

Full Stack Web Development Intensive, Fall 2017

There are two main objectives to this course. The first is learning how to build websites / web applications and the assets that compose them. The second is to understand the concepts behind computers, networks and full stack development.

Lecture Topics

- Computer Principles
- Bash
- HTML
- CSS
- JavaScript / jQuery
- Wireframing
- Responsive Design
- PHP
- MySQL

Class Sessions

Mondays and Wednesdays 6:00pm to 9:00pm

Class starts on Sept 11

Last day of class Jan 10

No classes: 10/9, 11/22, 12/25, 1/1

Grading

The best result is the knowledge and experience that you will gain during this course, you will also receive a grade based on the following rubric.

Personal Site 25%

Causes Site 35%

Web App 45%

Learning PHP, MySQL, Javascript, CSS and HTML5: A Step-by-step Guide to Creating Dynamic Websites.

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Software

- Sublime Text 3 or Brackets
- Git (Mac) or GitBash (Win)
- MAMP (Mac) or XAMPP (Win)
- Google Chrome
- Firefox Mozilla
- Github or Bitbucket Account
- Trello Account
- A Gmail Account with Google Drive
- Draw.io connected to your Google Drive

Date	Topics	Assignments
9/11	Introductions Learning Programming Computer Principles Hardware, Software, Network The Internet World Wide Web Introduction to Bash Commands HTML: Creating a HTML page HTML Syntax and Boilerplating Attributes and Comments Text Elements	
9/13	HTML Cont: HTML Review Lists, Media, Forms, Tables, Containers Bash pt. 2 folder Version Control, Git and GitHub	HW1: Project Setup Create a Project folder using BASH and name it FirstInitialLastName. ie. jortiz The project folder should have the following contents: <ol style="list-style-type: none"> 1. A css folder 2. An images folder 3. A js folder 4. An index.html with the boiler plate and a "Coming soon message" in an h1 tag 5. Initialize git, commit and push to Github Read Chapter 1 & 2
9/18	HW1 DUE CSS: Syntax, Typography, Color, Shadows	
9/20	CSS: Padding, Margin, Border, Background Display, Width, Height, Overflow	HW2: HTML Layout the HTML for a 3 page website that should include the following: <ol style="list-style-type: none"> 1. A homepage 2. A bio page 3. A contact page 4. Should include Absolute and Relative paths for images or hyperlinks and the user of various HTML elements. 5. You should have various GIT commits
9/25	HW 2 DUE CSS: Float, Positions, Display Flex, Animations, Selectors	
9/27	HTML: Meta tags Browser: Web Dev Tools CSS: Cascading, Media Query Sitemaps, Wireframing and Mockups Free Resources: Draw.io	HW 3: Wireframing Wireframe the Personal Site It can be drawn by hand or using Draw.io, showing the composition of each webpage of your personal site

10/2	HW3 DUE Free Resources: Color Generators Palette Generators Photo Editors CSS Workshop: Styling Cruise Site pt1	
10/4	CSS Workshop: Styling Cruise Site pt2 Discussion on Requirements for Causes Site	HW4: CSS Add CSS to your Personal Site, making any necessary changes to the HTML Finalize your Personal Site Your project should include the following: <ol style="list-style-type: none"> 1. The use of font style rules 2. The use of background style rules 3. The use of Pseudo classes 4. An External CSS 5. The use of at least 3 in-line CSS 6. The use of at least one embedded CSS 7. Properly styled nav 8. You should have various GIT commits 9. Push the Project to GITHUB and submit your repository on Slack
10/11	PERSONAL SITE DUE Bootstrap: Boilerplate BS, Grid System, CSS Components, JS Components	HW5: Causes Site Find a non-profit organization and pull content (images and text)
10/16	HW5 DUE Javascript: Introduction to Web Programming Intro to JS Script tag Comments and Variables Datatypes: Numbers	
10/18	JavaScript: Datatypes: Strings, Booleans, Arrays	HW6: Cause Website Wireframe Design a Wireframe for Your Causes site and submit via Slack Wireframes should show use of bootstrap components and your intended JS functionality
10/23	HW6 DUE JavaScript: Objects Comparisons Logicals Conditions Functions Loops	
10/25	Javascript: DOM, Events	HW7: Causes Site Build Use Bootstrap, your wireframes and HTML to build your Causes Site. Don't worry about Styling yet! Read Chapters on JS

