

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

JavaScript

1. General overview of JavaScript

- What is Javascript,
- JavaScript history,
- Relation between JavaScript and ECMAScript,
- Versions of JavaScript.

JavaScript Core

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
 - a. Flow control and conditionals,
 - b. Loops and iteration.
 - c. Jumps
- 6. Error handling
 - a. Throwing errors,
 - b. Error handling.
- 7. Numbers
 - a. Number literals,
 - b. Number object,
 - c. Number methods,
 - d. Math object
 - e. Date object
 - f. Working with Numbers.
- 8. Strings
 - a. String literals,
 - b. String object,
 - c. String methods,
 - d. Working with Strings.
- 9. Arrays
 - a. Creating and populating Arrays,
 - b. Array methods,
 - c. Working with Arrays.

10. Functions

- a. Defining functions,
- b. Calling functions,
- c. Functions as values,
- d. Arguments and parameters,
- e. Function scope,
- f. Closures,
- g. Arrow functions.

11. Indexed Collections

- a. Set object type
- b. Map object type

12. JSON

13. Iterators and generators

- a. Working with Iterators
- b. Working with Generators

14. Modules

15. Promises

16. Regular Expressions

- a. Creating regular expressions,
- b. RegExp object and its methods,
- c. String methods for matching patterns.

17. Objects

- a. Creating object,
- b. Properties,
- c. Methods,
- d. Build-in JavaScript objects.

