Course Title: ASP .NET Programming

Duration: Five (5) Days

Class Schedule: 9:00am to 5:00pm


Instructor: Microsoft Certified Trainer (MCT)

Total Hours: 35 Hours

Course Contents:

I. Overview of the Microsoft .NET Framework

This lesson describes the key features of the Microsoft .NET Framework and ASP.NET. Exploring the Development Environment

- Introduction to the .NET Framework
- Overview of ASP.NET

II. Creating Web Applications by Using Microsoft Visual Studio 2008 and Microsoft .NET-Based Languages

This lesson explains how to create a Web application by using Visual Studio 2008. It also describes how to create a component by using Visual Basic or C#.

Understanding Programming Concepts

- Overview of Visual Studio 2008
- Creating an ASP.NET Web Application Project
- Overview of the Microsoft .NET-Based Languages
- Creating a Component by Using Visual Studio 2008

III. Creating a Microsoft ASP.NET Web Form

This lesson describes how to create a Microsoft ASP.NET Web Form that contains server controls and uses a master page.

- Creating Web Forms
- Adding Server Controls to a Web Form
- Creating Master Pages
IV. Adding Code to a Microsoft ASP.NET Web Form

This lesson explains how to add functionality to server controls that are on an ASP.NET Web form.

- Implementing Code-Behind Pages
- Adding Event Procedures to Web Server Controls
- Handling Page Events

V. Tracing in Microsoft ASP.NET Web Applications

This lesson explains how to view runtime information about a Web application by using the Trace and Debug objects.

- Tracing and the Trace Object
- Remote Debugging

VI. Validating User Input

This lesson explains how to validate user input by using validation controls.

- Overview of User Input Validation
- Validation Controls
- Page Validation

VII. Creating and Implementing User Controls

This lesson explains how to create and implement a user control.

- Adding User Controls to an ASP.NET Web Form
- Creating User Controls

VIII. Accessing Data with Microsoft ADO.NET and Visual Studio 2008

This lesson explains how to access data by using Microsoft ADO.NET 3.5 and the built-in data access tools available in Visual Studio 2008.

- Overview of ADO.NET
- Connecting to a Database
- Accessing Data
- Accessing Multiple Tables

IX. Accomplishing Complex Data Access Tasks

This lesson explains how to call stored procedures from an ASP.NET Web application. It also covers how to access data from a database by using LINQ to SQL.

- Overview of Stored Procedures
- Calling Stored Procedures
- Data Access with LINQ to SQL
X. Reading and Writing XML Data

This lesson explains how to access and manipulate data that was stored by using Extensible Markup Language (XML).

- Overview of XML Architecture in ASP.NET
- XML and the DataSet Object
- Managing XML Data
- Accessing XML Data by Using the XML Web Server Control

XI. Creating an ASP.NET AJAX Application

This lesson explains how to create and extend an ASP.NET AJAX application.

- Introduction to ASP.NET AJAX
- Creating an ASP.NET AJAX Application by Using the ASP.NET AJAX Extensions
- Extending an Application by Using the ASP.NET AJAX Control Toolkit

XII. Delivering Dynamic Content with Microsoft Silverlight

This lesson explains how to create a Microsoft Silverlight-based application that delivers dynamic content.

- Overview of Microsoft Silverlight
- Creating Silverlight-Based Applications with Visual Studio 2008

XIII. Consuming and Creating XML Web Services

This lesson explains how to call a Web service from an ASP.NET Web application and incorporate the returned data into a Web application.

- Overview of Using XML Web Services
- Calling an XML Web Service
- Creating an XML Web Service

XIV. Managing State

This lesson explains how to store ASP.NET Web application and session data by using a variety of methods.

- State Management
- Application and Session Variables
- Cookies and Cookieless Sessions

XV. Configuring, Optimizing, and Deploying a Microsoft ASP.NET Web Application

This lesson explains how to configure and deploy an ASP.NET Web application.

- Implementing the Cache Object
- ASP.NET Output Caching
- Configuring an ASP.NET Web Application
Deploying an ASP.NET Web Application

XVI. Securing a Microsoft ASP.NET Web Application

This lesson explains how to secure an ASP.NET Web application by using a variety of technologies, including authentication and authorization.

- Web Application Security Overview
- Windows-Based Authentication
- Forms-Based Authentication