Front-End Development Course

## Description

## Front-end and back-end are terms used to characterize program interfaces and services relative to the initial user of these interfaces and services. (The "user" may be a human being or a program.) A "front-end" application is one that application users interact with directly. A "back-end" application or program serves indirectly in support of the front-end services, usually by being closer to the required resource or having the capability to communicate with the required resource. The back-end application may interact directly with the front-end or, perhaps more typically, is a program called from an intermediate program that mediates front-end and back-end activities.

## Expectations and Goals

* In this class, you’ll learn how to code in HTML and CSS, and then structure, design, and launch your very own personal website!
* You will be able to make your site dynamic and get basic programming knowledge.

# Course Materials

## Required Materials

For this course students are required to have followed basic materials with them:

* Personal Computer (Laptops)
* Text Editor (VsCode, Sublime) Recommended
* Operating Software (Windows, Linux) Recommended
* Modern Browser (Chrome, Firefox) Recommended

## Optional Materials

* Basic Designing ability (Photoshop, Illustrator)
* Basic coding knowledge (Any Programming Language)
* Internet availability at Home.

# Course Schedule

| Topic | Reading |
| --- | --- |
| HTML 5 | 1. Introduction to HTML 2. All About HTML Tags 3. Making Ordered and Unordered Lists 4. Images, Attributes and Lists 5. Organizing HTML with Divs and HTML 5 6. Embedding Objects with Iframe 7. Head Body and Meta Tags 8. HTML best Practices |
| CSS 3 | 1. Introduction to CSS 2. Styling Text and other HTML elements 3. Font Files and Web Fonts 4. Backgrounds, Colors and Colors 5. Height, Width and Box model 6. Differentiating between Elements: Classes and IDs! 7. Layout and Floating |

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| Topics | Readings |
| Responsive Web Development | 1. Introduction to Mobile First 2. Structuring your Files (File Naming Cheat sheet) 3. Working with Browser Inspector 4. Adding Media Queries to your project 5. Setting Up Breakpoints   Responsive Typography & Google web Fonts |
| Responsive Flow | 1. Getting Started with Boilerplate 2. Making Your Project Fluid 3. Responsive Grids in Action 4. Coding your Style Titles 5. Adding responsive images 6. Responsive iframes   Intro to Icon Fonts and Font Awesome |
| Final Touch | 1. Finishing your Project 2. Testing your Website 3. Introduction to Flexbox 4. Introduction to Flexbox Grids 5. Using Flexbox Layouts |
| Bootstrap | Introduction to Bootstrap |

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| Topics | Readings |
| JavaScript | 1. Basic OOPS Concepts 2. Introduction to JavaScript 3. JavaScript & HTML 4. The DOM: Objects in the Browser 5. Conditionals & Control Flow   Repetitive Code |
| JavaScript Events & Functions | 1. Getting Started with Events 2. User-Triggered Events 3. All about Functions 4. The Browser Environment 5. Even More Events! |
| jQuery | 1. Introduction to jQuery 2. Working with jQuery Objects 3. Reading JavaScript Documentation 4. Libraries, Plugins, and Widgets   Loops, Chaining and Refactoring |
| Project | Project by mentor and student side by side  Project by student |