

# Developing ASP.NET MVC 5 Web Applications

Eğitim Tipi: Classroom

Süre: 5 Day

## Eğitim Hakkında

In this course, you will learn to develop advanced ASP.NET Model-View-Controller (MVC) 4 applications using .NET Framework 4.5 tools and technologies. You will learn how to enhance the performance and scalability of the web site application through coding activities. You will also be introduced to ASP.NET MVC 4 with comparison to Web Forms so you know when each should/could be used. You will learn how to create web sites that separate the user interface, data access, and application logic.

## Önkoşullar

There are no prerequisites for this course.

## Kimler Katılmalı

- Professional web developers who use Microsoft Visual Studio 2010 in an individual-based or team-based, small-sized to large development environment
- Developers who are interested in developing advanced web applications and want to manage the rendered HTML comprehensively, as well as learn to create web sites that separate the user interface, data access, and application logic

## Neler Öğreneceksiniz

- Microsoft Web Technologies stack and select an appropriate technology to use to develop any given application
- Architecture and implementation of a web application that will meet a set of functional requirements, user interface requirements, and address business models
- Create MVC 4 Models and write code that implements business logic within model methods, properties, and events
- Add controllers to an MVC 4 application to manage user interaction, update models, and select and return views
- Create views in an MVC 4 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 2012 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 4 web application
- Use partial page updates and caching to reduce the network bandwidth used by an application and accelerates 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 4 web application.
- Implement a complete membership system in an MVC 4 web application
- Build an MVC application that resists malicious attacks and persists information about users and preferences
- Write a Windows Azure web service and call it from an MVC 4 application
- Web API and why developers might add a Web API to an application
- Modify the way browser requests are handled by an MVC 4 application
- Package and deploy an ASP.NET MVC 4 web application from a development computer to a web server for staging or production

## Eğitim İçeriği

### 1. Exploring ASP.NET MVC 4

- Microsoft Web Technologies
- ASP.NET 4.5
- ASP.NET MVC 4

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

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

### **3. Developing ASP.NET MVC 4 Models**

- Creating MVC Models
- Working with Data

### **4. Developing ASP.NET MVC 4 Controllers**

- Writing Controllers and Actions
- Writing Action Filters

### **5. Developing ASP.NET MVC 4 Views**

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

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

- Unit Testing MVC Components
- Implementing an Exception Handling Strategy

### **7. Structuring ASP.NET MVC 4 Web Applications**

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

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

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

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

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

### **10. Using JavaScript and jQuery for Responsive MVC 4 Web Applications**

- Rendering and Running JavaScript Code
- Using jQuery and jQueryUI

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

- Implementing Authentication and Authorization
- Assigning Roles and Membership

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

- Developing Secure Sites
- State Management

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

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

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

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

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

- Using HTTP Modules and HTTP Handlers
- Using Web Sockets

### **16. Deploying ASP.NET MVC 4 Web Applications**

- Deploying Web Applications and MVC 4 Applications