HTML

Section 1

Coding Basics: Intro to HTML Syntax

- The HTML, head, title, & body tags
- Headings, paragraphs, & lists
- The strong & em tags
- The doctype
- The meta tag & the unicode character set

Coding Links: Absolute & Relative URLs

- Anchor tags & hrefs
- Linking to other websites
- Linking to pages within a website
- Opening a link in a new browser window/tab

Adding Images

- The break tag
- The image tag & source attribute
- Using the width, height, & alt attributes
- Using horizontal rules

Intro to Cascading Style Sheets (CSS)

- The style tag
- Tag selectors
- The font-size, font-family, color, & line-height properties
- Hexadecimal color codes

CSS

CSS Class Selectors

- The class attribute
- CSS class selectors
- The span tag
- CSS opacity

Div Tags, ID Selectors, & Basic Page Formatting

- Dividing up content with the div tag
- Assigning IDs to divs
- Setting width & max-width
- CSS background-color
- Adding padding inside a div

HTML5 Semantic Elements & Validating HTML

- The outline algorithm
- The header, nav, aside, & footer elements
- Understanding articles & sections

- The main element
- The figure & figcaption elements
- Checking for errors: validating your code

Tailwind CSS Fundamentals

Understanding Utility Classes
- Basic Tailwind Setup and Configuration
- Customizing the Tailwind Configuration File (tailwind.config.js)

Layout and Flexbox
- Understanding the Grid System
- Creating Grid Layouts
- Grid Column and Row Sizing
- Flexbox Utilities
- Aligning and Justifying Items
- Flexbox Container and Item Properties

Typography
- Font Size and Family
- Font Weight and Style
- Text Color and Decoration
- Line Height and Letter Spacing

Spacing and Sizing
- Margin and Padding Utilities
- Width and Height Utilities
- Max Width and Max Height

Backgrounds and Borders
- Background Color and Gradient Utilities
- Border Color, Width, and Radius
- Box Shadow Utilities

Responsive Design
- Responsive Breakpoints and Media Queries
- Applying Responsive Utilities
- Designing for Mobile First

Customizing Tailwind
- Extending Tailwind with Custom Utilities
- Creating Custom Themes
- Using Plugins and Adding New Features

Advanced Components
- Creating Reusable Components with Tailwind
- Building Forms, Buttons, and Cards

- Modifying and Styling Components

Bootstrap

Bootstrap Grid System
- Understanding the 12-Column Grid
- Breakpoints and Responsive Design
- Nested Columns and Offsets

Typography and Utility Classes
- Headers and Text Formatting
- Text Alignment and Display Headings
- Using Utility Classes for Margins, Padding, and Display

Core Components
- Buttons and Button Groups
- Forms and Input Groups
- Navbars and Responsive Menus
- Cards, Lists, and Containers

Layouts and Flexbox
- Flexbox Layout Utilities
- Aligning and Justifying Content
- Responsive Utilities for Flexbox

Bootstrap Icons
- Using Bootstrap Icons
- Installing and Integrating Icons

JavaScript Components
- Modals and Popups
- Tooltips and Popovers
- Collapse and Accordion
- Dropdowns and Carousels

Customizing Bootstrap
- Introduction to Sass Customization
- Overriding Bootstrap Variables
- Creating Custom Bootstrap Builds

Responsive Media Queries
- Implementing Media Queries in Bootstrap
- Creating Responsive Images and Tables

JavaScript

1. General Overview of JavaScript
- What is JavaScript
- JavaScript history
- Relation between JavaScript and ECMAScript
- Versions of JavaScript

2. Syntax, Variables, Values, Data Types
- Syntax review
- Keywords and reserved words
- Variable declaration
- Variable scope
- Block scope

3. Data Types
- Primitive values
- Reference values
- Types
- Type conversion

4. Expressions and Operators
- Expressions (arithmetic, relational, logical, assignment, and others)
- Operators overview

5. Control Structures
- Flow control and conditionals
- Loops and iteration
- Jumps

6. Error Handling
- Throwing errors
- Error handling

7. Numbers
- Number literals
- Number object
- Number methods
- Math object
- Date object
- Working with Numbers

8. Strings
- String literals
- String object
- String methods
- Working with Strings

9. Arrays
- Creating and populating Arrays

- Array methods
- Working with Arrays

10. Functions
- Defining functions
- Calling functions
- Functions as values
- Arguments and parameters
- Function scope
- Closures
- Arrow functions

11. Indexed Collections
- Set object type
- Map object type

12. JSON

13. Iterators and Generators
- Working with Iterators
- Working with Generators

14. Modules

15. Promises

16. Regular Expressions
- Creating regular expressions
- RegExp object and its methods
- String methods for matching patterns

17. Objects
- Creating objects
- Properties
- Methods
- Built-in JavaScript objects