

JavaScript and DOM Scripting

Course Length: 5 days

Price: \$2,500

Summary

This course is for any web developer who wants to learn to use JavaScript effectively to make their web pages more dynamic and functional and to reduce the number of roundtrips to the server.

Who Should Attend?

Students should have fundamental skills with HTML and CSS prior to attending this class. If you do not have a thorough knowledge of HTML, we recommend attending our "*Mastering HTML and CSS*" course. No prior programming experience is assumed.

Course Outline

Introduction to JavaScript Programming

- Introduction to Web Development and JavaScript
 - Web Application Architecture
 - Core Web Technologies
 - DOM Scripting and AJAX
 - Cross-browser Compatibility
 - User Accessibility
- Coding a JavaScript Application
 - Editing and Testing with Notepad and Firefox
 - Basic JavaScript Skills
 - Using Objects in JavaScript
 - Control Statements
 - Using Functions
- Testing and Debugging
 - Introduction to Testing and Debugging

- Debugging with the Firebug Extension of Firefox
- Debugging with Other Browsers (IE, Chrome, Safari, and Opera)
- XHTML Review
 - Introduction to XHTML
 - Coding Web Pages
 - Working with Tables
 - Working with Forms
- CSS Review
 - Introduction to CSS
 - Basic Skills
 - Coding Selectors
 - Working with Text and Lists
 - Working with the Box Model
 - Positioning Elements

JavaScript Essentials

- Getting Input and Displaying Output
- Working with Numbers, Strings, and Dates
- Coding Control Structures
 - Equality, Identity, Relational and Logical Operators
 - If Statements
 - Switch Statements
 - Loops
- Arrays
- Functions

- Objects
- Regular Expressions
- Exception Handling
- Data Validation

DOM Scripting

- Basic DOM Scripting
 - Working with DOM Nodes
 - Working with DOM HTML Nodes
 - Events
 - Image Rollovers
 - Preloading Images
 - Using Timers
- Advanced Event Handling
 - Event Types
 - Core Event Models
 - Mouse Event Models
 - Keyboard Event Models
- Advanced DOM Manipulation
 - Detecting when the DOM is Ready
 - Searching the DOM
 - Modifying the DOM
- Scripting CSS
- Scripting Tables and Forms
- Animation with DOM Scripting

Other JavaScript Skills

- Controlling the Web Browser
 - Scripting Browser Windows
 - Scripting Browser Objects
 - Using Cookies
- Using JavaScript Libraries
 - Using jQuery
 - Using Dojo
 - Using Dijits