

CSS Frameworks:

Quickly designing and prototyping websites

Alvin Wang

ScottyLabs

- ScottyLabs is a student organization at Carnegie Mellon University.
- They organize educational events to help people learn how to make things, host events to give students the opportunity to work on projects outside of class, and develop applications and services for the campus community.

Alvin Wang

- Senior in Information Systems / Human-Computer Interaction
- Experience in front-end web development / design
- Solid experience with popular CSS Frameworks
- Developed a CSS Framework called Materialize

Materialize

<http://dogfalo.github.io/materialize/>

Workshop Overview

1. Introduction to CSS Frameworks
2. Very Basic HTML/CSS refresher
3. Explanation of framework components
 1. Walkthrough of Bootstrap
4. Creating a website using Bootstrap

- Understand the power of css framework
- Know how to layout webpages with the grid
- Know the capabilities of Bootstrap
- Ultimate goal: increase your ability to make responsive web pages

Goals

What are CSS Frameworks?

- A framework/development tool that makes it easier to design websites
- At its most basic form, it is just a .CSS file that comes with many predefined classes
- Provides a solid base for you to design upon

Why would I want to use one?

- Saves a lot of time setting up basic styles
- Makes your websites look good with minimal effort
- Great for prototyping
- Adds responsiveness to your website

What is responsiveness?

- ❖ Your webpage will resize from desktop to mobile seamlessly
- ❖ Large contrast from having to create a separate mobile site, which was common practice until the past few years

- If you aren't as aware of what styles are defined by the framework, styling your webpage can be frustrating.
- If you don't take the time to further customize your site after using the framework, your site could look very generic.

Disadvantages

- **Bootstrap** (made by Twitter, super popular)
- **Foundation** (**simpler design**)

Popular CSS Frameworks

Websites made with Bootstrap

<http://expo.getbootstrap.com>

Components of a CSS Framework

- CSS / CSS Preprocessor: LESS / SASS
- JavaScript
- Responsive Grid
- Components
 - Navigation Bar
 - Buttons
 - Forms
 - Dropdowns
 - Modal Popups
 - Icons
 - + Tons MORE!!!

HTML Refresher

- Text Markup Language
- Ideally, only content should go into HTML files
- <div> are containers
 - There are many other tags...
- We separate Style from Content by using CSS classes
- We add classes to elements like this:
 - <div class="class-name">

CSS Refresher

- Cascading Style Sheet – styles you apply “cascade down”
 - General rules cascade down until more specific styles are applied
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- <div> are containers
 - There are many other tags...
- We separate Style from Content by using CSS classes
- We add classes to elements like this:
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- Not much!
- A text editor of some sort (recommend Brackets)
- Bootstrap

What we'll need

- Download Bootstrap css + js
- Don't get the minified version so we can look at the full code if need be

Setting up Bootstrap

Make a simple portfolio

Our focus is on laying out the portfolio using the grid and also learning how to add framework components to our site.

The Grid

Upcoming Workshops