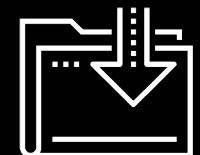
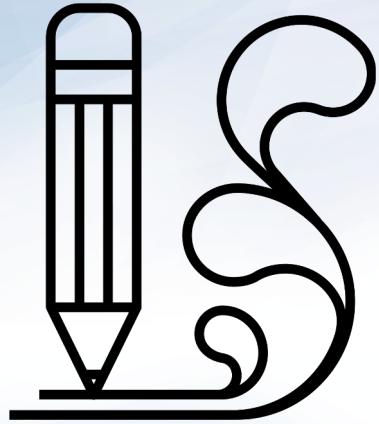


Down and Dirty CSS

Web Development Boot Camp
Lesson 2.2



A Few Admin Items



Homework is due!

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

Feedback #1: The Pace Is Fast!

Feedback #1: Pace Is Fast

Here's the reality: the pace of this program is fast.



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 during the course.



After the program is over, go back and review the concepts you need 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 review your code with you, offer tips on homework, or just give you a pep talk if that's what you need.



Reach out to Student Success if want to schedule a 1-on-1 meeting.

Feedback #2: Online class is hard!

Feedback #2: Online class is hard!



Class will be online for the rest of the cohort. We have to follow the rules of the university and you have until Saturday to drop the course and get a full refund.



Extra resources have been dedicated to make up for what is lost.



Instructional Staff and SSM are here to guide as much as possible.



Talk with your classmates and try to meet virtually outside of class.

Feedback #3: The Instructor is ill prepared

Feedback #3: The Instructor is ill prepared



You got me, teaching online is a new challenge for me.



My apologies, I will try to do better.



Hopefully from the work I put into this PowerPoint you think I'm a bit better prepared.



That being said, the instruction of the class is about 30% of the bootcamp, the other 70% is practice, reaching out for help, and utilizing your resources.



**Feedback #4: The activities are pointless
and not enough time**

Feedback #4: The activities are pointless and not enough time



The activities will often not be enough time.



The idea of the activities are that you take what I demo, and attempt to implement it



Use the code in prior demos as a guide to help you



If you make consistent progress during the activity, even if you don't finish the activity you succeeded



Please reach out to us if you feel like you just stare at the activities every class without understanding anything. We don't want you to feel that way and want to help you.

Today's Class

Objectives

In today's class, we'll introduce:



CSS Typography and Google Fonts



Pseudo-Classes



The Basics of Twitter Bootstrap

CSS Typography

Typography Is Huge

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



Typographic Properties

Typographic properties describe attributes of the type on the page.



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.

smashingmagazine.com



Line Length: Not a CSS property but rather a standard. Should be about 50–75 characters per line on a desktop. baymard.com

