.NET Development and Visual Studio

ASPMVC5: Microsoft ASP.NET MVC 5 Web Developer Training

Leap into ASP.NET MVC 5 using Visual Studio 2013. Learn how to build web applications with the latest version of the Microsoft ASP.NET MVC 5 framework. This course is compatible with Microsoft Official Curriculum: MOC 20486. This live class is available virtually with RemoteLive™ or locally at our Phoenix, AZ location.

$2,995.00

- 4 Days

Upcoming Dates

Course Description

Throughout the class you'll learn about core MVC concepts such as Model classes, Views and Controllers. You'll also see how routes are used and how they can be customized, write custom razor helpers and templates, and learn how to validate data using data annotations and the fluent API. Along with core MVC concepts you'll also learn how to query databases using Entity Framework. This includes creating custom DbContext classes, writing LINQ queries, building a repository layer to encapsulate data access code, and more. Finally, you'll learn how client-side technologies such as jQuery and AngularJS can be used to interact with RESTful services created using ASP.NET Web API.

If you're looking for a hands-on look at what the ASP.NET MVC framework offers then this class is for you!

Please note that this course is about ASP.NET MVC5 and does not cover ASP.NET Core.

If you are looking for ASP.NET Core, take our 4-day ASPCORE: ASP.NET Core MVC Development training class.

Course Outline

1. Model, View Controller Day

The goal of the first day is to understand how to create models, views, controllers, and routes and how these elements of a MVC application fit together.

- Using the Visual Studio 2013 One ASP.NET Project Template
- Creating a simple ASP.NET MVC application
- Understanding Routing, Models, View, Controllers
- Using the Razor View Engine
- Creating Strongly-Typed Views

2. View and Validation Day

The goal of this second day is to understand how you can compose MVC views from layouts and partials, and how you can validate form data.

- Working with MVC Helpers
- Validating form data

- Using ASP.NET MVC Layouts
- Using ASP.NET MVC Partials
- Using ASP.NET MVC Templates
- Using ASP.NET MVC Areas

3. Database Day

The third day is focused on retrieving and storing information in a database. You learn how to use LINQ and the Entity Framework to interact with a SQL Server database. You also learn how to take advantage of patterns such as the Repository Pattern and Dependency Injection to write more maintainable and testable code.

- An introduction to LINQ
- Building a database-driven application with the Microsoft Entity Framework
- Using the Repository Pattern
- Using Dependency Injection frameworks
- Creating Unit Tests and using Mock Object frameworks

4. Security and Single Page App Day (SPA Day)

On this final day of the workshop, you learn how to build secure ASP.NET applications and how to create Single Page Applications (SPAs). You learn how to use jQuery, KnockoutJS, and the ASP.NET Web API to build applications that execute in the browser.

- Security
- Common ASP.NET Security vulnerabilities and how to avoid them
- Securing your web application with new ASP.NET Identity system
- Single Page Apps
- Performing Ajax requests with jQuery
- Exposing data to the client with the ASP.NET Web API
- Building client-side MVVM applications with KnockoutJS

Audience

This course is intended for any Developer interested in building web applications using ASP.NET MVC. This class also is appropriate for ASP.NET Web Forms developers who need to learn how to migrate to ASP.NET MVC.

Prerequisites

Before attending this course, students should be familiar with:

- The .NET Framework, the C# programming language and any knowledge of SQL Server is helpful but not required.

What You Will Learn

After completing this course, you will have an in-depth understanding of:

- How to create models, views, controllers, and routes and how these elements of a MVC application fit together.
- How to compose MVC views from layouts and partials, and how you can validate form data
- Retrieving and storing information in a database.
- Use LINQ and the Entity Framework to interact with a SQL Server database
- Use patterns such as the Repository Pattern and Dependency Injection to write more maintainable and testable code.
- How to build secure ASP.NET applications and how to create Single Page Applications (SPAs).
- Use jQuery, KnockoutJS, and the ASP.NET Web API to build applications that execute in the browser.