www.logicalimagination.com
800.657.1494

Introduction to HTML, CSS, and JavaScript

Course #: HT-103 **Duration:** 4 days

Prerequisites

Experience working with computers regularly is required and a basic understanding of how the web works and some programming experience would be useful.

Details

HTML, CSS, and JavaScript are the cornerstone technologies of modern web design. The course is designed for students who need a jump start on all three technologies and who can handle an intensive, four-day experience.

In this class, you get a rapid, hands-on introduction to client-side programming with HTML, CSS, and JavaScript. You will learn how to structure a web page with HTML, add style with CSS, and make your website come to life with JavaScript.

Software Needed

Any text editor and modern web browser.

Outline

Rapid Introduction to HTML, CSS, and JavaScript

- **A Quick Overview of Web Development**
  - Client-side Programming
    - HTML
    - Cascading Style Sheets
    - JavaScript
    - Ajax
    - JavaScript Frameworks
  - Server-side Programming
    - Java EE
    - NET
    - Python
    - PHP
    - ColdFusion
    - js
- **Introduction to HTML**
  - Getting Started
  - The HTML Skeleton
    - The <head> Element
    - The <body> Element

        - Whitespace
    - Viewing Page Source
    - HTML Elements
        - Attributes
        - Empty vs. Container Tags
        - Blocks and Inline Elements
        - Comments
    - Special Characters
    - History of HTML
    - lang Attribute
- **Paragraphs, Headings, and Text**
    - Paragraphs
    - Breaks and Horizontal Rules
    - Quoted Text
    - Preformatted Text
    - Text-Level Semantic Elements
- **HTML Links**
    - Text Links
    - Absolute vs. Relative Paths
        - Absolute Paths
        - Relative Paths
        - Default Pages
    - Targeting New Windows
    - Email Links
    - Targeting a Specific Location on the Page
    - The title Attribute
- **HTML Images**
    - Inserting Images
        - Making Images Accessible
        - Alternative Text
        - Long Descriptions
        - Height and Width Attributes
    - Image Links
- **HTML Lists**
    - Unordered Lists
        - Nesting Unordered Lists
    - Ordered Lists
        - Nesting Ordered Lists
        - The type Attribute
        - The start Attribute
    - Definition Lists
- **Crash Course in CSS**
    - Benefits of Cascading Style Sheets
    - CSS Rules
    - CSS Comments
    - Selectors
        - Type Selectors
            - Class Selectors
            - ID Selectors
            - Attribute Selectors
            - The Universal Selector
            - Grouping
    - Combinators
        - Descendant Combinators
        - Child Combinators
        - General Sibling Combinators
        - Adjacent Sibling Combinators
    - Precedence of Selectors
    - How Browsers Style Pages
    - CSS Resets
    - CSS Normalizers
    - External Stylesheets, Embedded Stylesheets, and Inline Styles

        - External Stylesheets
        - Embedded Stylesheets
        - Inline Styles
    - and
    - Media Types
    - Units of Measurement
        - Absolute vs. Relative Units
        - Pixels
        - Ems and Rems
        - Percentages
        - Other Units
    - Inheritance
        - The inherit Value

- **CSS Fonts**
    - font-family
        - Specifying by Font Name
        - Specifying Font by Category
    - @font-face
        - Getting Fonts
    - font-size
        - Relative font-size Terms
        - Best Practices
    - font-style
    - font-variant
    - font-weight
    - line-height
    - font

- **Color and Opacity**
    - About Color and Opacity
    - Color and Opacity Values
        - Color Keywords
        - RGB Hexadecimal Notation
        - RGB Functional Notation
        - HSL Functional Notation
    - color
    - opacity

- **CSS Text**
    - letter-spacing
    - text-align
    - text-decoration
    - text-indent
    - text-shadow
    - text-transform
    - white-space
    - word-break
    - word-spacing

- **JavaScript Basics**
    - The Name “JavaScript”
    - What is ECMAScript?
    - The HTML COM
    - JavaScript Syntax
        - Basic Rules
    - Accessing Elements
        - Dot Notation
        - Square Bracket Notation
    - Where Is JavaScript Code Written?
    - JavaScript Objects, Methods, and Properties
        - Methods
        - Properties

- **Variables, Arrays, and Operators**
    - JavaScript Variables
        - A Loosely Typed Language

        - Google Chrome DevTools
        - Variable Naming
        - Storing User-Entered Data
    - Constants
    - Arrays
        - Associative Arrays
        - Array Properties and Methods
    - Playing with Array Methods
    - JavaScript Operators
    - The Modulus Operator
    - Playing with Operators
    - The Default Operator

- **JavaScript Functions**
    - Global Objects and Functions
        - parseFloat(object)
        - parseInt(object)
        - isNaN(object)
    - User-defined Functions
        - Function Syntax
        - Passing Values to Functions
        - Returning Values from Functions

- **Built-In JavaScript Objects**
    - String
    - Math
    - Date
    - Helper Functions

- **Conditionals and Loops**
    - Conditionals
        - if-else if-else Conditions
    - Short-circuiting
    - Switch / Case
    - Ternary Operator
    - Truthy and Falsy
    - Loops
        - while Loop Syntax
        - do…while Loop Syntax
        - for Loop Syntax
        - for…of Loop Syntax
        - for…in Loop Syntax
    - break and continue
    - Array: forEach()

- **Event Handlers and Listeners**
    - On-event Handlers
        - The getElementByld() Method
    - The addEventListener() Method
    - Capturing Key Events
        - Benefits of Event Listeners
        - Timers