ITMD-461 CLASS 6 FEBRUARY 17, 2015

TONIGHT'S AGENDA

- **Class Server questions**

- **HTML 5 Shiv (forgot the other week)**

- **Basic CSS Rules & Properties again**

- **CSS Cascade & Specificity**

- **CSS Box Model**

- **CSS Resets**

- **CSS Fonts**

- **Readings & Assignments**

HTML 5 SHIV

Add this code to the head section of your html page to support html5 elements in older IE

http://code.google.com/p/html5shiv/

<!--[if lt IE 9]>

<script src="dist/html5shiv.js"></script>

<![endif]-->

Included with modernizr

Uses IE conditional comments

http://msdn.microsoft.com/en-us/library/ms537512%28v=vs.85%29.aspx
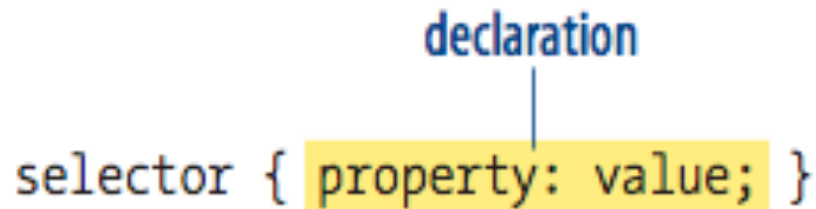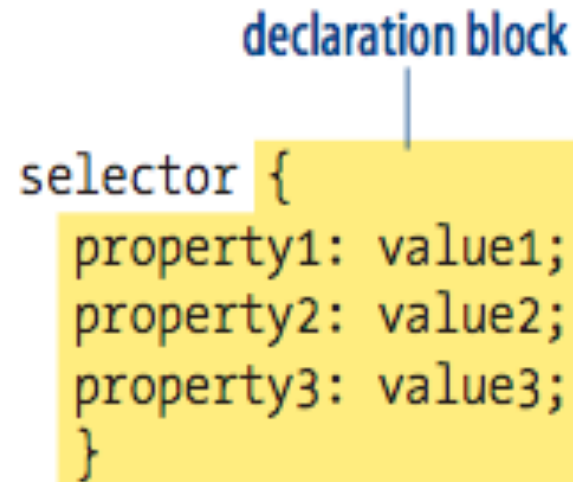
ANATOMY OF A CSS RULE AGAIN

declaration

selector { property: value; }

declaration block

selector {
    property1: value1;
    property2: value2;
    property3: value3;
}

CSS CONCEPTS

- **Inheritance**

    - Some properties inherit their settings from their parent element
    - Mostly styles that effect text

- **Parents & Children**

    - Elements nested inside other elements are said to be children of that element.
    - The element that a given element is nested inside is its parent.

- **It is very important that you understand the way your HTML is structured and how each of your elements are nested within each other to be successful writing complex CSS rules.**

CSS SPECIFICITY & BOX MODEL

CSS CASCADE & SPECIFICITY

- **Style passes down (cascades) until a rule with more weight overrides a previous style**

- **First goes by style sheet hierarchy**

- **Then goes by order defined in the style sheets**

- **If there is a conflict it resolves with a point system**

  - Creators developed a point system
  - inline is 1000, id is 100, class is 10, element is 1

- **See Charts on next two slides**

- **https://developer.mozilla.org/en-US/docs/Web/CSS/Cascade**

- **https://developer.mozilla.org/en-US/docs/Web/CSS/Specificity**

- **http://css-tricks.com/specifics-on-css-specificity/**

- **http://www.smashingmagazine.com/2007/07/27/css-specificity-things-you-should-know/**

- **http://code.tutsplus.com/tutorials/quick-tip-understanding-css-specificity--net-10963**

CSS SPECIFICITY

CSS Selector Specificity - *Cheat Sheet*

	*	id	classes	elements	**result**[*]
	a	b	c	d	
li	0	0	0	1	1
.lorem	0	0	10	0	10
#ipsum	0	100	0	0	100
style = " "	1000	0	0	0	1000
ul li	0	0	0	2	2
ul ol + li	0	0	0	3	3
ul ol li.red	0	0	10	3	13
li:first-line	0	0	0	2	2
#ipsum li	0	100	0	1	101
a:link	0	0	10	1	11

Legend:

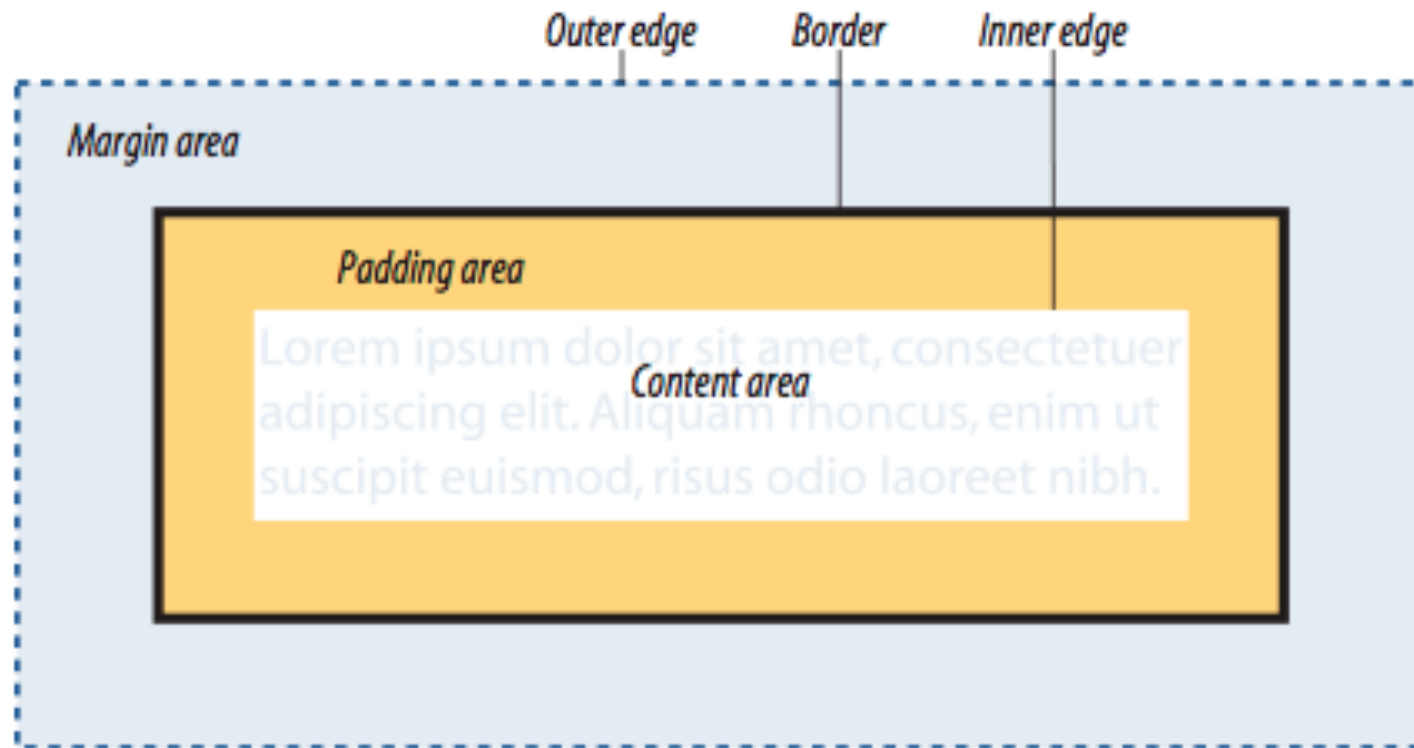|		
a=1000	style = " "	[*]*Bigger*
b=100	ID attributes	*is*
c=10	Classes and pseudo-classes	*more*
d=1	Elements and pseudo-elements	*specific*

CSS BOX MODEL

The Browser sees every element, block or inline, as a little rectangular box

CSS BOX MODEL

Standard CSS Box Model

- **This is the standard way the box model is calculated.**

- **CSS *box-sizing* property is:**

  - Not set
  - Set to content-box

- **Width of an element on screen is:**

  - *width* + *padding* + *border*
  - *width* property sets content area width
  - You must account for padding and borders when setting the width to get the exact size you want.

- **Supported in CSS 1**

- **https://developer.mozilla.org/en-US/docs/Web/CSS/box_model**

- **http://css-tricks.com/the-css-box-model/**

CSS BOX MODEL

New Border Box CSS Box Model

- **This is the new way the box model can be calculated.**

- **CSS *box-sizing* property is:**

  - Set to border-box
- **Width of an element on screen is:**

  - Whatever you set the width property to.
  - The browser will take the width of the padding and border out of the content area so your final box is the size you set.
- **CSS 3 Property that has fairly good browser support**

  - http://caniuse.com/#feat=css3-boxsizing
  - Even back to IE8
- **http://www.paulirish.com/2012/box-sizing-border-box-ftw/**

- **https://developer.mozilla.org/en-US/docs/Web/CSS/box-sizing**

- **http://css-tricks.com/box-sizing/**

CSS IN OUR BOOK

- Ch12 Text Styles

- Ch13 Colors

- Ch14 Box Model

CSS RESETS

CSS RESETS

- Used to reset all css properties so they will be consistent in all browsers.

- Eric Meyer's css reset

  - Complete reset to no styles
  - http://meyerweb.com/eric/tools/css/reset/

- Normalize

  - Targets only styles that need to be reset
  - http://necolas.github.com/normalize.css/

- Yahoo YUI css reset

  - Mostly complete reset
  - http://yuilibrary.com/yui/docs/cssreset/

- http://www.cssreset.com/

CSS FONTS

CSS FONTS

- We can now use an almost unlimited selection of fonts on our web pages

- CSS property *font-family* is used to specify which font an element should use.

- Used to have to supply a font stack for our font choices in case the user didn't have the one we wanted to use.
  - Always ended the list with a generic font (pg 230)
  - Serif, sans-serif, monospace, cursive, fanasty

- Now we can specify a specific font we want to use.

- We need to use special web fonts

CSS FONTS

- There are many options out there.

  - http://www.fontsquirrel.com/
  - http://www.google.com/webfonts
  - Adobe typekit

- We will show a fontsquirrel & google web fonts examples in class

- For Fontsquirrel

  - You want the @font-face kits on their site
  - They give you all the font files you need and css
  - Use the @font-face css declaration
  - Look at example from font squirrel

CSS FONTS

- Google Web Fonts don't need to be downloaded

- Include a link to a Google hosted file then you can use them in your CSS.

- Link needs to come before your CSS that uses the fonts

- http://www.google.com/webfonts

- Google gives you all the code you need

- Let's see an example

READINGS AND ASSIGNMENTS

READING & ASSIGNMENTS

Book

- **Start reading Part III, CSS. Try to get through Chapter 14.**

Assignment

- **Lab 3 & Lab 4. All details are posted in blackboard. Due Feb 21 by 11:59pm Chicago Time**

- **I'm going to post an HTML quiz on blackboard for everyone to take. I will email details and instructions when it is ready.**