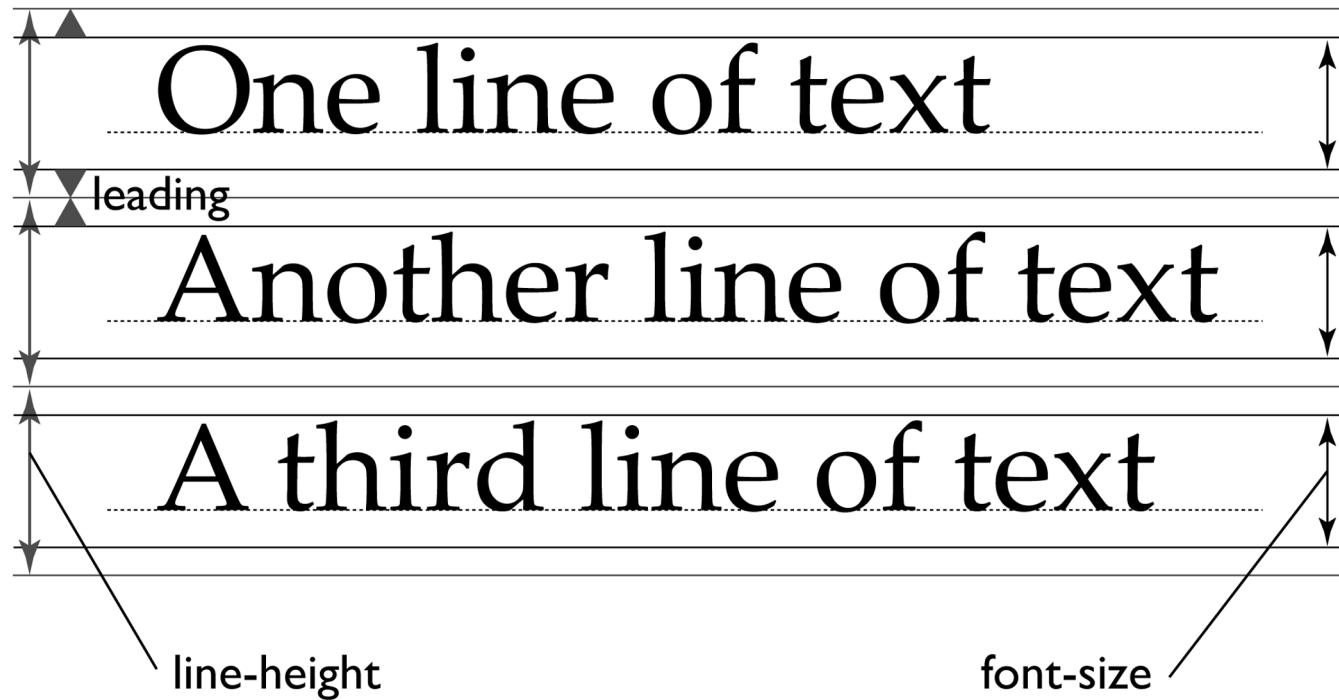


Letter Spacing: Spacing between individual letters. Try to avoid cramming letters together too closely.



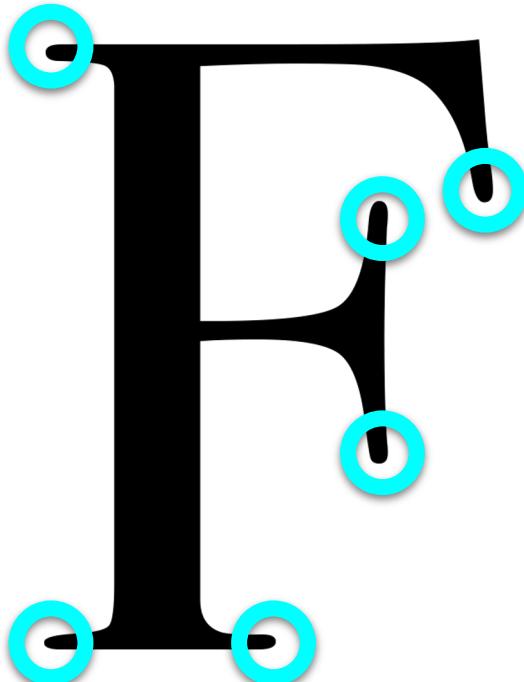
Sans-Serif vs. Serif: Sans-serif are fonts *sans their serifs*—no tails. They're easier to read online.

Line Height vs. Fonts

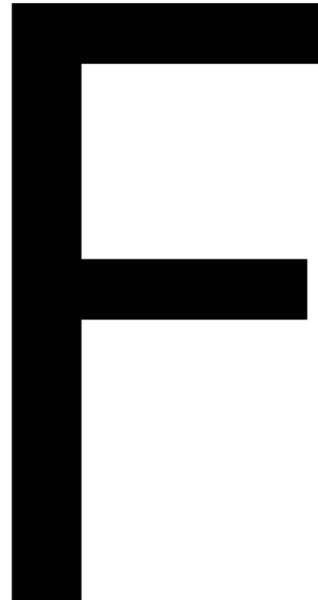


Serif vs. Sans-Serif

Serif fonts include small lines attached to the end strokes of letters.



Sans-Serif ("without serif") do not include such strokes.



Activity: CSS Typography

Using the `html-template` file provided to you, create an external CSS stylesheet to modify the typography of each of the body paragraphs.

Use CSS styling to modify the following properties:

- 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 (<http://typeplate.com/>).

Suggested Time: 10 minutes



Google Fonts

It's easy to incorporate [Google's custom fonts](#) into your site!

