

Programming ASP.NET Essentials

Visual Studio

5
days

course code
UNASP

Learning Goals

This course covers the fundamentals of Web site implementation by using ASP.NET Web Forms. This course focuses on using the Visual Studio environment and the Microsoft .NET platform to build powerful Web applications.

Target Audience

This course is intended for Web developers who want to learn how to create ASP.NET Web Forms Applications by using Visual Studio.

Prerequisites

Participants of this course need to have a good understanding of the .NET platform and have a good knowledge of C# or VB.NET.

u2u Course Outline

Introducing .NET and ASP.NET

Overview of the .NET Framework and ASP.NET Web Forms. ASP.NET versus ASP.NET AJAX. Evolving from inline code to code-behind. Compile-on-demand for all resource.

Creating and Programming a Web Application

Creating Web Applications and Web Projects. What is a Web Form? The ASP.NET Execution Model. The ASP.NET AJAX Execution Model. The Page Event Life Cycle. Tracing.

Adding and Configuring Server Controls

HTML Controls. HTML Server Controls. ASP.NET Server Controls. Validation Controls. ASP.NET AJAX Server Controls. ASP.NET AJAX Control Toolkit.

State Management

Intrinsic objects: HttpRequest, HttpResponse, QueryString... Using ViewState. Working with Cookies. Storing Application State. Storing Session State. Storing state in the ASP.Net Cache Object. Cache Dependencies. Using output Caching.

Accessing Data

Intro to ADO.NET and Entity Framework. Decoupling conceptual data structure from logical data structure. Generating the model from the database schema. LINQ to Entities. Change Tracking. Modifying data. Defining Entities and Relationships. Using Stored Procedures. Transactions. Databinding Expressions. Databinding with Controls. Templates and DataBinding. DetailsView. FormView. GridView. DataSource controls. SqlDataSource, LinqDataSource and EntityDataSource, ObjectDataSource. Using ListView and DataPager controls.

ASP.NET Dynamic Data

Building Dynamic Data pages. Customizing Dynamic Data pages. Validating data with Data Annotations.

Working with Master Pages and Themes

Master and content Pages. Applying and nesting master pages. Programming Master pages. Using CSS and themes.

Navigation

Overview. Site Navigation. Treeview. Menu Controls. Site Maps. Security Trimming. Cross-Page Postbacks. Routing.

Securing an ASP.NET Web Forms Application

Windows Authentication. Forms Authentication. Membership service. Role service. Security Controls.

Personalization: User Profiles

Personalization. Creating User Profiles. Working with Complex and Custom Types. Grouping.

Creating Custom Web Controls.

Creating Controls and Components. Business Components. Creating User Controls. Creating Custom Web Controls.

Working with Web Parts

WebPartManager. WebPartZone. Web Parts. Adding controls as Web Parts. Adding a WebPart. EditorZone. User Control as a Web Part. Creating a Custom Web Part. Adding Custom Verbs. Adding Personalization support. Exporting and Importing Web Parts. Connecting Web Parts.

Globalization and Localization

ASP.NET Local and Global resources. Making your web applications multilingual. Handling different date, number and currency formats. Changing cultures at runtime.

Configuration and Deployment

ASP.NET Configuration Files. Reading Configuration Settings. Custom Application Settings. Health Monitoring.

WCF Essentials

Building and consuming WCF Services with Visual Studio.