# Going Live

# **Objectives**

### In todays class we will...

- Recap the basic topics covered to date
- Work with CSS properties used for adjusting a website's typography
- Utilize custom fonts provided from Google Fonts
- Work with CSS pseudo classes to style elements based on special states
- Utilize the Bootstrap CSS framework for website development

## **Check-Up Session**

# How's it going?

After 1 week of Bootcamp, how are you holding up?

What feedback do you have so far?

# **Instructor Feedback**



Seriously, mind-blown.

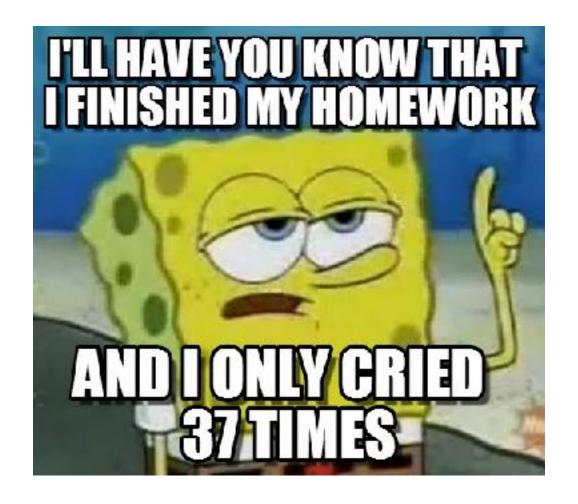
#### **Instructor Feedback**

### Things I've noticed people doing <u>incredibly</u> well:

- All of you are handling an enormous volume of information.
- All of you are asking the right questions.
- You notice the right details.
- You all help each other out.
- And, most importantly, you are <u>figuring out things on your own.</u>

# A Few Admin Things...

#### Homework is Due!



Don't forget to submit both the GitHub and GitHub Pages links!

#### **Instructor Feedback**

#### Homework Link:

<<<<INSERT LINK HERE>>>>

Remember to submit Homework via GitHub (& GitHub Pages):

<<<<INSERT LINK HERE>>>>

# And <u>seriously!</u> Submit whatever you have! Don't get a 0.

(Even if you don't like what you've made.)

### Office Hours + Additional Help

#### Also, remember....

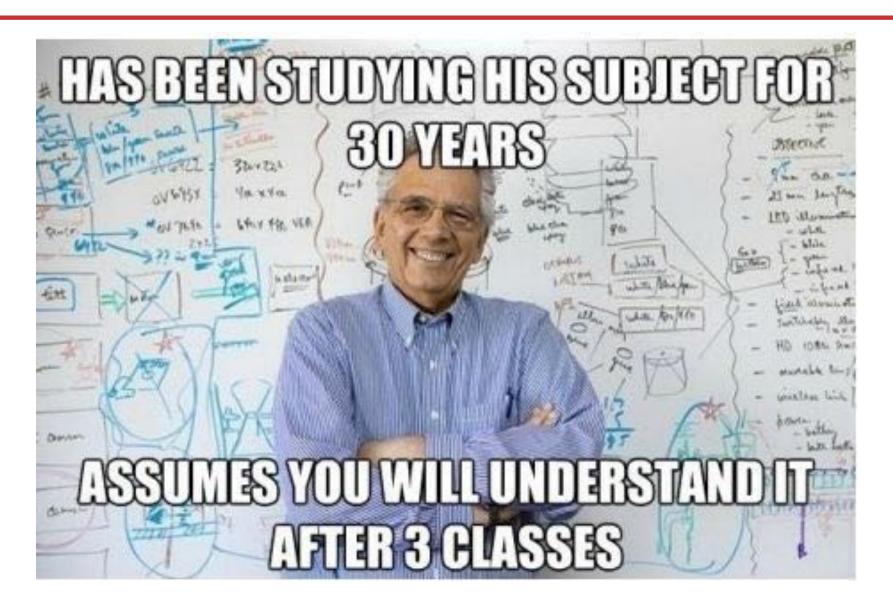
- In Class Office Hours: 30 minutes before class, 30 minutes after.
- Review In Class Material (Exercises and Slides):

<<<INSERT LINK>>>

#### **Re-Watch Class Videos:**

<<<INSERT LINK>>>

#### Feedback #1 - Pace is Fast!!!



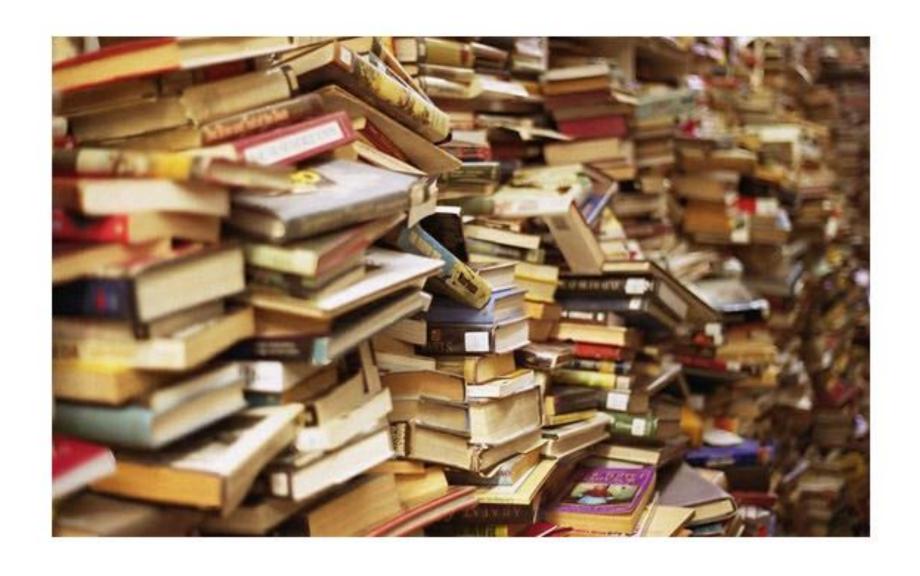
#### Feedback #1 – Pace is Fast!!!

