

ASP.NET MVC 3 Web Development

(3 days hands-on)

Over the last few years there has been a steady move towards Model-View-Controller (MVC) architectures for Web applications. MVC Web applications offer a clean separation of concerns between the business-logic classes, Web pages, and the controller. Microsoft ASP.NET MVC 3 offers Web developers all the benefits of MVC allied with all the power of the .NET platform. This course provides full coverage of ASP.NET MVC 3.

Contents:

- **Introduction to ASP.NET MVC:** Recap of ASP.NET Web development; Key benefits of ASP.NET MVC; The role of the model, view, and controller
- **Getting Started with ASP.NET MVC:** Preparing your development environment for ASP.NET MVC; Creating an ASP.NET MVC project; Understanding the structure of an ASP.NET MVC project; Naming conventions; Creating views; Defining controllers; Defining a data model
- **Creating a Complete ASP.NET MVC Application:** Creating strongly-typed views; Understanding URLs and action methods; Using HTML helpers; Handling form post-backs; Data validation
- **Using the Razor View Engine:** Razor design goals; Implementing a Razor view; Razor syntax; Accessing model data in Razor views
- **Industrial-Strength ASP.NET MVC Applications:** ASP.NET application architecture best practices; Implementing a repository and Entity Framework data model; Using Dependency Injection; Implementing a custom controller factory; Test-Driven Development with ASP.NET MVC
- **View Techniques:** Defining and using custom HTML helpers; Defining a layout/master page; Using styles; Defining and using partial views; Razor helper method syntax
- **Implementing Navigation:** Defining view-model classes; Implementing data filtering in a controller; Understanding the routing mechanism; Adding custom entries to a route table; Defining defaults, parameters, and validation; Generating URLs and hyperlinks; Custom route constraints
- **State Management:** Using hidden fields; Session and application state; Custom model bindings
- **Using Ajax and jQuery with ASP.NET MVC:** Overview of Ajax and ASP.NET MVC; Unobtrusive Ajax; Using Ajax action links; Overview of jQuery; jQuery techniques; Using jQuery UI
- **Additional ASP.NET MVC3 Techniques:** View scaffold templates; Controller scaffold templates; Dependency injection with Unity

Additional (optional) topics:

- **Test Driven Development with ASP.NET MVC:** Recap of TDD; Walk-through of using TDD with ASP.NET MVC
- **Additional Techniques:** Controller techniques; Filters; Model binding

Who Should Attend:

ASP.NET developers who want to use the MVC architecture.

Prerequisites:

3-6 months experience of ASP.NET Web development using in C#.