



# JavaScript Training

## Introduction to JavaScript

### Why JavaScript?

JavaScript is one of the most popular programming languages on the web. It is a scripting language used to enable access to objects within applications. JavaScript is primarily used in the form of client-side scripting and implemented as an integrated component of the web browser, allowing the development of enhanced user interfaces and dynamic websites.

Duration: 2 days

Class size: 10 students max

Times: 9:00am - 5:00pm

Price: \$990 inc GST

#### After the course?

Each student will receive:

- Certificate of completion
- Training manual
- 12 months FREE email support
- FREE class re-sit (if necessary)

### Who Should Do This Course?

This course is intended for:

This course is designed for people who want to extend their web development skills beyond HTML and want to enhance the user interface on the website.

### Prerequisites

This course requires a good understanding of HTML. Participants must have completed the 'Introduction to HTML' and 'Dreamweaver CS4: Website Development' course or have equivalent skills before commencing this course.

## Content

### Unit 1: Introduction

- A Short History of JavaScript
- What is JavaScript?
- What Can We Do with JavaScript?

### Unit 2: Writing JavaScript

- Writing JavaScript
- When JavaScript Runs
- Readability
- Template Page

### Unit 3: Programming with JavaScript

- The JavaScript Sampler
- Statements
- Expressions
- Variables & Assignment Statements
- The Naming of Variables
- Declaring Variables
- Functions
- Comments
- Data Types
- Numbers

- Strings
- Boolean
- Using Data Types
- Objects
- Undefined or Not Defined?

#### Unit 4: Numbers & Arithmetic

- Basic Operations
- Other Arithmetic Operators

#### Unit 5: String Operations

- String Concatenation
- String Properties
- Changing Data Types
- parseInt() parseFloat()

#### Unit 6: Boolean Calculations

- Boolean Calculations

#### Unit 7: Project - Guessing Game

- Game Function
- Game Loop
- Getting the User's Guess
- Testing the Value
- A Random Number function
- Adding a Score
- Early Exit
- Testing for Numbers
- Creating an Ordinal Function
- Getting the last digits
- Using the Ord Function
- The JavaScript Library

#### Unit 8: Project - Validating Forms

- Setting up the Form
- Selecting the first Field
- Confirming Form Reset
- Conditional Form Submission
- Error Array
- Reporting the Error
- Allowing or Cancelling Submit
- Setting up the Error Array
- The Validation Script
- Validation: Required Fields
- Empty Strings
- Validation: Specific Types
- Password Matching

- Post Codes
- Checking a Radio Button
- Testing the Radio Buttons
- Numeric Values
- Disappearing Text Boxes ...
- Checking a Select Menu
- Minimum Password Length

#### Unit 9: Project - Slide Show

- Initialising and Global Variables
- Locating and Assigning the slides img element
- The slides Array
- The Next Slide
- Incrementing and Rolling over the Slide Number
- Getting the show going
- Stopping the Show

#### Unit 10: Project - Form Calculators

- A Mortgage Calculator
- Preparing the Form
- Initialisation & Setup
- The Calculate Function

#### Unit 11: Project - Jump Menus

- Jump Menus

#### Unit 12: Project - Changing Style Sheets

- Alternate Style Sheets
- Setting Up
- Variables
- Initialisation
- Adding an option



## Javascript for the Web Course Outline

### Introduction to JavaScript

- What JavaScript can and can't do
- Origin of JavaScript
- Client Side vs Server Side Code
- Versions of JavaScript
- Browser considerations
- Compatibility issues

### The Language

- Understanding functions
- Working with variables
- Manipulating variables
- Object oriented programming

### Working with HTML

- Contextual events
- The Document Object Model (DOM)
- The ID attribute
- Element Properties

### Capturing User Input

- Dialogue boxes
- Working with forms
- Simple form validation
- Navigation and control

### Controlling the browser

- Determining platform
- Pop-up elements
- Navigation roll-overs
- Additional techniques

### Debugging

- Testing and debugging
- Going live