Bootstrap

- Welcome to the Bootstrap Section!
- Bootstrap is a very common framework used for Front-End Development
- What is a Framework?

- Framework
 - Inversion of Control
 - Default Behavior
 - Extensibility
 - Non-modifiable Framework Code

- A large part of Bootstrap is not memorization but really understanding how to reference the documentation for your own use cases
- This section will focus on common uses of Bootstrap

Bootstrap v3 versus v4

- Bootstrap 4 is currently in development and will be released soon!
- It may be released by the time you view this, but if it hasn't yet, you can always use the alpha and beta versions right now!

- For our level of use of Bootstrap, the differences between v3 and v4 won't really be apparent to us
- v4 is a major rewrite from v3, but we won't dive deep enough to notice many of these differences

- Some differences:
 - Panels are being replaced by cards
 - Larger default font sizes
 - New grid tier (XL)
 - Use of flexbox
 - Moved from Less to Sass

- The most important thing to get out of this section is the ability to reference the Bootstrap documentation
- Now let's explore the documentation and some examples of what bootstrap looks like!

Bootstrap - Part 1 Buttons

- A key feature of Bootstrap are its default classes
- You can call these classes to quickly and easily build good looking features for your web application!

- We'll go over button classes as well as container and Jumbotron classes.
- First we will start off by showing how to connect an HTML file to Bootstrap!
- Let's get started!

Bootstrap - Part 2 Forms

- A quick note before we begin to discuss Forms with Bootstrap.
- Many students get intimidated by Bootstrap, thinking they need to memorize all the classes we cover in this section.

- That is certainly not the case!
- Think of this section more as a guide to the documentation and what is possible with Bootstrap, not as an overview of things you need to memorize!

- Even people who work with Bootstrap often will reference the documentation a lot.
- We want to master the skill of gathering and applying information, not memorizing information!

- Bootstrap comes with many default classes for forms.
- Let's explore the various form components we can use with Bootstrap!
- We will be referencing the course notes quite a bit!

Bootstrap - Part 3 Navbars

- Navbars are navigational bars that you will often see on the top of a website
- In this section we will show how to manually create the basics of a NavBar
- Later on we will just copy and paste from the course notes!

- We will also see how to connect an HTML page to Javascript and jQuery
- We haven't really discussed those two technologies yet, but we will need them for some functionality of the NavBar!
- Let's get started!

Bootstrap - Part 4 Grids

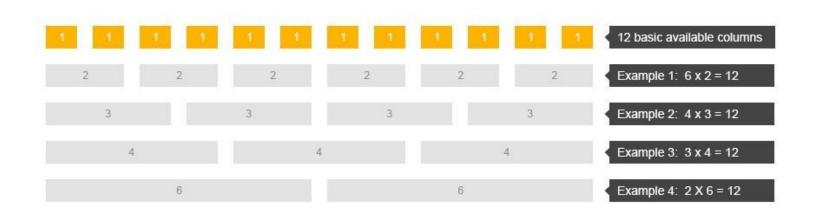
- The grid system for Bootstrap is one of its most fundamental features
- So far we've mostly seen convenient tools that Bootstrap provides through classes.
- The grid system goes much further than that!

- The grid system provides the core mechanism by which using Bootstrap allows websites to look good across multiple devices of multiple screen sizes
- Let's get started!

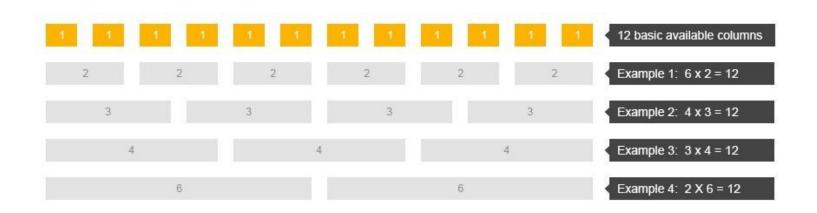
What happens on different screen sizes?



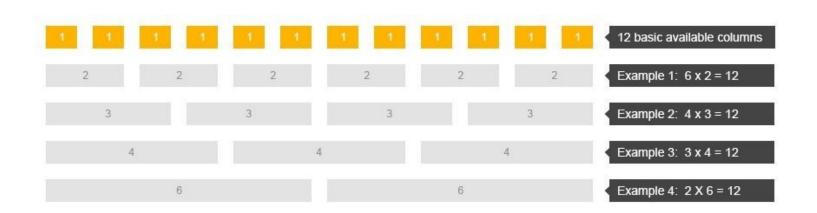
• We split the entire screen into 12 available columns.



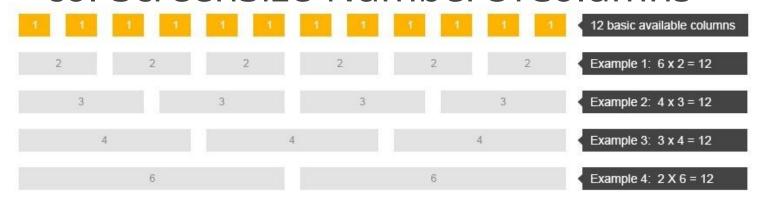
 We can use any combination of numbers that will eventually add up to 12 columns



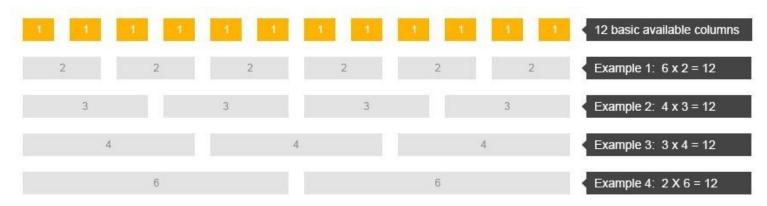
 The grid system call will make use of the class="row"



- Inside of a row class, we then have the following format:
 - col-ScreenSize-NumberOfColumns



- Inside of a row class, we then have the following format:
 - o col-md-6



- So we can define how the columns should be shown when the screen gets resized.
- Let's get started with some examples!

Bootstrap Project

- For this project you will be recreating a landing page and a Sign-In page that take advantage of Bootstrap's features.
- Open the Bootstrap_Project_Main.html file to see the full instructions.

- Remember that you can either tackle this project on your own first, or just follow along with Solutions Lecture, whichever you prefer!
- Let's take a quick look at the project!

Bootstrap Project Solutions

Capstone Project One Solutions - Continued

- We've learned a lot about HTML and CSS, two major components of any website.
- Before we move on to Bootstrap, let's take a moment to practice everything we've learned so far with a Capstone Project!

- You will be creating a mock landing page for a start-up.
- The landing page will have a form and lead to a Thank You page.
- This capstone project is optional and there are three ways you can approach it!

- If you feel very confident in HTML and CSS feel free to just skip this project
- You can just follow along with the solution videos.
- Try to recreate the landing page before watching the walkthrough videos.

 Let's take a look at the Landing Page, see the requirements, and then you can get started!

Command Line Crash Course

- Being able to navigate your computer through the command line is a vital skill for any web developer!
- Some commands are slightly different depending on if you use Windows or MacOS/Linux

- In this lecture we will briefly go over a few important commands you should know and point out OS differences
- You can always use the downloaded notes for reference!