10/30	HW7 DUE Javascript: Date Object JS Workshop: Image Gallery	
11/1	JS Workshop: Accordions, Conditional Form Handling, Object Prototyping	HW8: Causes Website CSS and Bootstrap components Brand your Causes Website using CSS and integrate BS Components Commit and push your project to GitHub Begin Flowcharts and wireframes for Web App
11/6	HW8 DUE JS Workshop: Objects and Local Storage	
11/8	JQuery: Introduction, Installation, Document ready, Selectors, Events, Each, Date, Transversals	HW9: Causes Site JS Functionality Build Custom JS into your Causes site Commit and push to GitHub Finalize Flowcharts and wireframes for Web App Read Chapters on PHP
11/13	HW9 (Causes Site, Web App Wireframes and Flowcharts) Due Prep for presentation by storing files on shared folder Causes Site Presentation Web App Mockup/Flowchart Presentation	
11/15	Going Full Stack Agile Methodologies: SCRUM and Sprints Flowcharts, wireframes and scope Discussion on Web App Xampp and MAMP: Introduction and Setup to Local Servers PHP: Server Processing, PHP Syntax, Error Handling, Web Programming review, Compare and contrast PHP to JS New Methods: Includes, Constants, Echo and Print_r	SPRINT 1: Web App Build Initialize Git for your Web App Build HTML/PHP Run and test on Local Server
11/20	PHP: Compare and Contrast PHP and JS pt 2 New Methods: Constants, Variable Scoping, Extending Objects, Super Globals	SPRINT 1: Finalize HTML/PHP and CSS for site Read Chapters on SQL
11/27	SPRINT 1 ENDS HTML: Prepping Form for Processing PHP: Form Processing, Post Variables, Echo User inputs, Folder and File Generation	
11/29	PHP: Image Handling, Email Generation SQL: Databases and Tables, Setup a table PHP: Insert Data into SQL Table	SPRINT 2: Data Infrastructure for your Web app Build the tables, file structure and Json templates necessary to support your web app

12/4	PHP: Sessions, Session Variables, Header Redirects, POST vs GET, Isset, Empty, file_exists	
12/6	SQL: Select from SQL PHP: Login Query, Session Destroy PHP Workshop: Dynamically Generate Table from SQL SQL: SQL Statements	SPRINT 2: Finalize Data Infrastructure for your Web app
12/11	SPRINT 2 ENDS Bringing it all together: AJAX and JSON AJAX Workshop pt1	
12/13	AJAX Workshop pt2	SPRINT 3: Develop Functionality for your Web App Prep project for 1-on-1 presentations
12/18	FileZilla and Remote Environment Github for Collaboration Going Full Stack SEO Adding a Favorite Icon Using Google Analytics 1-on-1s Instructor, Classmates	
12/20	1-on-1s Instructor, Classmates	SPRINT 3: Finalize MVP Development for your Web App Commit to GitHub Prep project for Soft Launch
12/27	SPRINT 3 ENDS Workshop: Soft Launch	
1/3	User Testing and QA Small Group Presentation Prepare for final presentation QA other group members work	SPRINT 4: Debug and enhance your Web App
1/8	In Class Development for Scope Creep, Debugging and Revisions	SPRINT 4: Finalize your Web App for Presentation
1/10	Final Project Presentations Presentations Prepare a 30 to 45 second elevator pitch for your application. You should be able to explain what it does, what problem it is solving and who are the primary users. Then prepare for a 5 minute walk through presentation. Please allocate 3 to 5 minutes for Q and A. Please make sure to have all items ready for submission, including: <ul style="list-style-type: none"> ● Flowcharts ● Wireframes ● MVP / Prototype ● Source code 	