ASP.NET Training Outline

(Duration 6 Weeks)

Prerequisites

- All students should know basic of HTML for Asp.net applications.
- Basic of SQL Server for Data Access and understanding ADO.net.

Programming with .NET Framework 4.5

1: Introduction to .NET Programming

Concepts

- Framework
- Common Language Runtime
- Base Class Library
- Common Type System (CTS)
- Intermediate Language
- Assemblies
- Namespaces

Programming with C#

- Teaching IDE Visual Studio 2010
- Variables
- Comments
- XML Documentation
- Constants
- Keywords
- Data Types
- Reference Types and Value Types
- Control Statements
- Conditional Statements
- Switch Statement
- Loops
- Jump Statements
- Go to
- break
- Continue
- Return
- Arrays
- Exception Handling
- Constructors
- Destructors
- Object Oriented Programming (OOP) Concepts

2: Developing Web Applications using ASP.NET 4.5

Objective of this module

First things first

Creating ASP.NET Application

Components an ASP.NET Application

ASP.NET Page Lifecycle

Server Controls

State Management

Master Pages

User Controls and Custom Controls

Control Binding with Data

Accessing Data from Controls

Form Validation

Site Navigation

Themes

Caching

Configuration

Globalization and Localization

Security
- Authentication
- Authorization
- Impersonation
- Code Access Security

Creating A dummy application for understanding

3: Data access with ADO.NET

First things first

Introduction to ADO.NET

Data Structures and Data Access Components

Data Binding

Data Access using SQL Server 2005

4: Web Services

Basics of Web Service

How to write a Web Service

How to explore a Web Service

How to consume a Web Service

5. Introduction NET Framework 4.5

- Comparison and Major Changes in framework 2.0, 3.5, 4.0
- Control Rendering Compatibility Version Setting in the Web.config File
- Client ID Mode Changes
- Html Encode and url Encode Now Encode Single Quotation Marks
- ASP.NET Page (.aspx) Parser is Stricter
- Browser Definition Files Updated
- System.Web.Mobile.dll Removed from Root Web Configuration File
- ASP.NET Request Validation
- Default Hashing Algorithm Is Now HMACSHA256
- Configuration Errors Related to New ASP.NET 4 Root Configuration
- ASP.NET 4 Child Applications Fail to Start When Under ASP.NET 2.0 or ASP.NET 3.5 Applications
- ASP.NET 4 Web Sites Fail to Start on Computers Where SharePoint Is Installed
- The Http Request.FilePath Property No Longer Includes Pathinfo Values
- ASP.NET 2.0 Applications Might Generate Http Exception Errors that Reference eurl.axd
- Event Handlers Might Not Be Not Raised in a Default Document in IIS 7 or IIS 7.5 Integrated Mode
- Changes to the ASP.NET Code Access Security (CAS) Implementation

- Membership User and Other Types in the System.Web.Security Namespace Have Been Moved
- System.Web.Security Types for Passport are Obsolete
- The MenuItem.PopOutImageUrl Property Fails to Render an Image in ASP.NET4
- Menu.StaticPopOutImageUrl and Menu.DynamicPopOutImageUrl Fail to Render Images When Paths Contain Backslashes