

Implementation (50%)
Communication

In-class discussion

Office hours

Piazza *

Email *

* we may not respond immediately, so please be patient
Office Hours

Raymon
W 3:30 pm - 4:30 pm (may change)

Kate
by appointment for now
Syllabus

1. The Basics / HTML, CSS, git, Javascript/jQuery
2. Data/Devices / APIs, mobile web, responsive design
3. Visualization / svg, d3.js, Google Maps
4. More Software Engineering / Python, Flask, TBD

Course website
http://courses.ischool.berkeley.edu/i290-iol/f13/
Questions?
Student Introductions
Name
Department
Favorite book/food/color/band/activity/whatever
Let’s Start
HTML
(STRUCTURE)
HTML

Hypertext Markup Language.

The main markup language for creating web pages and other information that can be displayed in a web browser.

http://en.wikipedia.org/wiki/HTML
HTML Structure

<p>This is a paragraph.</p>

<img src="http://site.com/cat.gif">

<ul>
  <li>item one</li>
  <li>item two</li>
</ul>
This is a paragraph.

![Image](http://site.com/cat.gif)

- item one
- item two
HTML Structure

This is a paragraph.

![Image](http://site.com/cat.gif)

- item one
- item two
Some Common HTML Elements

head

body

h

p

a

ul

ol

li

img

div

form

input

script

link

span

title

select

hr

link

form

script

input

ul

ol

p

h

a

body

head
Document Object Model

<html>
<body>
<div id="header">
  <h1>Title</h1>
</div>
<div id="content">
  <p>Paragraph</p>
  <p>Paragraph</p>
  <ul>
    <li>Item 1</li>
    <li>Item 2</li>
  </ul>
</div>
</body>
</html>
CSS
(APPEARANCE)
CSS

Cascading Style Sheets.

A style sheet language used for describing the presentation of a document written in a markup language.

Most commonly used to style HTML, but can also be used for any kind of XML documents (e.g. SVG).

http://en.wikipedia.org/wiki/CSS
CSS Structure

p {color: red; font-size: 14px;}

CSS Structure

```
p   {color: red; font-size: 14px;}
```

**SELECTOR**

**PROPERTY**

**VALUE**

**SELECTOR**
## Selectors

<table>
<thead>
<tr>
<th>Type</th>
<th>HTML</th>
<th>CSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>tag</td>
<td><code>&lt;p&gt;</code></td>
<td>p</td>
</tr>
<tr>
<td>id</td>
<td><code>id=&quot;header&quot;</code></td>
<td>#header</td>
</tr>
<tr>
<td>class</td>
<td><code>class=&quot;date&quot;</code></td>
<td>.date</td>
</tr>
<tr>
<td>descendant</td>
<td><code>&lt;div&gt;&lt;p&gt;</code></td>
<td>div p</td>
</tr>
</tbody>
</table>
## Id VS Class

<table>
<thead>
<tr>
<th>Id</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifying styles (CSS) &amp; targeting DOM elements (Javascript)</td>
<td></td>
</tr>
<tr>
<td>A single, unique element</td>
<td>Several elements</td>
</tr>
<tr>
<td>#name</td>
<td>.name</td>
</tr>
</tbody>
</table>
Some Common CSS Properties

- background
- width
- height
- border
- display
- padding
- margin
- position
- float
- z-index
- text-align
- font-family
- line-height
- color
- clear

http://htmldog.com/reference/cssproperties/
The Box Model

margin
border
padding
width
height
Class Survey

http://tinyurl.com/pthmaan
Homework 0 Assigned
Next Class
Next Class

More HTML & CSS

Getting started with version control & Git

Reading

  Pro Git (chapter 1 & 2)