Roboto

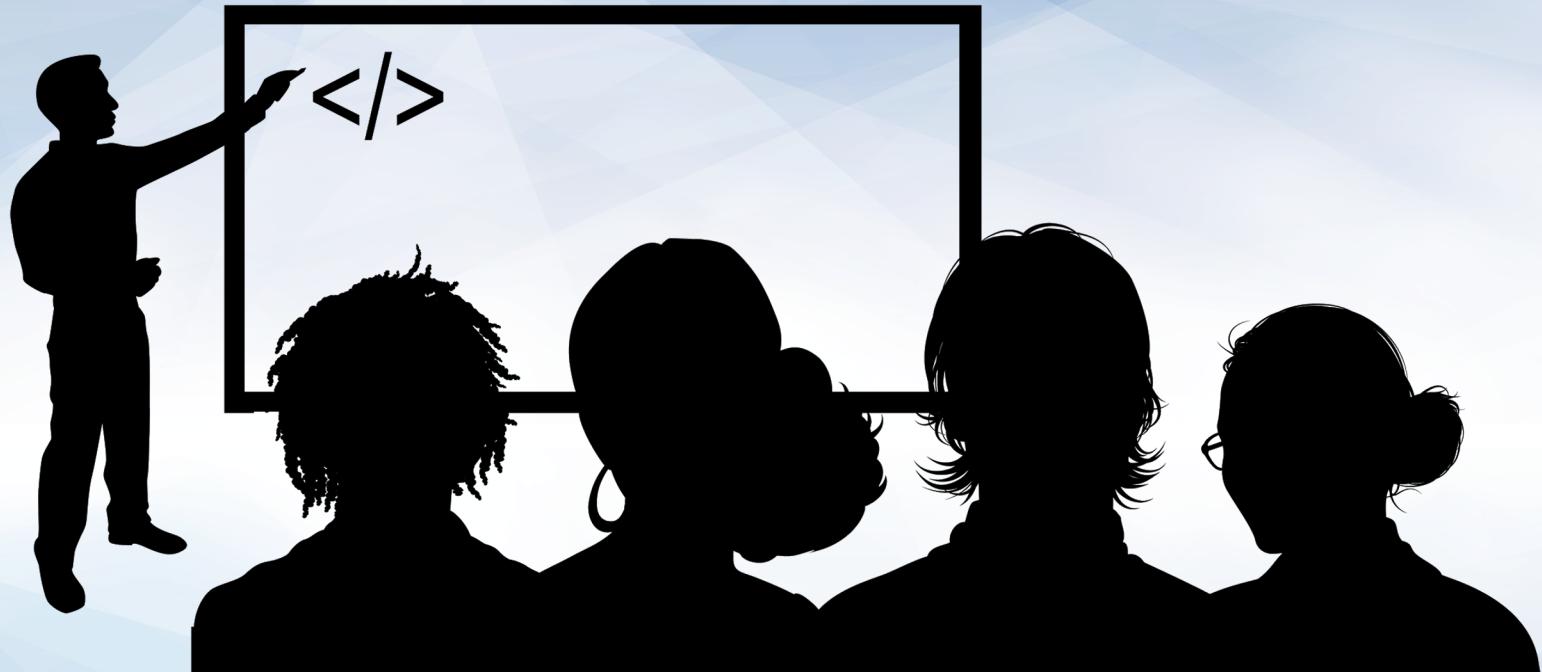
Christian Robertson

All their equipment
and instruments
are alive.

coiny

Marcelo Magalhães

**A red flare silhouetted
the jagged edge of a
wing.**



Instructor Demonstration

Custom Fonts

Activity: Custom Google Fonts

Assignment:

Create (or re-use) an HTML document and then incorporate 2–3 custom Google fonts (fonts.google.com) into the page.

Bonus:

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

Suggested Time: 11 minutes



Pseudo Styles

Pseudo-Classes

CSS provides keywords that can be added to selectors. These keywords can highlight the special states of the selected element.

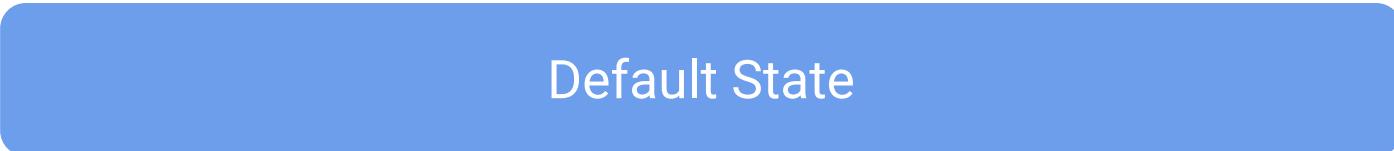
Great example: CSS can hook onto the specific moment when a link is hovered over using the `:hover` pseudo-class.

