

Course Outline

2543 – Core Web Application Technologies with Microsoft Visual Studio 2005



Duration: 3 days (18 hours)

Learning Objectives:

- 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 a 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

Target Audience:

This workshop is intended for corporate/ISV application developers who have a desire to learn more about specific technology areas in Web application development

Prerequisites:

- 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
- Be able to program an application using a .NET Framework 2.0 compliant language
- Know how to make assemblies available to other applications
- Have a basic understanding of XML including XML declaration, elements, attributes, and namespaces
- Have a basic understanding of client-side scripts
- Have a basic understanding of HTML

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Topics Covered:

- Creating a Web Application
 - Visual Studio Web Site Types
 - Default Event Handling in Web Applications
 - Web Configuration Files
- Programming a Web Application
 - Detecting the type, version, and capability of the browser being used to view a Web site.
 - Accessing information in an ASP.NET Web Page header.
 - Using the `HttpResponse.Write` method to provide feedback to users.
 - Handling page-level errors.
- Adding and Configuring Server Controls
 - HTML Controls and Web Server Controls
 - Types of Web Server Controls
 - Working with Web Server Controls
 - The ASP.NET 2.0 Page Postback Model
- Creating a Common Layout by using Master Pages
 - What Are Master Pages?
 - What Are Content Pages?
 - Nested Master Pages
- Managing State for a Web Application
 - ViewState Properties and ControlState Data
 - Application and Session Objects
 - Strategies for Managing Session State Data
 - The Cache Object
- Accessing and Displaying Data
 - Database Connections and the Web.Config File
 - Relational Data and Data Source Controls
 - XML Data and Data Source Controls
 - Object Data and Data Source Controls
- Controlling Access to a Web Application
 - Authentication for Web Applications
 - Authorization for Web Applications
 - Site Membership Systems Using the Membership Class
 - Web Site Security Administration Using the Roles Class
- Deploying a Web Application
 - Using the Copy Web Site utility to deploy a Web application in a non-compiled state
 - Using the Publish Web Site utility to deploy a precompiled version of the Web application
 - Building Microsoft Windows(Installer packages to create a redistributable application with full setup logic
- Making Web Applications available to Mobile Devices
 - Device Emulators for Mobile Web Forms
 - Mobile Device Detection and Redirection
 - Mobile Web Forms
 - Device-Specific Features in Mobile Web Forms