- Here's the reality, the pace of this program <u>is FAST</u>.
- We could slow down and make it easier but that wouldn't prepare you to be developers right out of the program.
- Take up the challenge. Try to retain as much as you can.
- Then on your own time (after the program), go back and review the concepts you felt you needed a refresher on.
- Don't try to master every little detail.
- Focus on the big picture and how to find what you need, when you need it.

#### Feedback #1 – Pace is Fast!!!

- That said, as instructors and TAs, we are here to help.
- Share your GitHub code as you run into issues. We can let you know if you're going in the right (or wrong) direction.
- Come to office hours! We can help go over old code, offer tips on homework, or just generally give you a pep talk.
- Reach out to Student Success if you'd ever like to schedule a 1-on-1 meeting.



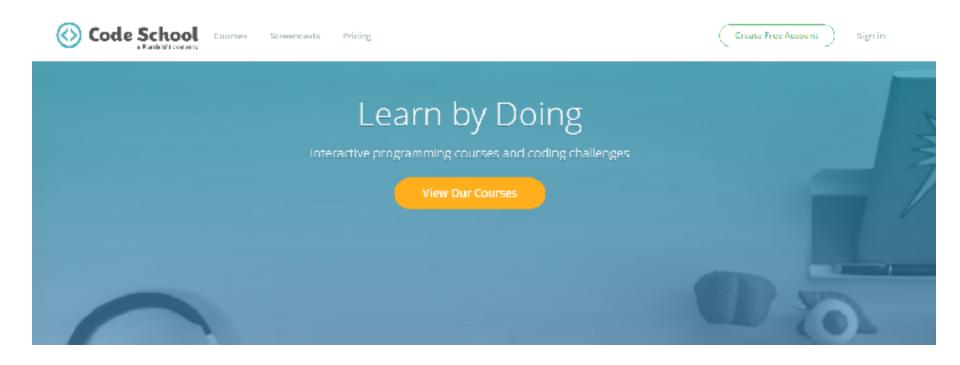


# • Advice:

While in this program, concentrate <u>all</u> your efforts on what we're covering in class.

- Books can be helpful when you are learning on your own. But in a Bootcamp like this, they can also be distracting—especially when our class is moving so quickly.
- When you're at home, focus your efforts on completing your homework, re-completing in-class exercises, and going over slides.
- Invest in books and outside tutorials after you finish the program.

That said, if you truly feel the need for outside resources...

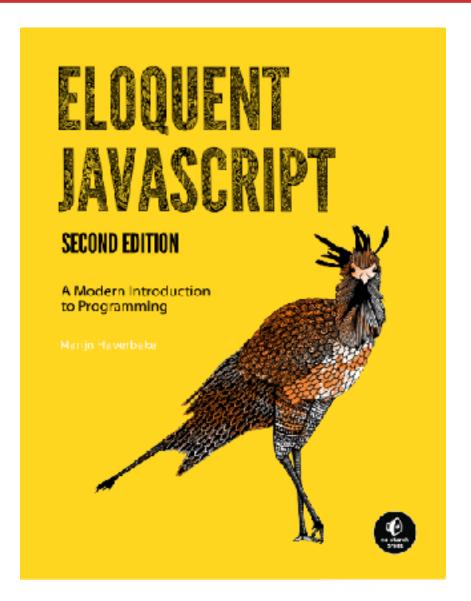


 Code School offers some of the best online courses for HTML, CSS, JavaScript, Node, Express and Angular.



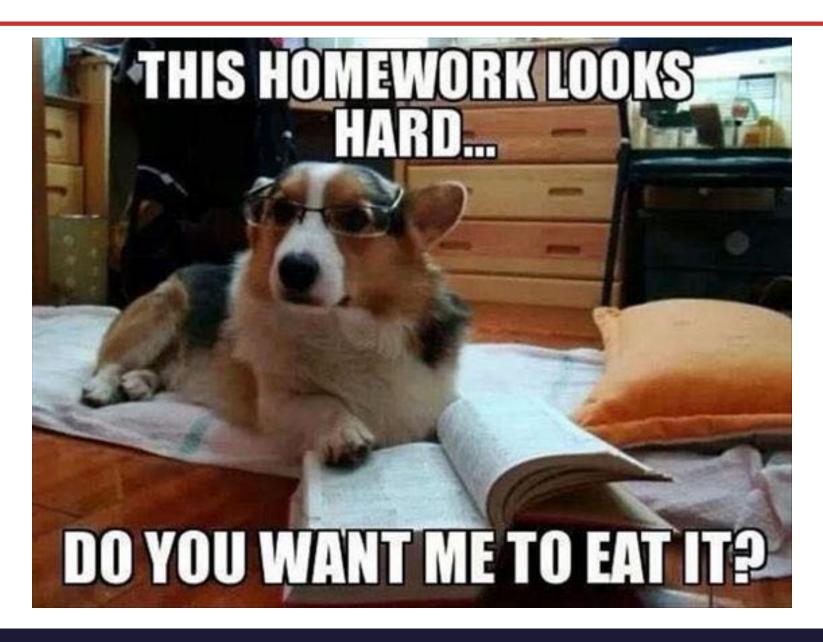


- Jon Duckett's books HTML & CSS and JavaScript & jQuery.
- These are two of the clearest primers on their respective subjects. If you're a "book-person," these may be helpful texts.



- Eloquent JavaScript: a terrific, free book that goes through the fundamentals of JavaScript.
- You can find it here: <a href="http://eloquentjavascript.net/">http://eloquentjavascript.net/</a>

#### Feedback #3 - Homework is Hard



#### Feedback #3 – Homework is Hard

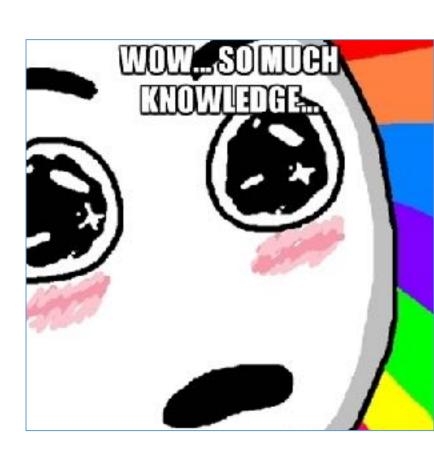
- Check your homework due dates in Bootcamp Spot.
- Generally speaking, expect homework to be semi-challenging.
- Make sure you're leaving a solid block of time to put in.
- If you find yourself working on assignment for over 2 hours without even a small amount of progress, **let us know!**
- You don't win points in life staring at a blank screen.