Complete list of pseudo-classes: developer.mozilla.org

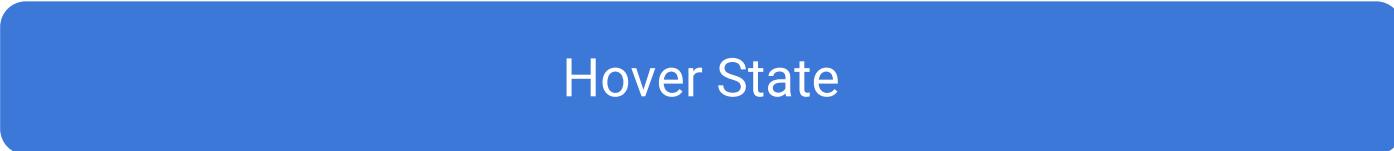
Index of standard pseudo-classes				
<code>:active</code>	<code>:first-child</code>	<code>:last-child</code>	<code>:only-child</code>	<code>:root</code>
<code>:any</code>	<code>:first-of-type</code>	<code>:last-of-type</code>	<code>:only-of-type</code>	<code>:scope</code>
<code>:checked</code>	<code>:fullscreen</code>	<code>:left</code>	<code>:optional</code>	<code>:target</code>
<code>:default</code>	<code>:focus</code>	<code>:link</code>	<code>:out-of-range</code>	<code>:valid</code>
<code>:dir()</code>	<code>:hover</code>	<code>:not()</code>	<code>:placeholder-shown</code>	<code>:visited</code>
<code>:disabled</code>	<code>:indeterminate</code>	<code>:nth-child()</code>	<code>:read-only</code>	
<code>:empty</code>	<code>:in-range</code>	<code>:nth-last-child()</code>	<code>:read-write</code>	
<code>:enabled</code>	<code>:invalid</code>	<code>:nth-last-of-type()</code>	<code>:required</code>	
<code>:first</code>	<code>:lang()</code>	<code>:nth-of-type()</code>	<code>:right</code>	

Button with Various States

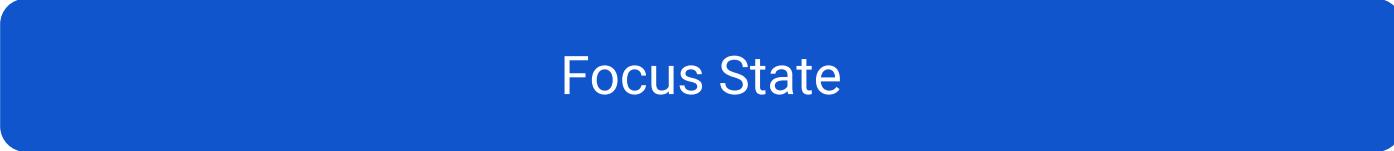
You can use pseudo-classes to define how a button appears in various states.



