FEWD Lesson 3

Discussion

- 1 takeaway from the assignment or classes last week

- 1 thing in assignment that didn't go as planned or how you might have wanted

Learning Objectives

- Explain the CSS Box Model

- Demonstrate the ability to properly manipulate the "box" around tags.

- Select nested elements to apply styling.

- Apply inline and block attributes to a page.

- Describe and identify use cases for normalize.css and reset.css files.

Review

1. Project structure and organization

2. Best Practices for Html5

File structure - best practice

We will build upon this structure as we go.

Controversy

```
<img src="path/to/file.jpg" height="42"
width="100">
```

width and height here are in pixels

Why do this? browser sets aside that space size for the image and doesn't have to rerender the page when the image is loaded. This has to do with how a browser deals with images.

some people say image size should be fluid and controlled by css

The right answer is both. depends on your use case.

However, according to https://developers.google.com/speed/pagespeed/?csw=1 google, you should always set the height and width for fastest results.

Where do these links go?

```
<link rel="stylesheet" href="styles/main.css">


<link rel="stylesheet" href="../styles/main.css">
```

1)   first on looks for the styles directory, relative to the file linking to it, and then tries to open main.css
2) The second looks one directory up from the current directory that this file is in…and then looks for the styles directory and the main.css file in it

Html5 vs html4

- What is the best practice?

Semantic Tags in html5

Which framework is newer?

```
<ul class="vertical medium-horizontal menu">
  <li><a href="#">Item 1</a></li>
  <li><a href="#">Item 2</a></li>
  <li><a href="#">Item 3</a></li>
</ul>
```

```
<nav>
  <div class="nav-wrapper">
    <a href="#" class="brand-logo center">Logo</a>
    <ul id="nav-mobile" class="left hide-on-med-and-down">
      <li><a href="sass.html">Sass</a></li>
      <li><a href="badges.html">Components</a></li>
      <li><a href="collapsible.html">JavaScript</a></li>
    </ul>
  </div>
</nav>
```
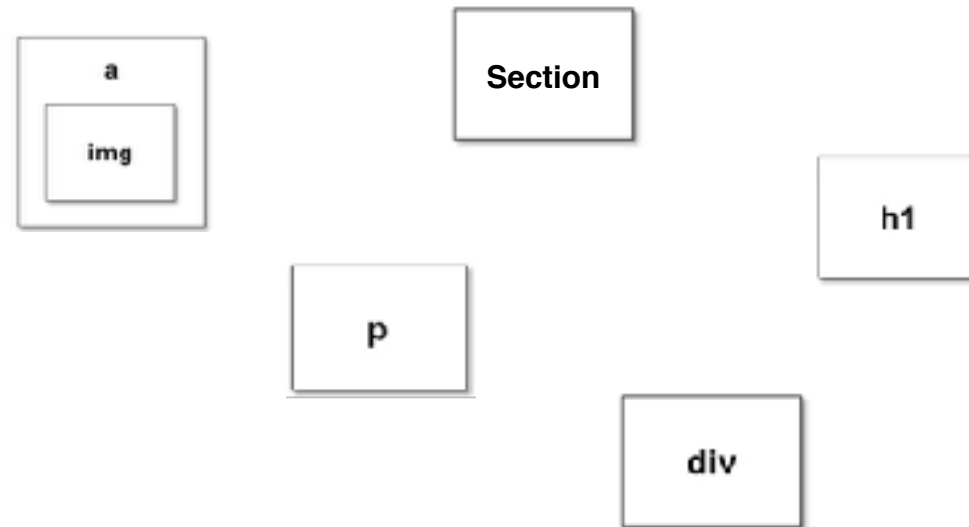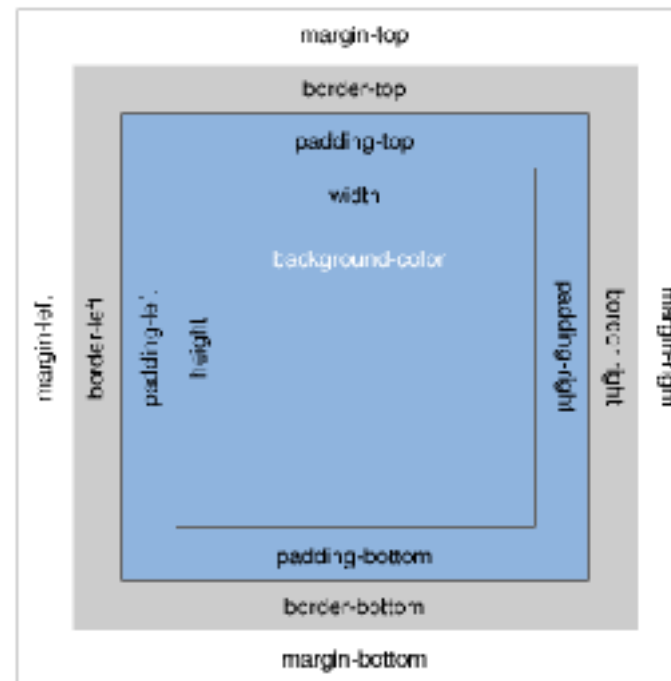
Boxes everywhere

Every element on our page is a box.   Sometimes the box starts at the left and goes all the way to the right hand side of the page. And sometimes it doesn't in the case of . Sometimes there might be a box within a box.