# Recapping

### Recap

#### In just one whirlwind week we've covered:

- Full-Stack Development Conceptually
- Terminal / Git Bash
- HTML Syntax
- Git Concepts and Commands
- CSS Purpose, Syntax, and Styles
- Floating
- Positioning
- Box Model
- Chrome Dev Tools
- •How to Learn on Your Own!!



**Full-Stack Development?** 



#### > Intro to Console

```
800
                               Macintosh HD - bash - 80x26
       Terminal
                                              bash
                                                                 bash
                           nano
OSXDaily@hyrule:/$ ls -l
total 16053
drwxrwxr-x+ 112 root admin 3.7K Jan 29 16:49 Applications/
                            510B Jul 21 2011 Developer/
drwxrwxr-x 15 root
                     admin
drwxrwxr-x 7 root
                     admin
                             238B Aug 9 15:28 Incompatible Software/
drwxr-xr-x+ 62 root wheel
                             2.1K Jan 29 13:47 Library/
            2 root wheel
                             68B Jun 20 2012 Network/
drwxr-xr-x@
drwxr-xr-x+
             4 root wheel
                             136B Jul 26 2012 System/
                              60B Mar 10 2011 User Guides And Information@ ->
lrwxr-xr-x
             1 root admin
/Library/Documentation/User Guides and Information.localized
                             306B Jan 25 14:00 Users/
drwxr-xr-x
             9 root
                     admin
             4 root admin
                             136B Jan 29 13:56 Volumes/
drwxrwxrwt@
drwxr-xr-x@ 39 root wheel
                             1.3K Jan 29 13:47 bin/
                             68B Jun 20 2012 cores/
             2 root admin
drwxrwxr-t@
             3 root wheel
                             4.3K Jan 29 13:56 dev/
dr-xr-xr-x
             1 root wheel
                              11B Jul 26 2012 etc0 -> private/etc
lrwxr-xr-x@
             2 root wheel
                               1B Jan 29 14:08 home/
dr-xr-xr-x
             1 root wheel
                             7.8M Aug 25 00:49 mach kernel
-rw-r---a
             2 root wheel
                               1B Jan 29 14:08 net/
dr-xr-xr-x
                             136B Dec 2 14:44 opt/
drwxr-xr-x@
             4 root admin
            6 root wheel
                             204B Jul 26 2012 private/
drwxr-xr-x@
                             2.1K Jan 29 13:47 sbir/
drwxr-xr-x@ 62 root wheel
lrwxr-xr-x@ 1 root wheel
                             11B Jul 26 2012 tmp@ -> private/tmp
                             374B Dec 2 14:45 usr/
drwxr-xr-x@ 11 root wheel
                              11B Jul 26 2012 var@ -> private/var
lrwxr-xr-x@ 1 root wheel
OSXDaily@hyrule:/$
```

#### <title> Intro to HTML </title>

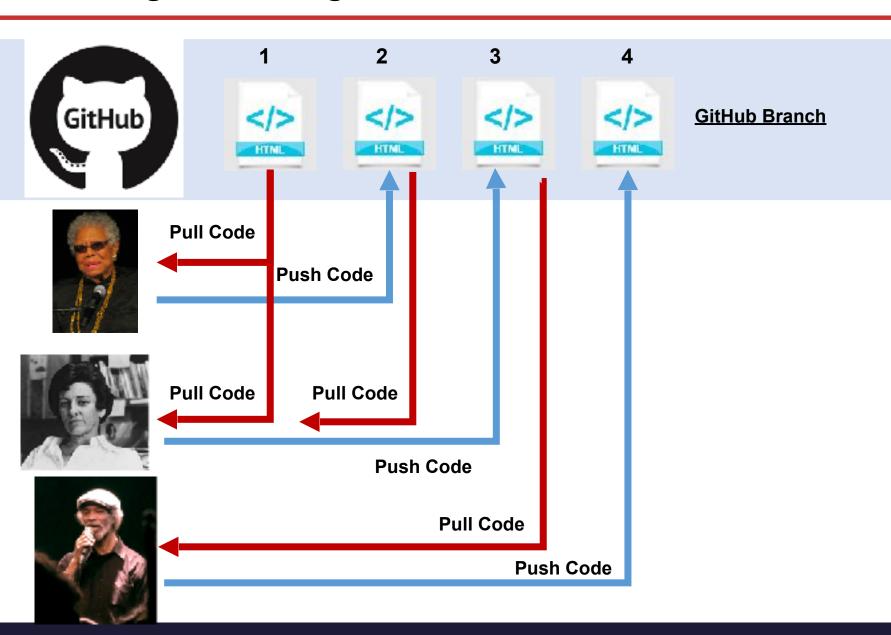
# HTML





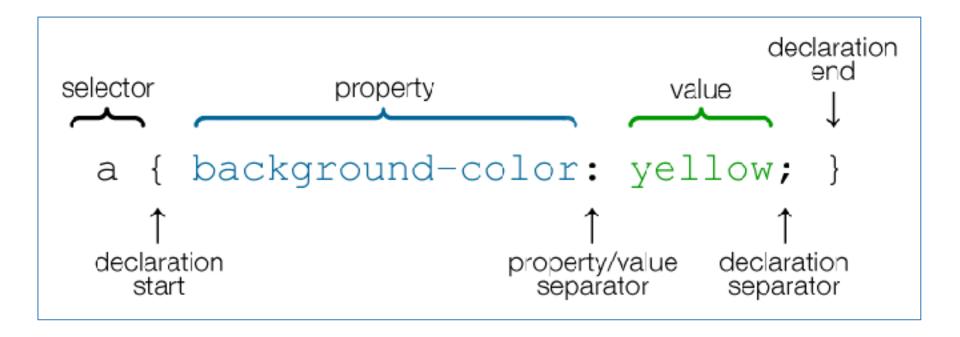
- •HTML is one of the three base languages behind every single website.
- •It defines all of the basic content and a bit of formatting.