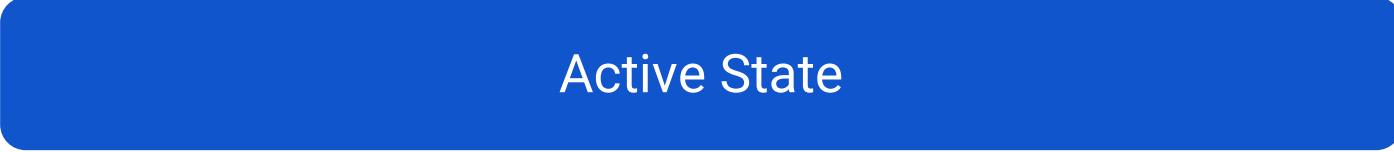
Default State



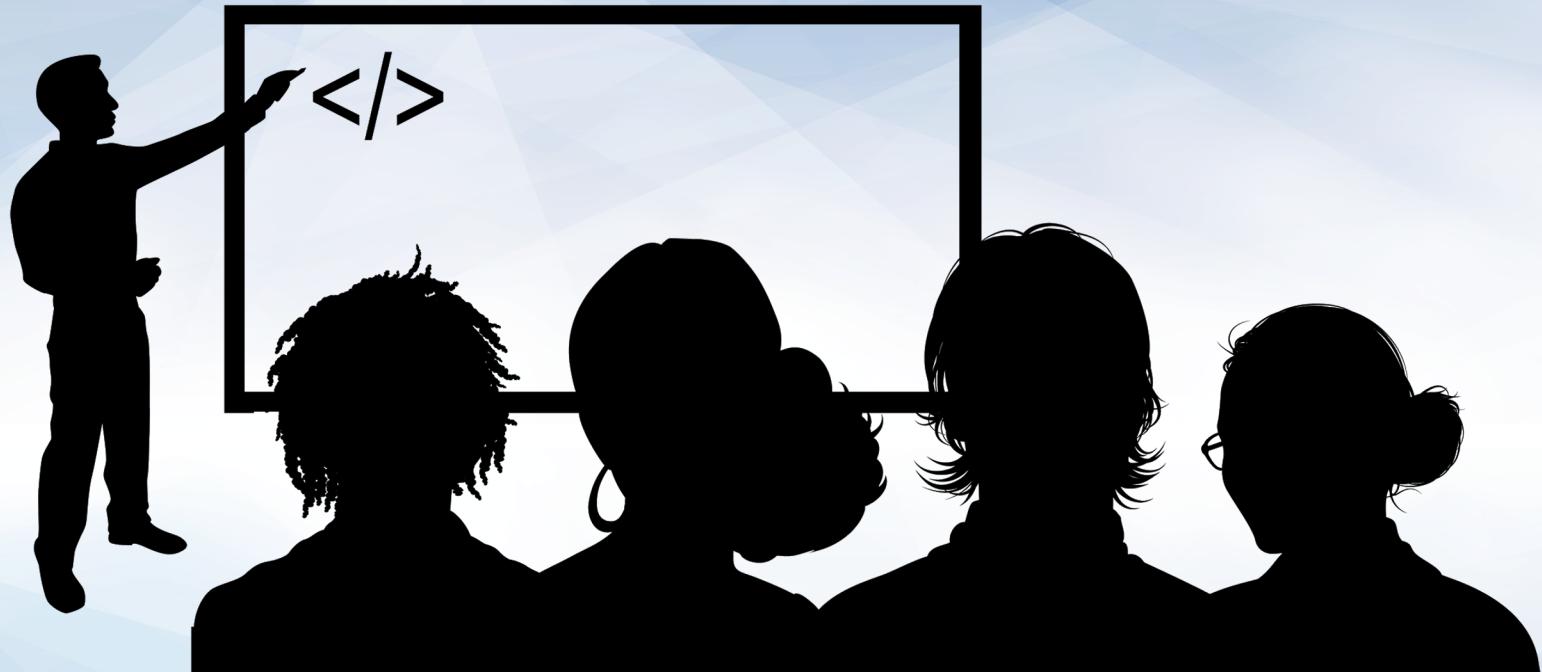
Hover State



Focus State



Active State



Instructor Demonstration Pseudo Styles

Activity: Pseudo Styles

Assignment:

Create a series of links and modify the pseudo-classes associated with their default, active, hover, and focus states.

Bonus:

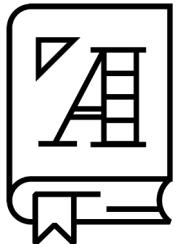
If you finish early, incorporate a pseudo-class we haven't yet covered.
Then Google pseudo-elements and try to incorporate one as well.

Suggested Time: 5 minutes



Beyond CSS Hacking

Quick Refresher on HTML/CSS



HTML: Hypertext Markup Language (Content)

CSS: Cascading Style Sheets (Appearance)

HTML and CSS are the “languages of the web.” Together, they define both the content and the aesthetics of a webpage, including colors, fonts, and content placement. (JavaScript is the third language of the web: it handles logic, animation, etc.)

