



## jQuery Fundamentals

**Course #:** JS-102      **Duration:** 3 days

### Prerequisites

Basic familiarity with HTML and CSS.

### Details

You can think of jQuery as one of the four technologies that every professional web developer should master, along with HTML5, CSS3, and JavaScript. So this class is for any web developer today. That includes web developers who know HTML5 and CSS3 but are new to JavaScript and jQuery, web developers who have done JavaScript programming but are new to jQuery, web developers who have used jQuery for special-purpose applications but don't feel comfortable with it, or web developers who program in ASP.NET, JSP, or PHP on the server side and now want to master client-side programming.

### Software Needed

A text editor (Notepad is sufficient) and any web browser.

### Outline

#### jQuery Fundamentals

- **Introduction to Web Development**
  - How a Web Application Works
  - The Components of a JavaScript Application
  - Critical HTML and CSS Skills
  - How to Test a JavaScript Application
  - How to Use Aptana to Develop JavaScript Applications
- **Getting Started with JavaScript**
  - How to Include JavaScript in an HTML Document
  - The JavaScript Syntax
  - How to Work with JavaScript Data
  - How to Code Control Statements
  - How to Find Errors in Your Code
- **How to Work with Objects, Functions, and Events**
  - How to Use Objects to Work with Data
  - How to Use Functions
  - How to Handle Events
- **How to Test and Debug a JavaScript Application**
  - An Introduction to Testing and Debugging
  - How to Debug with Firebug

- Other Debugging Methods
- **How to Work with Arrays**
  - How to Create and Use an Array
- **How to Script the DOM with JavaScript**
  - DOM Scripting Properties and Methods
  - Two Critical Issues for JavaScript Applications
  - DOM Scripting Skills for Links and Images
  - How to Use Timers
- **Get Off to a Fast Start with jQuery**
  - Introduction to jQuery
  - Basics of jQuery Programming
  - A Working Subset of Selectors, Methods, and Event Methods
- **How to Use Effects and Animations**
  - How to Use Effects
  - A Slide Show Application with Effects
  - How to Use Animation
  - A Carousel Application with Animation
- **How to Use the DOM Manipulation and Traversal Methods**
  - The DOM Manipulation Methods
  - The Methods for Working with Styles and Positioning
  - The DOM Traversal Methods
- **How to Work with Forms and Data Validation**
  - Introduction to Forms and Controls
  - How to Use jQuery to Work with Forms
  - A Validation Application that uses JavaScript
  - How to Use a Plugin for Data Validation
  - A Validation Application that Uses the Validation Plugin
- **How to Create and Use Plugins**
  - Introduction to Plugins
  - How to Use Four of the Most Useful Plugins
  - How to Create Your own Plugins
  - A Web Page that Uses Two Plugins
- **jQuery UI Themes and Widgets**
  - Introduction to jQuery UI
  - How to Build and Use a jQuery UI Download
  - How to Use jQuery UI Widgets
- **How to Use jQuery UI Interactions and Effects**
  - How to Use Interactions
  - How to Use Effects
- **Ajax, JSON, and Blogger**
  - Introduction to Ajax
  - How to Use the jQuery Shorthand Methods for Ajax
  - How to Use the \$.ajax Method for Working with Ajax
  - How to Use Ajax with the API for Google's Blogger
- **API's for YouTube, Twitter, and Flickr**
- **API for Google Maps**
- **jQuery Mobile**
  - How to Work with Mobile Devices
  - How to Get Started with jQuery Mobile
  - How to Style Web Pages with jQuery Mobile
- **How to Enhance a jQuery Mobile Web Site**
  - How to Use the jQuery Mobile Documentation
  - How to Use jQuery Mobile for Content Formatting
  - How to Use jQuery Mobile for List Views
  - How to Use jQuery Mobile for Forms

