

L +44 7989 401397

HTML5, CSS3, and JavaScript Development

(5 days)

Course overview

HTML5 and CSS3 are essential ingredients in modern-day web applications. Gone are the days of vendor-specific plugins and browser wars, and in their place we have the promise of truly open and powerful industry standards.

This course takes a detailed look at the new features in HTML5 and CSS3. The course also shows how to write effective JavaScript code to make the most of these standard technologies.

What you'll learn

- Using HTML5 GUI elements
- Implementing client-side behaviour using HTML5 APIs
- Using CSS3 style features
- Writing JavaScript code effectively

Prerequisites

- Familiarity with HTML and CSS
- Experience with JavaScript or other similar language

Course details

- HTML and CSS Core Principles: HTML core concepts and syntax; CSS core concepts and syntax
- Creating HTML5 and CSS3 Web Pages: HTML5 semantic tags; Additional HTML5 layout features; CSS3 enhancements
- JavaScript Core Principles: JavaScript essential syntax; Accessing and updating HTML content by using DOM; Getting started with jQuery; Event handling
- Using Forms: Defining a form to gather user input; Using the new HTML5 input elements; Validating input; Implementing JavaScript validation
- Implementing Ajax-Enabled Web Pages: Overview of Ajax; Using Ajax manually; Using Ajax with jQuery; Using Ajax2 and Cross-Origin Requests (CORS)
- Going Further with CSS3: Textual styling; Using CSS3 selectors; Additional CSS3 techniques
- Object-Oriented Programming in JavaScript: Creating objects; Defining properties and methods; Defining constructors; Understanding prototypes; Implementing inheritance
- Platform Integration: Using the File API; Implementing drag-and-drop; Incorporating audio and video; Using the Geolocation API
- Offline Working: Using local storage; Offline working; Using the application cache

- Creating Adaptive User Interfaces: Media queries; Creating applications that look good in different form factors; Creating printer-friendly applications
- Graphics: Using the canvas API; Using SVG; Techniques and recommendations
- CSS3 Animations and Effects: Transitions; 2D and 3D transformations; Key-frame animations
- Web Sockets: The need for Web Sockets; Implementing a Web Sockets client;
 Implementing a Web Sockets server
- Web Workers: Overview of Web Workers; Implementing a Web Worker; Asynchronous programming techniques