

## Course Details

# Course 20486A

## Developing ASP.NET MVC 4 Web Applications

Length: 5 Days

Published: January 14, 2013

Language(s): English

Audience(s): Developers.

Level: 200

Technology: Microsoft Visual Studio 2012

Type: Course

Delivery Method: Instructor-led (classroom)

## Prerequisites

Before attending this course, students must have:

A minimum of two to three years of experience developing web-based applications by using Microsoft Visual Studio and Microsoft ASP.NET, proficiency in using the .NET Framework, and some familiarity with the C# language.

## Course Outline

### Module 1: Exploring ASP.NET MVC 4

- Overview of Microsoft Web Technologies
- Overview of ASP.NET 4.5
- Introduction to ASP.NET MVC 4

### Module 3: Developing ASP.NET MVC 4 Models

- Creating MVC Models
- Working with Data

### Module 5: Developing ASP.NET MVC 4 Views

- Creating Views with Razor Syntax
- Using HTML Helpers
- Reusing Code in Views

### Module 2: Designing ASP.NET MVC 4 Web Applications

- Planning in the Project Design Phase
- Designing Models, Controllers, and Views

### Module 4: Developing ASP.NET MVC 4 Controllers

- Writing Controllers and Actions
- Writing Action Filters

### Module 6: Testing and Debugging ASP.NET MVC 4 Web Applications

- Unit Testing MVC Components
- Implementing an Exception Handling Strategy

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### Module 7: Structuring ASP.NET MVC 4 Web Applications

- Analyzing Information Architecture
- Configuring Routes
- Creating a Navigation Structure

### Module 8: Applying Styles to ASP.NET MVC 4 Web Applications

- Using Template Views
- Applying CSS to an MVC Application
- Creating an Adaptive User Interface

### Module 9: Building Responsive Pages in ASP.NET MVC 4 Web Applications

- Using AJAX and Partial Page Updates
- Implementing a Caching Strategy

### Module 10: Using JavaScript and jQuery for Responsive MVC 4 Web Applications

- Rendering and Running JavaScript Code
- Using jQuery and jQueryUI

### Module 11: Controlling Access to ASP.NET MVC 4 Web Applications

- Implementing Authentication and Authorization
- Assigning Roles and Membership

### Module 12: Building a Resilient ASP.NET MVC 4 Web Application

- Developing Secure Sites
- State Management

### Module 13: Using Windows Azure Web Services in ASP.NET MVC 4 Web Applications

- Introduction to Windows Azure
- Designing and Writing Windows Azure Services
- Consuming Windows Azure Services in a Web Application

### Module 14: Implementing Web APIs in ASP.NET MVC 4 Web Applications

- Developing a Web API
- Calling a Web API from Mobile and Web Applications

### Module 15: Handling Requests in ASP.NET MVC 4 Web Applications

- Using HTTP Modules and HTTP Handlers
- Using Web Sockets

### Module 16: Deploying ASP.NET MVC 4 Web Applications

- Deploying Web Applications
- Deploying MVC 4 Applications