HTML vs. HTML/CSS

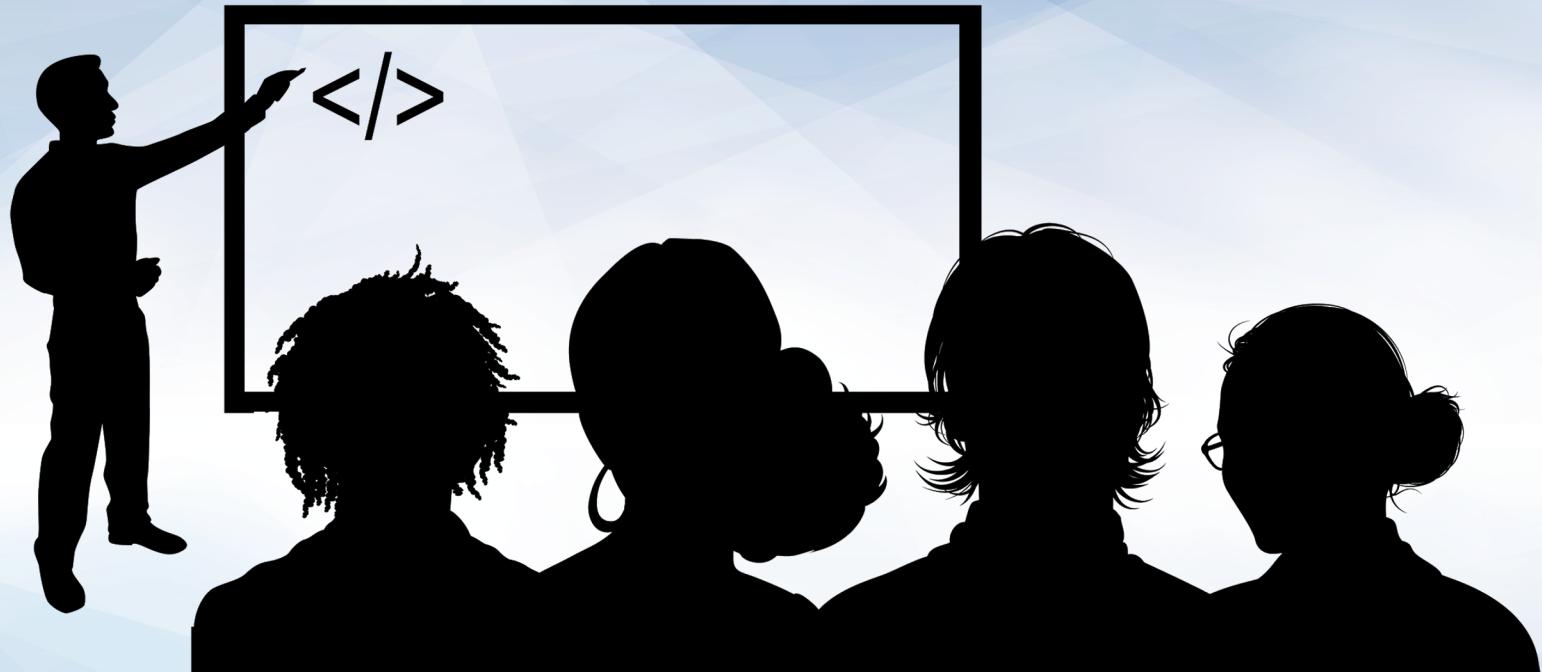
HTML Alone	HTML and CSS
Like writing papers in Notepad.	Like writing papers in Microsoft Word.
Used to write unformatted text (i.e, content only).	Used both to write the content <i>and</i> format it (color, font, alignment, layout, etc.).
 A purple icon featuring a white stylized letter 'N' inside a rounded square, with a smaller overlapping square behind it.	 A blue icon featuring a white stylized letter 'W' inside a rounded square, with a smaller overlapping square behind it.

How You (Probably) Feel About CSS



A revelation. There is a better way!





Instructor Demonstration

Where's the CSS?

Partner Activity: Where's the CSS?

With those sitting nearest to you, take a close look at the Bootstrap-powered HTML document I just sent you.

Be prepared to answer the following two questions:

01

Where does this HTML document draw its styles from?

02

How does our browser know which HTML element to style, and in which way?
(e.g., button face or background banner)

HINT: Think about how Google Fonts work.

Suggested Time: 5 minutes



Powered by Bootstrap

External CSS Link:

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4     <title>My First Website</title>
5     <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/
       bootstrap/3.3.6/css/bootstrap.min.css">
6 </head>
7 <body>
```

Predefined CSS Class (e.g., jumbotron):

