

## Front-end Bootcamp Course Overview

### Overview of the Web and Web Technologies

- What is the Web?
- Lifecycle of a Request
- Technical Fundamentals: Plumbing of the Internet/Servers and Server-Side Concepts, Client and Client-Side Concepts
- Jobs & Roles in Web Development
- Thinking and Acting Like a Developer

### HTML & CSS

- The Development Environment
- What is HTML?
- Working with HTML Text Elements
- Working with Other Semantic and Media HTML Elements
- Introduction to CSS
- CSS Text Styles
- CSS Selectors, Classes, & ID's
- CSS Layout Then and Now
- CSS Animations, Transitions, & Transformations
- Looking into the Future
- Best Practices

### UI/UX

- An Introduction to UX Design -- What it is, what it isn't, and how it affects the way we interact with technology
- Fundamentals of Human Computer Interaction
- Gestalt Laws; Fitts' Law
- From Cognitive Psychology and Human Factors to design guidelines
- Ben Shneiderman's Eight Golden Rules of Interface Design
- Methodologies of User Centered Design
- Requirements Analysis, Design, Prototyping, User Testing, Design Critique
- Iterating your way to great UX

### Intro to Programming

- Thinking like a programmer – logical steps
- Flowcharts as a development tool
- Conditionals
- Loops
- Psuedocode as a communication tool
- Variables
- Operators

- Functions
- Arrays

#### **Module 4: Introduction to Programming with JavaScript**

- Brief History of JavaScript
- Introduction to Programming with JavaScript
- Working with Functions
- Creating Objects and Modules
- JavaScript: Best Practices

#### **Applied JavaScript**

- Using jQuery
- Event Handling
- Asynchronous Programming
- Accessing Server Resources
- JavaScript Frameworks

#### **Intro to Server Side (PHP)**

- Understanding server side languages
- Introduction to PHP
- Methods of execution
- PHP.net resources
- Similarities and differences between PHP and JavaScript
- What can PHP do?
- Predefined variables
- Syntax with HTML
- Form cycle
- Databases
- Other server side languages

#### **Module 6: Thinking Like a Developer**

- Project Scope
- Self-Management / Assessment
- Real World Constraints
- Reverse Engineering & “Copying”
- Testing
- Software Patterns
- Identifying Patterns

#### **Integrated Throughout Class**

- Project Management
- Team Building
- Client Management
- Peer Reviews
- Web Application Projects

