

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

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