# **Pushing and Pulling to GitHub**

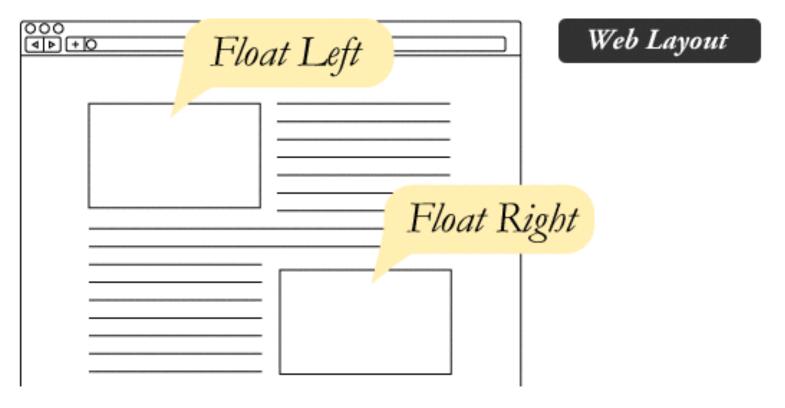


# **CSS Syntax**

- CSS works by hooking onto selectors added into HTML using "classes and identifiers".
- Once hooked, we apply styles to those HTML elements using CSS.

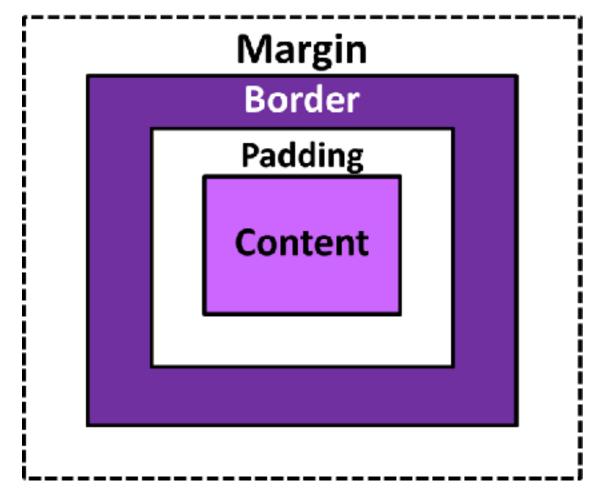


### The Concept of "Flow"



- In HTML/CSS, (by default) every element displayed is governed by a concept called "flow."
- This means that HTML elements force their adjacent elements to **flow around** them.

#### The Box Model



• The Box Model wraps every CSS element in **padding**, **border** and margin – allowing developers to modify spacing styles.

# **CSS Positioning**



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We can orient our HTML elements in relation to space with CSS positioning (static, relative, fixed, absolute).

#### How to Learn...



design shack







# **CSS-TRICKS**







#### **General Questions / Issues?**



# Double Take

#### Divs, Sections, Navs, Etc....



What is the difference between <section> and <div>?

Are new HTML5 elements like <section> and <article> pointless? [closed]

Why to use HTML5 semantic tag instead of div [duplicate]

10 months ago by Noel Hale

#### USE DIV OR SECTION ELEMENT

Section (Layout) vs. Div Block (Basic): Which one to use for Semantic Markup and Page Layout?

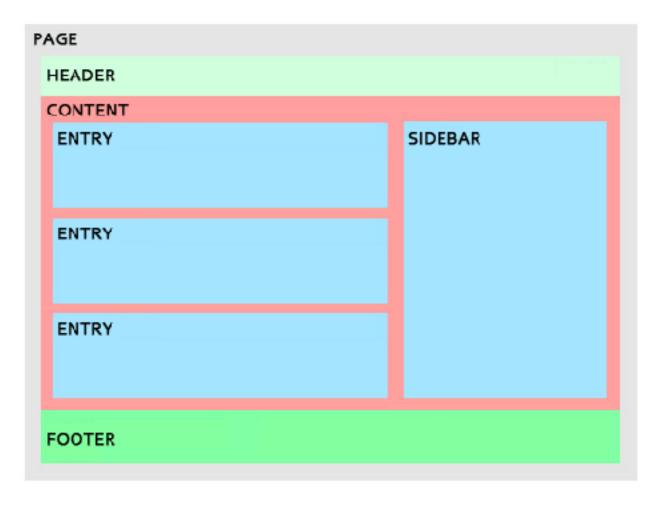
Need Help

About.com 3 About Tech > Web Design & HTML > ... > HTML 5 Tags

What is the Difference Between DIV and SECTION?

Understanding the HTML5 SECTION Element

## Divs, Sections, Navs, Etc....

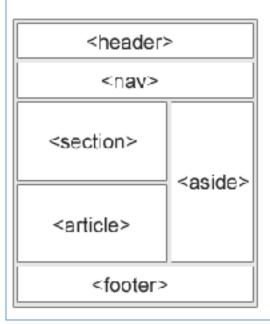


• All web layouts are inherently composed of containers, traditionally called "divs."

#### Divs, Sections, Navs, Etc....

# Website Layout Using HTML5

HTML5 offers new semantic elements that define different parts of a web page:

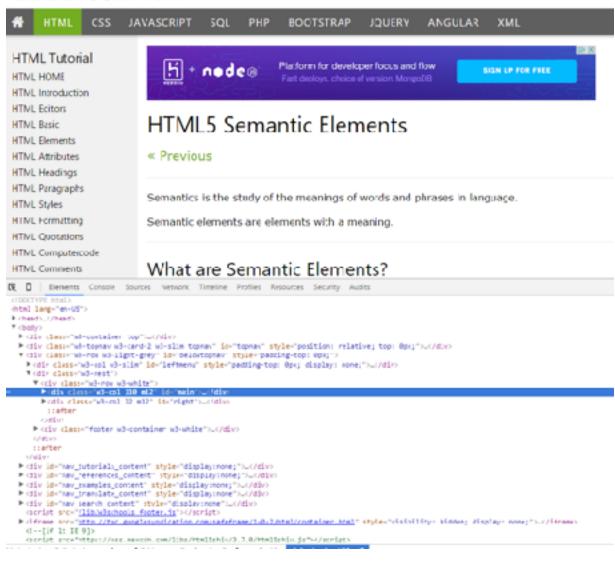


- <header> Defines a header for a document or a section
- <nav> Defines a container for navigation links
- <section> Defines a section in a document
- <article> Defines an independent self-contained article
- <aside> Defines content aside from the content (like a sidebar)
- <footer> Defines a footer for a document or a section.
- <details> Defines additional details
- <summary> Defines a heading for the <details> element

- HTML5 introduced the concept of "semantic layouts," meaning "divs" could be given more meaningful names.
- In theory, this helps with organization and search engine optimization.

