

M1: Exploring ASP.NET MVC4

- o Overview of Microsoft Web Technologies
- o Overview of ASP.NET 4.5
- o Introduction to ASP.NET MVC 4
- o Designing Models, Controllers, and Views

M2: Developing ASP.NET MVC 4 Models

- o Creating MVC Models
- o Working with Data

M3: Developing ASP.NET MVC 4 Controllers

- o Writing Controllers and Actions
- o Writing Action Filters

M4: Developing ASP.NET MVC 4 Views

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

M5: Testing and Debugging ASP.NET MVC 4 Web Applications

- o Unit Testing MVC Components
- o Implementing an Exception Handling Strategy

M6: Structuring ASP.NET MVC 4 Web Applications

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

M7: Applying Styles to ASP.NET MVC 4 Web Applications

- o Using Template Views
- o Applying CSS to an MVC Application

- o Creating an Adaptive User Interface

M8: Building Responsive Pages in ASP.NET MVC 4 Web Applications

- o Using AJAX and Partial Page Updates

- o Implementing a Caching Strategy

M9: Using JavaScript and jQuery for Responsive MVC 4 Web Applications

- o Rendering and Executing JavaScript Code

- o Using jQuery and jQuery UI

M10: Controlling Access to ASP.NET MVC 4 Web Applications

- o Implementing Authentication and Authorization

- o Assigning Roles and Membership

M11: Building a Resilient ASP.NET MVC 4 Web Application

- o Developing Secure Sites

- o State Management

M12: Using Windows Azure Web Services in ASP.NET MVC 4 Web Applications

- o Introducing Windows Azure

- o Designing and Writing Windows Azure Services

- o Consuming Windows Azure Services in a Web Application

M13: Implementing Web APIs in ASP.NET MVC 4 Web Applications

- o Developing a Web API

- o Calling a Web API from Mobile and Web Applications

M14: Handling Requests in ASP.NET MVC 4 Web Applications

- o Using HTTP Modules and HTTP Handlers

- o Using Web Sockets

M15: Deploying ASP.NET MVC 4 Web Applications

o Deploying a Web Application

o Deploying an MVC 4 Application

*Each of these modules will consist of three parts:

- Lecture covering module's topics

- Coding practice covering module's topics

- Short test covering module's topics