



Developing Microsoft ASP.NET Web Applications Using Visual Studio .NET (Course 2310)

Duration: 5 days

Introduction

This five-day, instructor-led course will teach Microsoft Visual Basic® 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.

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 wanting to learn ASP.NET.

At Course Completion

After completing this course, students will be able to:

- Explain the Microsoft .NET Framework and ASP.NET
- Create a component in Visual Basic .NET or C#.
- Create an ASP.NET Web application project by using Visual Studio .NET.
- Add server controls to an ASP.NET Web Form.
- Create and populate ASP.NET Web Forms
- Add functionality to server controls that are on an ASP.NET Web Form.
- Use the Trace and Debug objects that are provided with Visual Studio .NET.
- Use validation controls to validate user input.
- Create a user control.
- Access data by using the built-in data access tools that are available in Visual Studio .NET.
- Use Microsoft ADO.NET to access data in an ASP.NET Web application.
- Accomplish complex data access tasks from an ASP.NET Web application.
- Access Extensible Markup Language (XML) data and read it into a DataSet.



- Call an XML Web service from an ASP.NET Web application and incorporate the returned data into a Web application.
- Store application and session data by using a variety of methods.
- Configure and deploy an ASP.NET Web application.
- Help protect an ASP.NET Web application by using a variety of technologies

Prerequisites

Before attending this course, students must have the ability to create HTML or DHTML, including:

- Tables
- Images
- Forms

Programming experience using Visual Basic .NET, including:

- Declaring variables
- Using loops
- Using conditional statements

Students can satisfy the prerequisites for this course by completing Course 1912—Introduction to Web Development Technologies.



Course Outline

Module 1: Overview of the Microsoft .NET Framework

Take a closer look: **Download Sample Module 1** (Portable Document Format, 1.02 MB).

This module introduces the conceptual framework of the .NET Framework and ASP.NET.

Lessons

- Introduction to the .NET Framework
- Overview of ASP.NET
- Overview of the Lab Application Resources

After completing this module, students will be able to:

- Explain the advantages of using the .NET Framework.
- Understand the key functionality and purpose of using ASP.NET when developing Web applications.
- Understand the basic functionality of the Web application that you will build in the labs throughout the course.

Module 2: Using Microsoft Visual Studio .NET

Take a closer look: **Download Sample Module 2** (Portable Document Format, 1.13 MB).

This module explains how to create new projects, and how to use the primary features that are available in Visual Studio .NET.

Lessons

- Overview of Visual Studio .NET
- Creating an ASP.NET Web Application Project

After completing this module, students will be able to:

- Navigate the Visual Studio .NET IDE.
- Create, build, and view an ASP.NET Web application



Module 3: Using Microsoft .NET-Based Languages

This module will introduce the various languages that support .NET. This module will focus on Visual Basic .NET and C#. Students will use Visual Studio .NET to create a class project and write code in either Visual Basic .NET or C#.

Lessons

- Overview of the .NET-Based Languages
- Comparison of the .NET-Based Languages
- Creating a Component Using Visual Studio .NET

After completing this module, students will be able to:

- Identify the languages that support ASP.NET.
- Choose an appropriate development language for their needs.
- Create a component by using Visual Studio .NET.

Module 4: Creating a Microsoft ASP.NET Web Form

This module explains how to create and display an ASP.NET Web Form.

Lessons

- Creating Web Forms
- Using Server Controls

After completing this module, students will be able to:

- Add a Web Form to an ASP.NET Web Application project.
- Use the Visual Studio .NET toolbox to add server controls to a Web Form