### Divs, Sections, Navs, Etc....

#### w3schools.com



- That said... many (if not most) websites, seem to still be using basic divs.
- There are reasons for this that we'll showcase in later sections.
- Additionally, it's possible to include "semantics" by using id names and classes.



div?

Section?

#### Bottom line:

Follow your homework's instructions. But when you get out in the "real world," follow the convention of where you work!

### Classes vs. IDs

Classes = Barcode (all iPod)

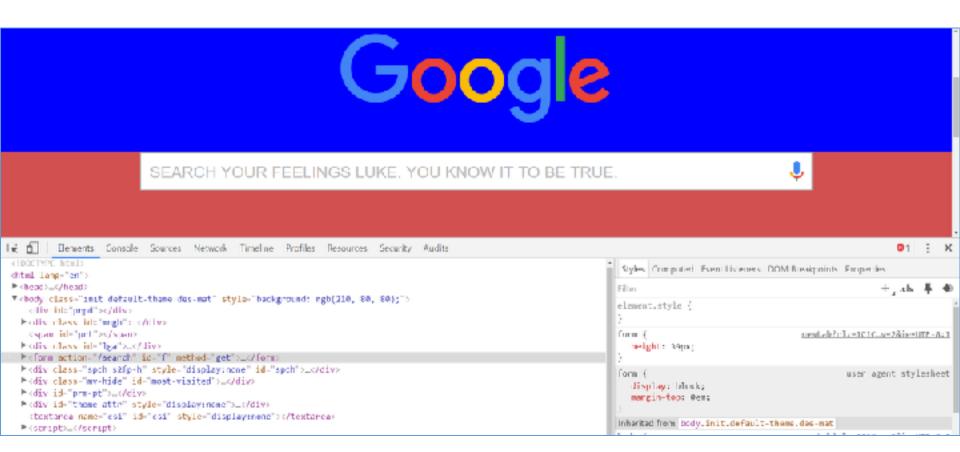
**IDs = Serial Number (unique iPod)** 



When choosing between a CSS ID and a CSS Class follow the convention:

- Classes (.classname) are to be used if the same style will be used on multiple HTML elements.
- **IDs** (#idname) are to be used if a style is *unique* to that HTML element.

### **Modifying Sites**



- You can edit any page's HTML and CSS with Chrome Developer Tools.
- Plus, you'll see your results instantly.

## **Practice Through Frustration**

# Keep Practicing!

It gets better.

## CSS Typography

## **Typography is Huge**



 Typography can play a huge role in the visual aesthetic and emotional identity of a webpage.

### **Typographic Properties**

#### Line Height

Distance between lines of text on a page (Golden Ratio of 1.5x font).

#### Font-Size

Actual size of lettering. Should be at least 16 px on modern pages. <a href="https://www.smashingmagazine.com/2011/10/16-pixels-body-copy-anything-less-costly-mistake">https://www.smashingmagazine.com/2011/10/16-pixels-body-copy-anything-less-costly-mistake</a>

#### Line Length

Not a CSS property but rather a standard. Should be about 50-75 characters per line on a desktop .

http://baymard.com/blog/line-length-readability

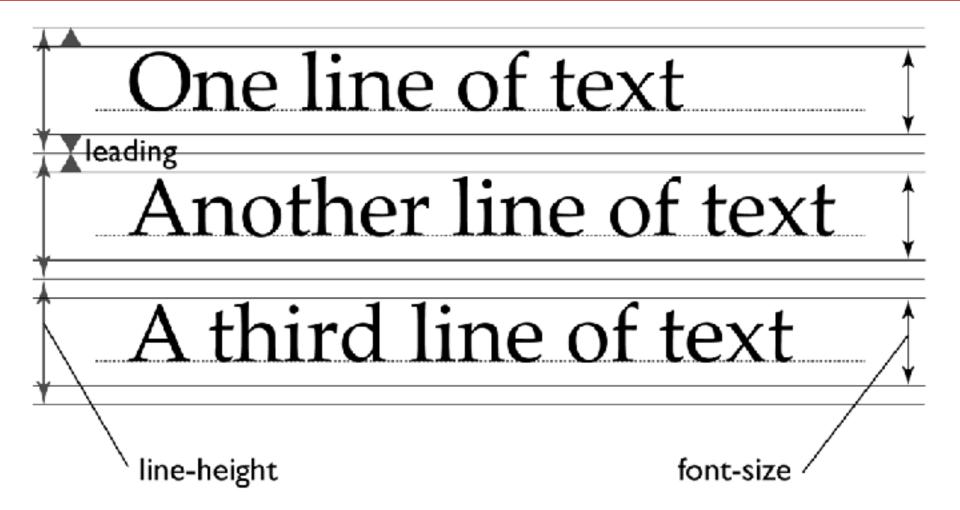
### Letter Spacing

Spacing between individual letters—try to avoid cramping.

#### Sans-Serif vs Serif

Sans-serif are fonts sans their serifs—no tails. They're easier to read online.

## **Line Height vs Fonts**



### **Serif vs Sans Serif**



- Serif fonts include small lines attached to the end strokes of letters.
- Sans-Serif (without serif) do not include such strokes.

### > YOUR TURN!!

### **Assignment**

Create a block of text using a Lorem Ipsum Generator. Incorporate it into an HTML Document.

