

Course Outline | AJAX and JavaScript Introduction

3 day(s)

Overview

AJAX - Asynchronous JavaScript and XML is a synergy of multiple technologies and communication with the server without a page refresh, enabling a rich and responsive web-based client application.

This AJAX Training course covers AJAX related technologies including JavaScript, DOM, CSS, XML etc., focusing on Object Oriented JavaScript and the main AJAX object: XMLHttpRequest.

Aspect Training's AJAX and JavaScript training course will take you through the different technologies that come together to form AJAX. The course will also show you how to bring these technologies together to create rich and exciting web sites.

Prerequisites

This course is designed for Web developers who already have programming experience of JavaScript front end development.

Course Outline

1 - AJAX - Asynchronous JavaScript and XML - Overview

- Web Applications - Pre and Post AJAX
- AJAX in the Real World
- Alternatives to AJAX

2 - XML In A Nutshell

- Syntax
- Rules

3 - JavaScript Refresher

- Primitive Data Types and Reference Types
- Variables
- Loops
- Function Definition and Function Call
- Objects
- Expressions, Operators and Escape Sequences

4 - Document Object Model (DOM)

- Window Object
- HTML & XML DOM
- Node
- Element
- Accessing Element Nodes
- innerHTML
- Properties of Element and Text Nodes
- Node Attributes
- Event Handling
- Key Word - this
- Removing Nodes
- Creating New Nodes
- Node Methods

5 - XMLHttpRequest Object

- XMLHttpRequest Instantiation
- XMLHttpRequest open() Method

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- Asynchronous vs Synchronous Requests
- Callback Function
- readyState

6 - CSS Refresher

- Syntax
- Units
- Selectors
- Positioning properties
- float Property
- Types of Positioning

7 - XML and AJAX

- Creating a DOM Document with JavaScript
- load XML
- Receiving XML Responses from the Server
- Passing XML to the Server

8 - Object-Oriented JavaScript

- Multiple Simultaneous Asynchronous Requests
- Prototype
- Extending BuiltIn Objects
- Object-Oriented
- XMLHttpRequest

9 - XSLT

- Overview
- XSLT in the Browsers
- Advantages and Disadvantages

10 - XPath

- Overview