This is the first step to layout with css

Box Model

all block level elements have the following properties
border - by default, invisible
padding - pushes content inward away from the border
margin - pushes boxes away from other boxes

Box model

- Width = width + padding-left + padding-right + border-left + border-right

- Height = height + padding-top + padding-bottom + border-top + border-bottom

Block elements

Containers for grouping things together

Can contain other block and inline elements

Starts on a new line and takes up the full width available (stretches out to the left and right as far as it can).

- <div>, <section>

- <h1> - <h6>

- <p>

- <form>

After block elements, browsers render a new line.

Hands-on

starter_code/tags_and_boxes

demo - overflow for tp1 element

point out: bottom and top margins will collapse. the largest margin between the two wins out.

Inline elements

Does not start on a new line and only takes up as much width as necessary

- <span>

- <a>

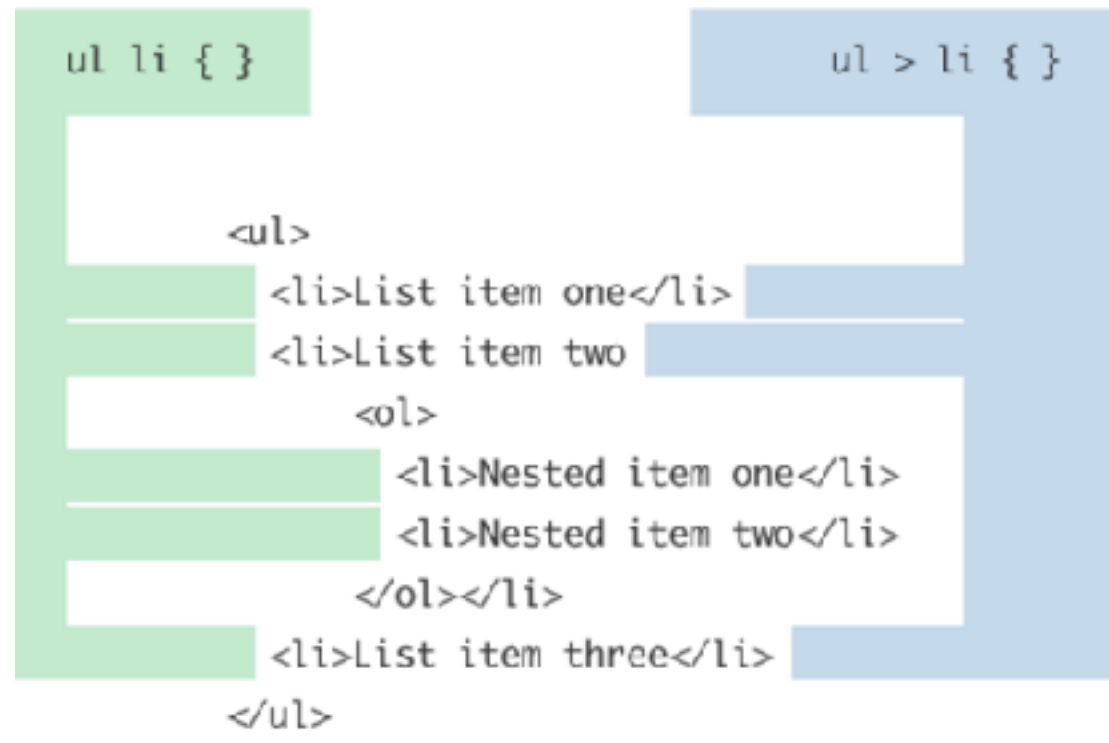- <img>

Block vs inline

use same exercise to demonstrate inline elements and how they are inserted into content and don't break the flow of the block element

Beginning Layouts

- Use elements to add style to multiple sub-elements

- Demonstrate adding style to multiple groups of elements within another

- starter_code/beginning_layout

Use the example to draw a dom tree. Show how the em is inside of the p tags.

left is a decendant selector. select **any** list items that are anywhere underneath an unordered list in the markup structure.

the right is a child combinator selector. This means it will **only** select list items that are **direct children of an unordered list**. In otherwords, it only looks one level down the markup structure, no deeper.

adjacent siblings (+) first thing after
General siblings (~)

Nested selectors

- starter_code/nested_selectors

For Fun

- http://flukeout.github.io

Css Reset

- stylesheet with rules that override the default browser style for all html elements

- start from a know place with regards to margins and fonts

- Internet explorer vs chrome

http://meyerweb.com/eric/tools/css/reset/

CSS Normalize

- CSS file that provides better cross-browser consistency in the default styling of HTML elements. It's a modern, HTML5-ready, alternative to the traditional CSS reset

Hands-on

- https://codepen.io/bigkat73/pen/vmBYBX

let's look at the reset first

Lab Time

- Starting Relaxr

- Students use the relaxr_landing.jpg to begin their week's assignment: Recreate Relaxr's landing page.

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