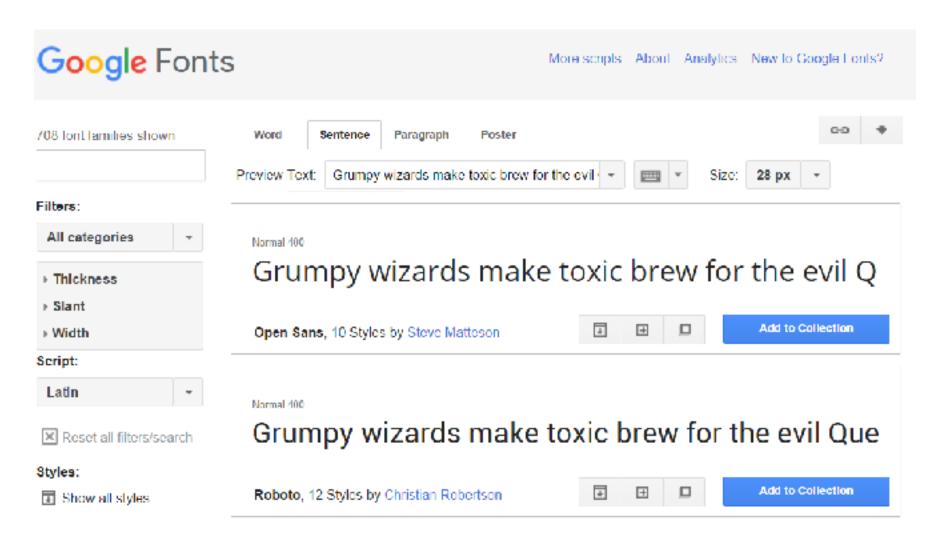
Then use CSS styling to modify the:

- Font-family
- Font-size
- Font-weight
- Line-height
- Letter-spacing

#### **Bonus:**

If you finish early, read about TypePlate and see if you can figure out how to incorporate it into your site (<a href="http://typeplate.com/">http://typeplate.com/</a>).

## **Google Fonts**



You can easily incorporate Google's custom fonts.

# Google Fonts

### > YOUR TURN!!

## **Assignment:**

Create (or re-use) an HTML Document of your choosing and then incorporate 2-3 custom Google fonts into the page.

### **Bonus:**

If you finish early, read about Font Awesome icons and see if you can figure out how to incorporate one onto your page.

## Lunch (30 mins)

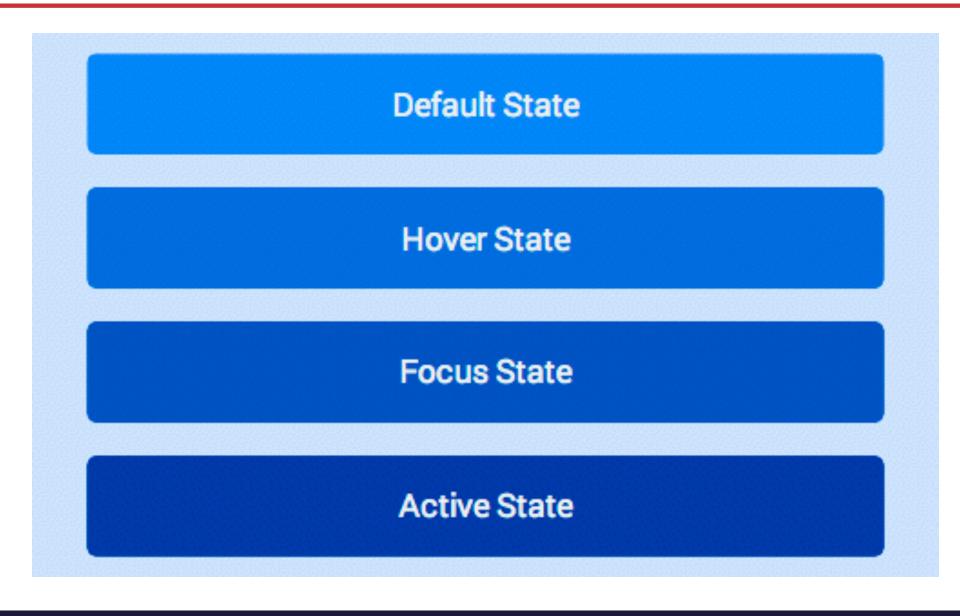
## Pseudo Styles

### **Pseudo Classes**

- CSS has keywords that can be added to selectors. These highlight the <u>special states</u> of the selected element.
- Great example: CSS can hook onto the specific moment when a link is <u>hovered over</u> using the :hover pseudo-class.
- Complete list of pseudo-classes found here: <a href="https://developer.mozilla.org/en-US/developer.mozilla.org/en-US/docs/Web/CSS/Pseudo-classes">https://docs/Web/CSS/Pseudo-classes</a>

#### Index of standard pseudo-classes :active : link carry :not() : checked :nth-child() !default :nth-last-child() :dir() inth last of type() :disabled :nth of type() : empty :only-child :enabled :only-of-type : first :optional :first\_childcoul of range :first-of-type : nead-only :fullscreen :read-write : focus : required chower emight :indeterminate : nost :in-range : scope :invalid : Larget : lang() :walid :last-child :visited :last-of-type :left

### **Button with Various States**



## Instructor: Demo (Button.html | 9-Pseudoclass)

### > YOUR TURN!!

## **Assignment**

Create a series of links and modify the pseudo-classes associated with their Default, Active, Hover and Focus States.

### Bonus:

If you finish early, incorporate a pseudo-class we haven't covered in your page. Then read about "pseudo-elements" and try to incorporate one as well.

## Beyond CSS Hacking

### **Quick Refresher on HTML/CSS**

- HTML: Hypertext Markup Language (Content)
- CSS: Cascading Style Sheets (Appearance)
- HTML/CSS are the "languages of the web". Together they define both the content and the aesthetics of a webpage handling everything from the layouts, colors, fonts, and content placement. (Javascript is the third handling logic, animation, etc.)



### HTML vs HTML/CSS

### **HTML Alone**

- Like writing papers in "Notepad."
- Can only write unformatted text.

## Like writing papers in Microsoft Word.

HTML / CSS

 Can format text, page settings, alignment, etc. based on "highlighting" and menu options.





## How You (Probably) Feel About CSS

## **CSS** in a nutshell



A Revelation...

