

Programming in HTML5 with JavaScript and CSS3

20480B



Delivery Type: Classroom

Duration: 5 days

Overview:

This course provides an introduction to HTML5, CSS3, and JavaScript. This course helps students gain basic HTML5/CSS3/JavaScript programming skills. This course is an entry point into both the Web application and Windows Store apps training paths. The course focuses on using HTML5/CSS3/JavaScript to implement programming logic, define and use variables, perform looping and branching, develop user interfaces, capture and validate user input, store data, and create well-structured application.

The lab scenarios in this course are selected to support and demonstrate the structure of various application scenarios. They are intended to focus on the

principles and coding components/structures that are used to establish an HTML5 software application. This course uses Visual Studio 2012, running on Windows 8.

Audience Profile:

- ✓ This course is intended for professional developers who have 6-12 months of programming experience and who are interested in developing applications using HTML5 with JavaScript and CSS3 (either Windows Store apps for Windows 8 or web applications).
- ✓ Students choosing to attend this course without a developer background should pay special attention to the training prerequisites. Developers who have more than 5 years programming experience may find that portions of this training are

fundamental in nature when presenting the syntax associated with certain programming tasks.

- ✓ Individuals who are interested in taking exam 70-480: Programming in HTML5 with JavaScript and CSS3, can also attend this course.

Course Completion:

After completing this course, students will be able to:

- ✓ Explain how to use Visual Studio 2012 to create and run a Web application.
- ✓ Describe the new features of HTML5, and create and style HTML5 pages.
- ✓ Add interactivity to an HTML5 page by using JavaScript.
- ✓ Create HTML5 forms by using different input types, and validate user input by using HTML5 attributes and JavaScript code.
- ✓ Send and receive data to and from a remote data source by using XMLHttpRequest objects and jQuery AJAX operations.
- ✓ Style HTML5 pages by using CSS3.
- ✓ Create well-structured and easily-maintainable JavaScript code.
- ✓ Use common HTML5 APIs in interactive Web applications.

- ✓ Create Web applications that support offline operations.
- ✓ Create HTML5 Web pages that can adapt to different devices and form factors.
- ✓ Add advanced graphics to an HTML5 page by using Canvas elements, and by using and Scalable Vector Graphics.
- ✓ Enhance the user experience by adding animations to an HTML5 page.
- ✓ Use Web Sockets to send and receive data between a Web application and a server.
- ✓ Improve the responsiveness of a Web application that performs long-running operations by using Web Worker processes.

Prerequisites:

Before attending this course, students must have at least three months of professional development experience.

In addition to their professional experience, students who attend this training should have a combination of practical and conceptual knowledge related to HTML5 programming.