

ASP.NET 4.0 Web Development

(5 days hands-on)

When Microsoft introduced ASP.NET, they revolutionized Web development. The clean separation between Web design and code-behind implementation classes brings some much-needed structure and discipline to Web applications, and gives full access to the power of the .NET Framework class library.

This course can be used as part of your preparation for Microsoft Exam 70-515: TS: Web Applications Development with Microsoft .NET Framework 4.

Contents:

- **Introduction to ASP.NET 4.0:** Evolution of ASP.NET Web development; Websites and Web Projects; Designing Web pages in Visual Studio 2010; Understanding code-behind files; Running/debugging a Web application
- **Understanding Web Forms:** Adding controls to a Web form; The ASP.NET event model; Web Forms processing stages; Overview of View state; Understanding requests and responses; Globalization; Web parts
- **Using ASP.NET Server Controls:** Types of server controls; HTML server controls; Web controls; List controls; Validation controls; Rich controls
- **Defining Themes and Master Pages:** Overview of themes and skins; Using style sheets with themes; Creating and using master pages
- **Implementing Navigation Support:** Programmatically connecting pages; Defining a sitemap; Displaying a sitemap
- **The ASP.NET Application Model:** Application lifetime; Handling application events; Understanding web.config
- **State Management:** View state; Query strings; Cookies; Session state; Application state
- **Defining User Controls:** Overview of user controls; Creating a user control; Adding code to a user control; Using a user control in a Web page
- **Defining Server Controls:** Overview of server controls; Creating a server control; Defining adaptive rendering; Extending existing Web controls
- **Introduction to Data Access:** .NET data providers; Connecting to a database; Connection strings in web.config; Executing a query; Processing a result set; Overview of DataSets
- **Data Binding:** Single-value binding; Data source controls; Selecting and updating records; Rich data controls; LINQ; Data services
- **Client-side Scripting and Ajax:** ASP.NET AJAX; jQuery; Script libraries and server callbacks; Accessing services
- **ASP.NET MVC:** Overview of ASP.NET MVC; Controllers and actions; Creating and customizing views
- **Caching:** Caching fragments of Web pages; Data caching; Configuring caching; Defining cache dependencies
- **Security:** Authentication options; Authorization and roles; ASP.NET membership and profiles APIs
- **Deployment:** Overview of IIS; Managing Websites; Deploying ASP.NET applications to IIS

Who Should Attend:

Developers who want to develop Web applications for the .NET 4.0 platform

Prerequisites:

3-6 months experience in C#. Familiarity with Web development is an advantage.