

Course ID

TK2310

Course Duration

5 days

Course Title

Developing Microsoft ASP.NET Web Applications Using Visual Studio .NET

Related Courses

- Introduction to Visual basic .NET Programming (TK2559, 5 days)
- Programming with Microsoft Visual Basic .NET (TK2373, 5days)

Aimed At

Microsoft Visual basic programmers and beginning web developers who wish to learn the basics of web application site implementation with Microsoft ASP.NET and Visual Basic.NET.

Group Size

5-15

Prerequisites

You should be able to create HTML or DHTML including tables, images and forms and have some experience with programming in Visual Basic .NET including declaring variables, constructing loops, and using conditional statements.

**Course
In a Nutshell**

This comprehensive five-day workshop teaches the basics of web application site implementation. It 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.

Customize It!

You can ask us to customize this course to your specific background and job requirements at little-to-no additional cost. Let us know how we can make this course do more for your organization.

Learn How 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

Course Outline

- Overview of the Microsoft .NET Framework
 - Introduction to the .NET Framework
 - Overview of ASP.NET
 - Overview of the lab application
 - Resources
- Using Microsoft Visual Studio .NET
 - Overview of Visual Studio .NET
 - Creating an ASP.NET web application project
 - Exercise
- Using Microsoft .NET-Based Languages
 - Overview of the .NET-based languages
 - Comparison of the .NET-based languages
 - Creating a component using Visual Studio .NET
 - Exercise
- Creating a Microsoft ASP.NET Web Form
 - Creating web form
 - Using server controls
 - Exercise
- Adding Code to a Microsoft ASP.NET Web Form
 - Using code behind pages
 - Adding event procedures to web server controls
 - Using page events
 - Exercise
- Tracing in Microsoft ASP.NET Web Applications
 - Introduction to tracing
 - Using trace statements
 - Debugging web applications remotely
 - Exercise
- Validating User Input
 - Overview of user input validation
 - Using validation controls
 - Page validation
 - Exercise
- Creating User Controls
 - Adding user controls to an ASP.NET web Form
 - Creating user controls
 - Exercise
- Accessing Relational Data Using Microsoft Visual Studio .NET

- Overview of ADO.NET
- Creating a connection to the database
- Displaying a DataSet in a list-bound control
- Exercise
- Accessing Data with Microsoft ADO.NET
 - Introduction to using ADO.NET
 - Connecting to a database
 - Accessing data with DataSets
 - Using multiple tables
 - Accessing data with DataReaders
 - Exercises
- Calling Stored Procedures with Microsoft ADO.NET
 - Overview of stored procedures
 - Calling stored procedures
 - Exercise
- Reading and Writing XML Data
 - Overview of XML architecture in ASP.NET
 - XML and the DataSet object
 - Working with XML data
 - Using the XML web server control
 - Exercise
- Consuming and Creating XML Web Services
 - Overview of Using XML web services
 - Calling an XML web service by HTTP
 - Using a proxy to call an XML web service
 - Creating an XML web service
 - Exercise
- Managing State
 - State management
 - Application and session variables
 - Using cookies and cookieless sessions
 - Exercise
- Configuring, Optimizing, and Deploying a Microsoft ASP.NET Web Application
 - Using the cache object
 - Using ASP.NET output caching
 - Configuring an ASP.NET web application
 - Deploying an ASP.NET web application
 - Exercise
- Helping to Protect a Microsoft ASP.NET Web Application
 - Web application security overview
 - Working with Windows-based authentication

- Working with forms-based authentication
- Overview of Microsoft passport authentication
- Exercise
- Wrap-up: Course Recap, Q/A, and Evaluation

**How You Will
Learn**

- An experienced programmer and instructor will teach this class as a workshop.
- Hands-on exercises will ensure that you understand each topic taught in class.
- Your instructor will employ real-life examples and applications to help you apply the course content in your own job.
- We'll teach you the important dos and don'ts, the tricks "pros" use to speed up the work, and the pitfalls to avoid.
- You will also receive a comprehensive study guide.

Revised

April 6,2007