

Developing ASP.NET MVC 5 Web Applications

Duration: 5 Days · **Training format:** Virtual Classroom / Online

Description

This ASP.NET MVC training class provides students with the knowledge and skills required to develop advanced ASP.NET MVC applications using .NET Framework tools and technologies. Students will also learn how to enhance the performance and scalability of the web applications.

This course is intended for professional web developers who use Microsoft Visual Studio in an individual-based or team-based, small to large-sized development environment. Candidates for this course are interested in developing advanced web applications and want to manage the rendered HTML comprehensively. They want to create websites that separate the user interface, data access, and application logic.

Delegates will learn how to

- describe the Microsoft Web Technologies stack and select an appropriate technology to use to develop any given application.
- design the architecture and implementation of a web application that will meet a set of functional requirements, user interface requirements, and address business models.
- create MVC Models and write code that implements business logic within Model methods, properties, and events.
- add Controllers to an MVC Application to manage user interaction, update models, and select and return Views.
- create Views in an MVC application that display and edit data and interact with Models and Controllers.
- run unit tests and debugging tools against a web application in Visual Studio and configure an application for troubleshooting.
- develop a web application that uses the ASP.NET routing engine to present friendly URLs and a logical navigation hierarchy to users.
- implement a consistent look and feel, including corporate branding, across an entire MVC web application.
- use partial page updates and caching to reduce the network bandwidth used by an application and accelerate responses to user requests.
- write JavaScript code that runs on the client side and utilizes the jQuery script library

to optimize the responsiveness of an MVC web application.

- implement a complete membership system in an MVC web application.
- build an MVC application that resists malicious attacks and persists information about users and preferences.
- describe how to write a Microsoft Azure web service and call it from an MVC application.
- describe what a Web API is and why developers might add a Web API to an application.
- modify the way browser requests are handled by an MVC application.
- describe how to package and deploy an ASP.NET MVC web application from a development computer to a web server for staging or production.

Outline

Exploring ASP.NET MVC 5

Designing ASP.NET MVC 5 Web Applications

Developing ASP.NET MVC 5 Models

Developing ASP.NET MVC 5 Controllers

Developing ASP.NET MVC 5 Views

Testing and Debugging ASP.NET MVC 5 Web Applications

Structuring ASP.NET MVC 5 Web Applications

Applying Styles to ASP.NET MVC 5 Web Applications

Building Responsive Pages in ASP.NET MVC 5 Web Applications

Using JavaScript and jQuery for Responsive MVC 5 Web Applications

Controlling Access to ASP.NET MVC 5 Web Applications

Building a Resilient ASP.NET MVC 5 Web Application

Implementing Web APIs in ASP.NET MVC 5 Web Applications

Handling Requests in ASP.NET MVC 5 Web Applications

Deploying ASP.NET MVC 5 Web Applications

Prerequisites

There is no prerequisite