

Course ID

**TK2543**

Course Duration

**3 days**

Course Title

**Core Web Application Technologies with Microsoft Visual Studio 2005**

**Aimed At**

Corporate/ISV application developers who have a desire to learn more about specific technology areas in web application development.

**Group Size**

5-15

**Prerequisites**

You should be able to manage a solution environment using the Visual Studio 2005 IDE and tools, understand Microsoft .NET Framework 2.0 and the common language runtime as well as program an application using a .NET Framework 2.0 compliant language. You should also know the basics of XML including XML declarations, elements, attributes and namespaces, client-side scripts and HTML, and how to make assemblies available to other applications.

**Course**

**In a Nutshell**

The course provides an in-depth coverage of web application technologies and provides the knowledge and skills to develop Microsoft ASP.NET 2.0 web applications using Microsoft Visual Studio 2005. The course focuses on user interfaces, web site structure and functionality, and implementation details.

You will learn in depth how to create and program a web application, add and configure HTML and web server controls, create a layout using master and content pages, manage the application state, access and display data, control access to a web application, deploy a web application, and make a web application available to mobile devices.

**Customize It!**

If there are aspects of web application development you're particularly interested in, please let us know, so we can customize the course to your needs. Most customization is performed free of charge.

**Learn How To**

- Create a web application
- Program a web application
- Add and configure server controls for a web application
- Use master pages to establish a common layout for a web application
- Manage state data for web application
- Access and display data in a web application
- Control access to a web application
- Deploy a web application
- Create a mobile web application

**Course**

**Outline**

- Creating a Web Application
  - Visual studio web site types

- Default event handlers
- Web configuration files
- Exercise
- Programming a Web Application
  - Event handling in web application
  - Detecting browser capabilities
  - Retrieving page header
  - Handling page-level and application-level errors
  - Exercises
- Adding and Configuring Server Controls
  - HTML controls and web server controls
  - Types of web server controls
  - Design and build web-based user interface
  - ASP.NET 2.0 page postback model
  - Exercises
- Creating a Common Layout using Master Pages
  - What are master pages?
  - What are content pages?
  - Nested master pages
  - Designing master page and nested master pages
  - Configuring content pages
  - Exercises
- Managing State for a Web Application
  - State management technologies
  - Application and session objects
  - Strategies for managing session state data
  - Configuring ViewState properties for web server control
  - Cache object
  - Exercises
- Accessing and Displaying Data
  - Database connections and web configuration files
  - Relational data and data source controls
  - XML data and data source controls
  - Object data and data source controls
- Controlling Access to a Web Application
  - Configuring authentication for web applications
  - Configuring authorization for web applications
  - Site membership systems using the membership class
  - Web site security administration using the roles class
  - Exercises

- Deploying a Web Application
  - Copy web site utility
  - Publish web site utility
  - Building a Windows installer setup application
  - Exercises
- Making Web Applications Available to Mobile Devices
  - Emulating devices for mobile web forms
  - Detecting and redirecting mobile devices
  - Designing and implementing mobile web forms
  - Designing device specific feature for mobile web applications
  - Exercises
- Wrap-up: Course Recap, Q/A, and Evaluations

### **How You Will Learn**

- An experienced web developer/instructor will teach this class in workshop format.
- Ongoing hands-on exercises will reinforce your understanding of each topic as it is taught.
- We will use real-life examples and applications to help you apply the material on your job.
- We'll teach you the dos and don'ts, tricks of the trade, and the traps as well.
- You will receive a comprehensive study guide to serve as a back-to-the-job refresher and a reference.

*Revised*

*April 6, 2007*