## There is a better way!

## Where's the CSS? (Instructor Demo)

Combact

The Coding Bootcamp

Home

About

Dropdown +

Default

Static top

Fixed loo

## Awesome Header

Smaller Awesome Header

Even Smaller Header







Lorem ipsum dolor sit amet, consectetur adipisicing elit. Quis, molestiae modi accusantium animi magnam veniam, imperiit aspenores sint consequuntur debits tugil quibusdam dolor, lusto sed porro ab minus voluptatibus amet Lorem ipsum dolor sit amet, consectetur adipisicing elit. Accusamus, maiores, quos. At, anim, taotis. Alas itaque ab minima rerum, caque animi nesciunt harum nomo est cumque voluptas, qui reprehenderit atque.

### > YOUR TURN!!

## **Quick Activity:**

With those closest to you, take a close look at the Bootstrappowered HTML document I just sent you.

Be prepared to answer the following two questions:

- 1. Where does this HTML document draw its styles from?
- 2. How does our browser know which HTML element to style, and in which way? (ex: button face or background banner)

HINT: Think about how Google Fonts work.

### Powered by Bootstrap

### **External CSS Link**

### Pre-Defined CSS Class (ex: "Jumbotron")

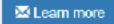
## **Powered by Bootstrap**



## Awesome Header

Smaller Awesome Header

Even Smaller Header



class="jumbotron"





Lorem ipsum dolor sit amet, consectetur adipisicing elit. Quis, molestiae modil accusantium animi magnam veniam, impertif aspenores sint consequuntur debitis tugit quibusdam dolor, fusto sed porro ab minus voluptatibus amet Lorem ipsum dolor sit amet, consectetur adipisicing elit. Accusamus, maiores, quos. At, animi, tactis. Atas itaque ab minima rerum, eaque animi mesciuni harum nomo est cumque voluptas, qui reprehendent atque.



Using Bootstrap, we have <u>PRE-DEFINED</u> CSS Styles.

### > YOUR TURN!!

## **Quick Activity:**

Turn to the person next to you and celebrate this together.

Then discuss the concept of Bootstrap to confirm that you both understand why you are celebrating.

<u>Hint</u>: You should be explaining why is Bootstrap's "pre-defined" CSS a big deal.

## What is Bootstrap?

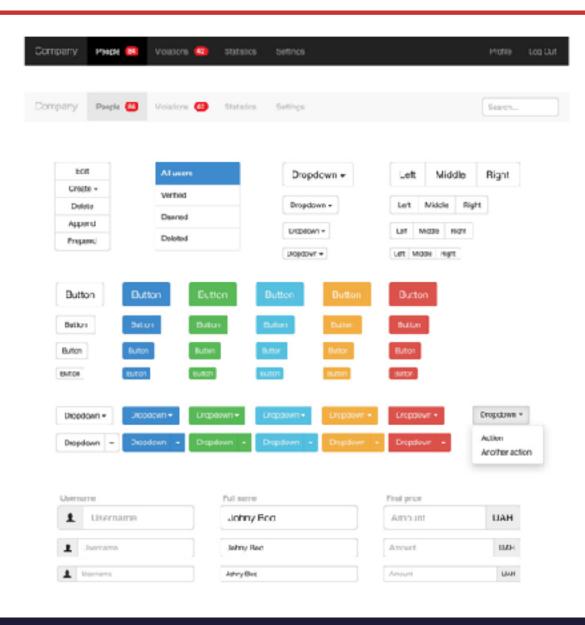
## **Bootstrap Definition**

- Twitter Bootstrap is a free collection of tools for creating websites and web applications.
- It comes with a pre-built design template for typography, forms, buttons, navigation, UI elements and JavaScript.
- Documentation here: <a href="http://getbootstrap.com/">http://getbootstrap.com/</a>





## Why Use Bootstrap?



- Reason #1: UI Kit
- Familiarize yourself with the UI features it offers via the documentation.
- Once Bootstrap is active, you can simply copy snippets from the documentation to save yourself major time of creating elements yourself.

## Why Use Bootstrap?

### Reason #2: Mobile Responsiveness

- One of the most compelling reasons to use Bootstrap is the default <u>mobile-responsive</u> quality it provides.
- This means that your website will look "good" automatically when viewed on screens ranging from monitors to tablets to phones.



## HTML / CSS / Bootstrap Analogy

## **HTML Alone**

- Like writing papers in "Notepad."
- Can only write unformatted text.

## HTML / CSS

- Like writing papers in Microsoft Word.
- Can format text, page settings, alignment, etc. based on "highlighting" and menu options.

# HTML / CSS & Bootstrap

Like writing papers in Microsoft Word with a prebuilt template.

You can still customize, but now have a pre-built style and aesthetic look.

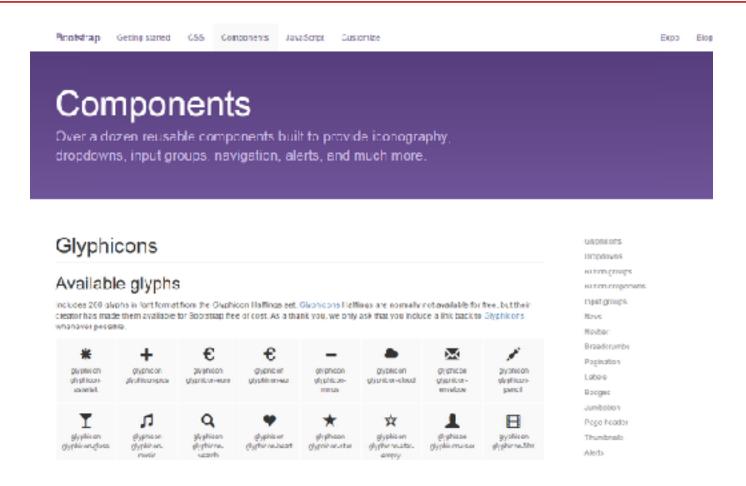






# Key Bootstrap Features

## **Bootstrap Components**



 Bootstrap offers a wide range of components that you should consider including in your next web projects. Flip through the documentation and incorporate elements you see fit.

