

Developing ASP.NET Web Applications using Visual Studio .NET

Course Summary

Description

This instructor-led course will teach Microsoft VB programmers and beginning Web developers the fundamentals of Web application site implementation by using Microsoft ASP.NET and Microsoft Visual Basic .NET. This course focuses on using the Microsoft Visual Studio .NET environment and the Microsoft .NET platform to create an ASP.NET Web application that delivers dynamic content to a Web site.

Topics

- Overview of the Microsoft .NET Framework
- Using Microsoft Visual Studio .NET
- Using Microsoft .NET-Based Languages
- Creating a Microsoft ASP.NET Web Form
- Adding Code to a Microsoft ASP.NET Web Form
- Tracing in Microsoft ASP.NET Web Applications
- Validating User Input
- Creating User Controls
- Accessing Relational Data Using Microsoft Visual Studio .NET
- Accessing Data with Microsoft ADO.NET
- Calling Stored Procedures with Microsoft ADO.NET
- Reading and Writing XML Data
- Consuming and Creating XML Web Services
- Managing State
- Configuring, Optimizing, and Deploying a Microsoft ASP.NET Web Application
- Securing a Microsoft ASP.NET Web Application

Audience

This course is intended for beginning Web developers who have knowledge of the Hypertext Markup Language (HTML) or dynamic HTML (DHTML), along with some knowledge of a scripting language, such as Visual Basic Scripting Edition or Microsoft JScript. This course is also appropriate for Visual Basic 6.0 developers who need to learn ASP.NET.

Prerequisites

Students attending this class should have the ability to create HTML or DHTML including tables, images and forms. They should also have programming experience using Visual Basic .NET including declaring variables, using loops and conditional statements.

Duration

Five days

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Course Outline

- I. Overview of the Microsoft .NET Framework**
 - A. Introduction to the .NET framework
 - B. Overview of ASP.NET
 - C. Overview of the lab application
 - D. Resources

- II. Using Microsoft Visual Studio .NET**
 - A. Overview of Visual Studio .NET
 - B. Creating an ASP.NET web application project

- III. Using Microsoft .NET-Based Languages**
 - A. Overview of the .NET-based languages
 - B. Comparison of the .NET-based languages
 - C. Creating a component using Visual Studio .NET

- IV. Creating a Microsoft ASP.NET Web Form**
 - A. Creating web forms
 - B. Using server controls

- V. Adding Code to a Microsoft ASP.NET Web Form**
 - A. Using code-behind pages
 - B. Adding event procedures to web server controls
 - C. Using page events

- VI. Tracing in Microsoft ASP.NET Web Applications**
 - A. Understanding tracing
 - B. Remote debugging

- VII. Validating User Input**
 - A. Overview of user input validation
 - B. Using validation controls
 - C. Page validation

- VIII. Creating User Controls**
 - A. Adding user controls to an ASP.NET web form
 - B. Creating user controls

- IX. Accessing Relational Data Using Microsoft Visual Studio .NET**
 - A. Overview of ADO.NET
 - B. Creating a connection to the Database
 - C. Displaying a DataSet in a list-bound control

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Course Outline (cont'd)

X. Accessing Data with Microsoft ADO.NET

- A. Introduction to using ADO.NET
- B. Connecting to a Database
- C. Accessing data with DataSets
- D. Using multiple tables
- E. Accessing data with DataReaders

XI. Calling Stored Procedures with Microsoft ADO.NET

- A. Overview of stored procedures
- B. Calling stored procedures

XII. Reading and Writing XML Data

- A. Overview of XML architecture in ASP.NET
- B. XML and the DataSet object
- C. Working with XML data
- D. Using the XML web server control

XIII. Consuming and Creating XML Web Services

- A. Overview of using XML web services
- B. Calling an XML web service by HTTP
- C. Using a proxy to call an XML web service
- D. Creating an XML web service

XIV. Managing State

- A. State management
- B. Application and session variables
- C. Cookies and cookieless sessions

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

- A. Using the cache object
- B. Using ASP.NET output caching
- C. Configuring an ASP.NET Web application
- D. Deploying an ASP.NET Web application

XVI. Securing a Microsoft ASP.NET Web Application

- A. Web application security overview
- B. Working with Windows-based authentication
- C. Working with forms-based authentication
- D. Overview of Microsoft passport authentication

XVII. Review

- A. Review of material covered
- B. Introduction to the game

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