```
<div class="jumbotron">
    <h1 class="text-center"><strong>Awesome Header</strong></h1>
    <h2 class="text-center">Smaller Awesome Header</h2>
    <h3 class="text-center">Even Smaller Header</h3>
    <p class="text-center"><a class="btn btn-danger btn-lg" href="#" role="button">
        <span class="glyphicon glyphicon-envelope"></span> Learn more</a></p>
</div>
```

Powered by Bootstrap

The Coding Bootcamp

Home

About

Contact

Dropdown ▾

Default

Static top

Fixed top

Awesome Header

Smaller Awesome Header

Even Smaller Header

 Learn more

class="jumbotron"



Lorem ipsum dolor sit amet, consectetur adipisicing elit. Quis, molestiae modi accusantium animi magnam veniam, impedit asperiores sint consequuntur debitibus fugit quibusdam dolor, iusto sed porro ab minus voluptatibus amet.



Lorem ipsum dolor sit amet, consectetur adipisicing elit. Accusamus, maiores, quos. At, animi, facilis. Alias itaque ab minima rerum, eaque animi nesciunt harum nemo est cumque voluptas, qui reprehenderit atque.



Using Bootstrap gives us
predefined CSS styles.

Partner Activity: Predefined CSS



Turn to the person next to you and celebrate!



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



HINT: You should be explaining why Bootstrap's predefined CSS a big deal.

Suggested Time: 5 minutes



What Is Bootstrap?

Bootstrap Definition



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.



Bootstrap documentation: getbootstrap.com

Why Use Bootstrap?

Reason #1: UI Kit



Familiarize yourself with the UI features Bootstrap offers by reading the documentation.



Once Bootstrap is active, you can simply copy snippets from the documentation to save yourself the time it takes to create elements from scratch!



Why Use Bootstrap?

Reason #2: Mobile Responsiveness



One of the most compelling reasons to use Bootstrap is that it is mobile-responsive by default.



This means that your website will automatically look great when viewed on screens ranging from monitors to tablets to phones.



HTML/CSS/Bootstrap Analogy

HTML Alone	HTML and CSS	HTML/CSS and Bootstrap
Like writing papers in Notepad.	Like writing papers in Microsoft Word.	Like writing papers in Microsoft Word <i>using a template</i> .
Used to write unformatted text (i.e, content only).	Used both to write the content <i>and</i> format it (color, font, alignment, layout, etc.).	You can still customize it, but you're starting with a pre-built style and aesthetic.
 A purple Notepad icon with a white 'N' on it, representing HTML alone.	 A blue Microsoft Word document icon with a white 'W' on it, representing HTML and CSS.	 A blue Microsoft Word document icon with a white 'W' on it, followed by a plus sign and a large blue diamond, representing HTML/CSS and Bootstrap.

Key Bootstrap Features

Bootstrap Components

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

Bootstrap Components				
Alerts	Badges	Buttons	Cards	Carousel
Dropdowns	Forms	Jumbotron	List group	Modal
Navs	Popover	Progress Bar	Toast	Tooltips
Several more...				

Bootstrap Nav Bars

My First Website

Link 1

Link 2

Link 3

Example:

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

```
<div class="jumbotron">
  <h1>Hello, world!</h1>
  <p>...</p>
  <p><a href="#" class="btn btn-primary btn-lg" role="button">Learn more</a></p>
</div>
```

Bootstrap Table

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

Example:

```
<table class="table table-striped">
  <tr>
    <th>First Name</th>
    <th>Last Name</th>
    <th>Username</th>
  </tr>
  <tr>
    <td>Mark</td>
    <td>Otto</td>
    <td>@mdo</td>
  </tr>
  ...
</table>
```

Bootstrap Form

Email address

Password

File input

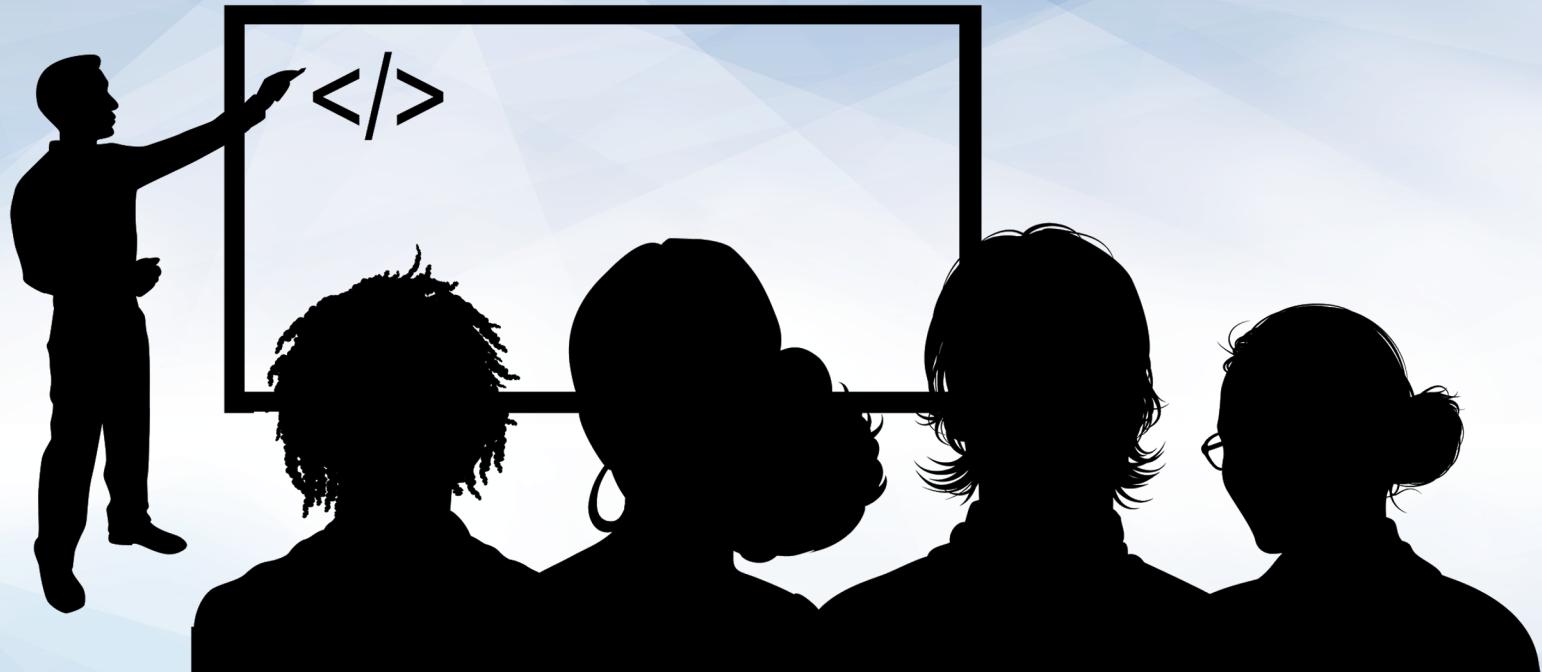
No file chosen

Example block-level help text here.

Check me out

Example:

```
<form>
  <div class="form-group">
    <label for="exampleInputEmail1">Email address</label>
    <input type="email" class="form-control" id="exampleInputEmail1" placeholder="Enter email">
  </div>
  <div class="form-group">
    <label for="exampleInputPassword1">Password</label>
    <input type="password" class="form-control" id="exampleInputPassword1" placeholder="Password">
  </div>
  <div class="form-group">
    <label for="exampleInputFile">File input</label>
    <input type="file" id="exampleInputFile">
    <p class="help-block">Example block-level help text here.</p>
  </div>
  <div class="checkbox">
    <label>
      <input type="checkbox"> Check me out
    </label>
  </div>
  <button type="submit" class="btn btn-default">Submit</button>
</form>
```



Instructor Demonstration

Bootstrap Components

Partner Activity: Bootstrap Components

Working with someone sitting near you, do the following:

01

Navigate to the Twitter Bootstrap website.

02

Copy the link to the Bootstrap CSS file into one of your old HTML files.

03

Look through the Bootstrap CSS or Components list and incorporate at least three Bootstrap elements into your page.

04

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.

Suggested Time: 15 minutes



Takeaways

Takeaways

It's the end of class! By now, you should be able to:

01

Provide a loose definition of *typography* and list a few CSS properties that can be used to style it.

02

Offer a practical example of using pseudo-classes.

03

Understand generally what Twitter Bootstrap is and why predefined CSS frameworks are so powerful.

04

Know how to incorporate the Twitter Bootstrap style library into your website.

Next Class: Layout Building!

News Home About Contact

Awesome Stories



The Greatest Website Ever Made

Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit, sed quia non numquam eius modi tempora incidunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim ad minima veniam, quis nostrum exercitationem ullam corporis suscipit laboriosam, nisi ut aliquid ex ea commodi consequatur? Quis autem vel eum iure reprehenderit qui in ea voluptate velit esse quam nihil molestiae consequatur, vel illum qui dolorem eum fugiat quo voluptas nulla.



The Greatest Website Ever Made

Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit, sed quia non numquam eius modi tempora incidunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim ad minima veniam, quis nostrum exercitationem ullam corporis suscipit laboriosam, nisi ut aliquid ex ea commodi consequatur? Quis autem vel eum iure reprehenderit qui in ea voluptate velit esse quam nihil molestiae consequatur, vel illum qui dolorem eum fugiat quo voluptas nulla.

Questions?