## **Bootstrap Nav Bars**

My First Website Link 1 Link 2 Link 3

```
<nav class="navbar navbar-default navbar-fixed-top" role="navigation">
 <div class "container">
    cdiv class="navbar header">
     <button type="button" class="navbar-toggle collapsed"</pre>
           data-toggle "collapse" data-target "#navbar" aria-expanded "false" aria-controls "navbar">
       Cspan class="sr only">Toggle navigation(/span)
       <span class="icon-bar"></span>
       <span class "icon-bar"></span>
       Cspan class="icon bar">C/span>
     </button>
     <a class "page-scroll navbar-brand" href "#page-top">My First Website</a>
    c/div> <! /.navbar header</pre>
   <div id "navbar" class "navbar-collapse collapse">
     Cul class="nav navbar nav">
       class="hidden">
           <a href "#page-top"></a>
       dlib
       <| ti><a href="http://www.google.com" class="nav-btn">link 1</a>
       <a href "http://www.facebook.com" class "nav-btn">Link 2</a>
       <a href="http://www.twitter.com" class="nav btn">Link 3</a>
     c/div>c! /.mavbar collapse
 </div> <!-- /.container -->
</nav>
```

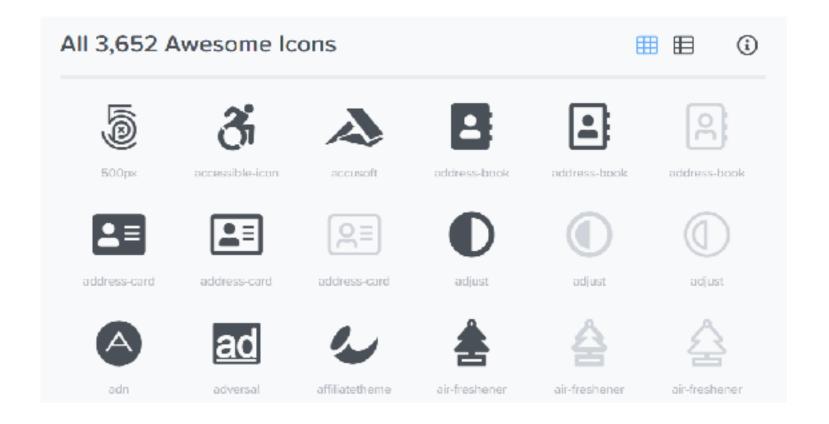
## **Bootstrap Jumbotron**

# Hello, world!

This is a simple hero unit, a simple jumbotron-style component for calling extra attention to featured content or information.

Learn more

# **Bootstrap and Font Awesome**



Example: <span <pre>class="fa fa-envelope"></span> Learn more

## **Bootstrap Table**

#	First Name	Last Name	Username
1	Mark	Ollo	@mdo
2	Jacob	Thornton	@fat
3	Larry	the Bird	@twitter

## **Bootstrap Form**

# Email address Enter email Password Password File input Choose File No tile chosen Example block level help lest here Check me oul Submit

```
(form)
 (div class="form group")
   <label for="exampleInputtmail1">tmail address</label>
   <input type="email" class="form-control" id="exampleInputInail1" placeholder="Enter email">
  4/div>
  edia class="form group">.
   <label for="exampleInputPassword1">PasswordK/label>
   <input type="password" class="form-control" id="exempleInputPassword1" placeholder="Password">
  4/div>
  cliv class="form group">
   <label for="exampleInputhile">File input</label>
   Kinput type="file" id="exampleInputFile">
   cp class="help block")Example block level help text here.(/p)
  c/diva
  <div class="checkbox">
   <label3</pre>
      (input type="checkbox") Check me out
   </div>
  <button type="submit" class="btn btn-default">Submit</button>
Offermal
```

#### **INSTRUCTOR DEMO!**

# Instructor: Demo

(BootstrapButtons.html | 11-BootstrapDemo)

#### > YOUR TURN!!

#### **Activity:**

Working with someone closest to you:

- 1. Navigate to the Twitter Bootstrap website.
- 2. Then copy the link to the Bootstrap CSS file into one of your old HTML files.
- 3. Look through the Bootstrap CSS or Components list and incorporate at least three Bootstrap elements onto your page.
- 4. Slack a screenshot of your page to your section's channel when you finish.

Hint: First include a link to Bootstrap's CSS. Then visit the Bootstrap page on CSS or Components.

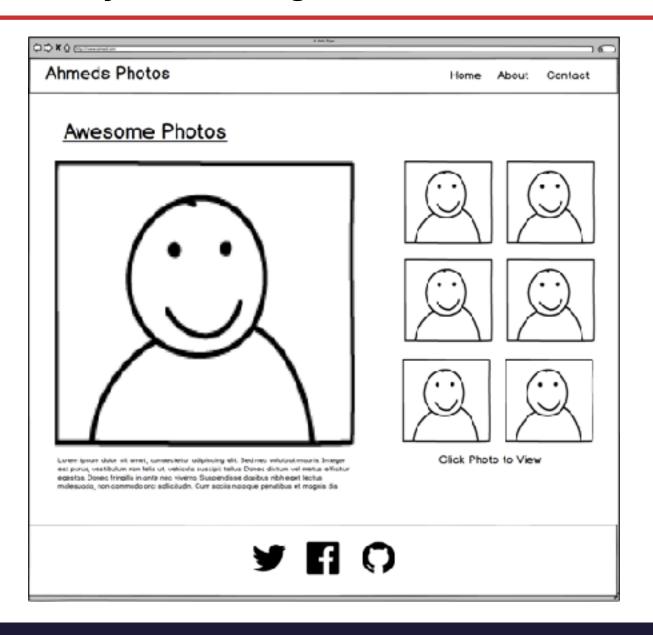
# Takeaways

# **Takeaways**

## By the end of class you should be able to:

- 1. Offer a loose definition of "typography" and a few CSS properties for styling it.
- Offer a practical example of using pseudo-classes.
- 3. Understand *generally* what Twitter Bootstrap is and why predefined CSS frameworks are powerful.
- 4. Know how to incorporate the Twitter Bootstrap style library into your website.

# **Next Class... Layout Building!**



# Homework #2

# Questions?