Interface Programming 1
Week 4
## CALENDAR

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
<th>Week 7</th>
<th>Week 8</th>
<th>Week 9</th>
<th>Week 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.13</td>
<td>1.20</td>
<td>1.27</td>
<td>2.03</td>
<td>2.10</td>
<td>2.17</td>
<td>2.24</td>
<td>3.03</td>
<td>3.10</td>
<td>3.17</td>
</tr>
<tr>
<td>Intro to the class, Intro to all applications &amp; all assignments; Lesson: setting up your UH account; Intro to Dreamweaver; Lesson: Simple HTML page</td>
<td>HW - UH site posted with link to 1st assignment: simple html page; Lesson: intro to CSS; Lesson: Intro to Divs</td>
<td>HW - HTML page with external CSS file Due; Div tests Due</td>
<td>HW – HTML page w/ stylized DIV sections; DIV tests; Lesson: Positioning Techniques</td>
<td>HW - 2 pages due, one long scrolling, one fixed height; Lesson: in-line lists &amp; navigation; a: hover rollovers with images, plus FIR</td>
<td>HTML page w/ Three Navigation systems using unordered lists, a:hover for top nav Lesson: How to go from Photoshop to CSS;</td>
<td>HW - two IP examples due, one rundle technique, the other a:hover image rollovers topnav using leahy technique; Intro to the mid-term project</td>
<td>HW - NMA test HTML page due. Lesson: CSS Layout Techniques;</td>
<td>Lesson: None, full work day</td>
<td>MID-TERM – NMA CSS Redesign</td>
</tr>
</tbody>
</table>

INTRO DAY WORK DAY WORK DAY WORK DAY WORK DAY WORK DAY WORK DAY WORK DAY WORK DAY CRITIQUE

<table>
<thead>
<tr>
<th>Week 11</th>
<th>Week 12</th>
<th>Week 13</th>
<th>Week 14</th>
<th>Week 15</th>
<th>Week 16</th>
<th>Week 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.24</td>
<td>3.31</td>
<td>4.07</td>
<td>4.14</td>
<td>4.21</td>
<td>4.28</td>
<td>5.05</td>
</tr>
<tr>
<td>NO CLASS – SPRING BREAK</td>
<td>HW - Final Designs Due; Lesson: How to go from Photoshop to CSS;</td>
<td>HW - Home Page Due; Lesson: Layouts, Javascript Show/Hide</td>
<td>HW - Sub Page Due; Lesson: Transparency, Tables vs. CSS</td>
<td>HW - 1st Draft of Site Due</td>
<td>QA Test Dat E</td>
<td>FINAL - the fully coded web site is due.</td>
</tr>
</tbody>
</table>

WORK DAY WORK DAY WORK DAY WORK DAY WORK DAY CRITIQUE
EXAMPLE

• Review of last week
  • Div’s and testing documents
• Lesson: CSS positioning
  • Static
  • Absolute
  • Relative
  • Floats
  • Margins
• Definitions and simple examples of absolute vs. relative positioning:
  • http://www.w3schools.com/css/pr_class_position.asp
  • http://www.nickrigby.com/article/16/guide-to-css-positioning
EXAMPLE

• Valuable resources for CSS bug fixing:
  • A List Apart (Eric Meyer, Jeffrey Zeldman, and others)
    • http://www.alistapart.com/
  • Stop Design (Douglas Bowman)
    • http://www.stopdesign.com
  • Glish.com (Eric Costello)
    • http://glish.com/css/
LESSON

• According to the CSS2 spec, an absolute-positioned element is positioned according to its containing block. Any element is considered “positioned” if it has a position value of relative, absolute, or fixed (anything other than static). “Static” is one of the possible values for the position property. It’s also the default value for any element if no other position is specified. Static basically means an element’s position is not modified, and the element will appear in the expected normal flow of the document in context with other sibling elements and containing blocks.*

*excerpt taken from stopdesign’s “Making the Absolute, Relative”
http://www.stopdesign.com/articles/absolute/
LESSON

• Static vs. absolute vs. relative positioning
  • what is the difference b/w the 3?
  • when do we use one vs. another?
    • we use absolute positioning when the majority or all of the content has fixed sizes and positions on the page.
    • we use static and relative positioning when the content will vary in size and position (think: height) based upon the size of the content itself. In other words, we use static and relative positioning when the content is variable and the layout needs to be flexible enough to adapt to the content. For instance, if the length of the text may change and the page length may grow, then we need that particular block level element to be either static or relative.
LESSON

• Preserving Normal Flow
  • Using a combination of static, relative, and very few absolute positioned elements.

• Lesson on absolute positioning
  • When we use absolute positioning we are break normal flow.
    • This is not always recommended practice!
      • Keep in mind that this is an exercise for understanding the power of absolute positioning.

• One-on-One meetings:
  • I will walk around and check in with everyone and answer questions
LESSON

• When to **preserve normal flow** (use Static/Relative positioning)?
  • You should try to preserve normal flow most of the time!!!
  • By default all `<div>`’s are set to static!!!
  • Most `<div>` tags, especially:
    • Container
    • Header
    • Main body/content sections
    • Footer
  • We often use a **relative** positioning value on a parent `<div>` when we need to absolutely position a nested div according to its immediate parent. In this case the parent div would need to be set to “relative.”

• When to **break normal flow** (use Absolute positioning)?
  • Sparingly!!!
  • Only with designs with a fixed height!!!
  • Only when a `<div>` needs to be placed at an exact location
  • A common use is to use absolute positioning with nested `<div>`’s, or `<div>`’s that are inside of another. For example: the location of a logo inside of a header. The header will have a **fixed height**, thus enabling the logo to be positioned inside of it using absolute positioning.
LESSON

SECTION 1
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SECTION 2
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LESSON

SECTION 1
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LESSON

Body

Container

Header

Relative (parent)

Fixed height!!

Absolute (within header)

Section 1

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Section 2

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Footer
LESSON

Body

Container

Float Left

Absolute (within header)

Relative (parent)

Fixed height!!

Header

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Stacked

<div>’s

(static)

(normal flow)
LESSON

• Floats
  • How to set up a testing document to learn more about floats.
LESSON

Body

Container

Fixed height!!!

Body

Container

Fixed height!!!
ASSIGNMENT

Due :: Week 5

• 2 pages:
  1. A long scrolling page layout that uses minimal absolute positioning and preserves normal flow
     • Uses a combination of relative and absolute positioning for the header, logo, and header links
     • Uses floats for the main two sections/column
  2. A short/fixed height page that completely breaks normal flow
     • Uses all absolute positioning
     • Note: this layout is not flexible!! The location of all major <div> elements are fixed! (this is very bad for pages that will be updated frequently with content of varying sizes and length.)