



## Course Outline

### Customizing Microsoft Office SharePoint Portal Server 2003

Course 2014—Two days—Instructor-led

#### Introduction

This two-day instructor-led course provides students with the knowledge and skills to customize Microsoft Office SharePoint Portal Server 2003. The workshop focuses on Web Parts, security, and the SharePoint Services object model.

#### Audience

This workshop is intended for experienced programmers who have a minimum of six months programming experience using Visual Studio .NET.

#### At Course Completion

After completing this workshop, students will be able to:

- Describe the Web Parts for Microsoft SharePoint products and technologies.
- Add Web Parts to pages.
- Use web part templates in Visual Studio .NET.
- Use Web Parts as custom ASP.NET controls.
- Connect Web Parts.
- Package and deploy Web Parts.
- Secure Web Parts.
- Describe the Windows SharePoint Services Object Model.
- Develop Web Parts using Microsoft Office FrontPage.

#### Prerequisites

Before attending this workshop, students must have working knowledge of the following:

- ASP.NET
- Web Services
- Visual Basic or Visual C# and Visual Studio

#### Microsoft Certification exams

No Microsoft Certification exams are associated with this course currently.

#### Course Materials

The student kit includes a comprehensive workbook and other necessary materials for this workshop.



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#### ***Module 1: Introduction to Web Parts for Microsoft SharePoint Products and Technologies***

This module explains the concepts behind Web Parts, which are a type of ASP.NET server control. Unlike standard ASP.NET controls, which are added to Web form pages by programmers at design time, Web Parts are added to Web Part Zones on Web Part Pages by users at run time.

##### **Lessons**

- Web Parts Infrastructure
- Architectural Overview
- Animation: Exploring SharePoint Products and Technologies

After completing this module, students will be able to:

- Describe the origins and evolution of Web Parts technology
- Describe the fundamentals of Web Parts infrastructure

#### ***Module 2: Adding Web Parts to Pages***

This module explains how to add Web Parts to pages. Web Parts are componentized Web page elements that allow developers to create modular Web sites. Actions such as closing and deleting Web Parts will be explained in detail. This unit also introduces how to modify Web Part Pages and set Web Part properties.

##### **Lessons**

- Demonstration: Adding a Web Part to a Web Part Page
- Adding Web Parts to a Web Part Page
- Closing and Deleting Web Parts
- Requirements for Modifying Web Part Pages
- Setting Web Part Properties

#### **Lab A: Adding Web Parts to Web Part Pages**

- Completing the SharePoint Products and Technologies Installation

After completing this module, students will be able to:

- Add a Web Part from any of the four default Windows SharePoint Services Web Part galleries to a SharePoint Web Part page
- Close and Delete Web Parts
- Modify Web Parts
- Set properties for Web Parts

#### ***Module 3: Using Web Part Templates in Visual Studio .NET***

This module explains how to use Web Part templates in Visual Studio .NET. Since Web Parts are ASP.NET custom controls, Microsoft Visual Studio .NET provides an excellent environment for creating and debugging Web Parts. This unit also introduces the Visual Studio .NET Web Part Library templates for both C# and Visual Basic .NET.



## Course Outline

### Lessons

- Overview
- Using Web Part Templates in Visual Studio .NET
- Web Part Library Templates
- Demonstration: Verifying the Output Path Property for a Web Part Project

### Lab A: Using Web Part Templates in Visual Studio .NET

- Completing the SharePoint Products and Technologies Installation

After completing this module, students will be able to:

- Create a Simple Web Part Library Project
- Add a New File to a Web Part Library Project
- Set the Output Path for a Web Part Project

### *Module 4: Web Parts as ASP.NET Custom Controls*

Creating Web Parts is a variation on the process of creating ASP.NET custom controls. To create effective Web Parts, it is important to understand the similarities and differences between Web Parts and other ASP.NET custom controls.

### Lessons

- Overview
- ASP.NET Extensibility
- Web Part Custom Controls
- Advantages of the Web Part Infrastructure
- The Web Part Life Cycle

### Lab A: Web Parts as ASP.NET Custom Controls

- Creating Web Part Classes
- Adding Child Controls to Web Parts
- Rendering the HTML for a Web Part
- Creating and Displaying Custom Properties
- Implementing Event Handlers
- Implementing Control Event Handler

After completing this module, students will be able to:

- Compare Web Parts to other ASP.NET custom controls
- Create Web Part classes
- Add child controls to Web Parts
- Render HTML for a Web Part
- Create and display custom properties

### *Module 5: Connecting Web Parts*

This module explains how to connect Web Parts. The Web Part infrastructure provides rich support for communication between Web Parts. Developers can use standard interfaces to create Web Parts that can exchange information with each other.



## Course Outline

### Lessons

- Overview
- Web Part Connections
- Web Part Interfaces

### ***Lab A: Implementing the ICellConsumer Web Part***

- Implementing the ICellConsumer Web Part

After completing this module, students will be able to:

- Understand Web Part connections in a browser and in FrontPage 2003
- Understand the Web Part interfaces
- Implement a Web Part

### ***Module 6: Packaging and Deploying Web Parts***

This module explains how to package and deploy Web Parts using administrative tools provided with Microsoft Windows SharePoint Services.

### Lessons

- Overview
- Web Part Package Components
- Deploying Web Part Packages

### ***Lab A: Building and Deploying Web Part Packages***

- Creating the .dwp file for the CustomerRowProvider Web Part
- Creating the .dwp file for the OrdersCellConsumer Web Part
- Modifying the Manifest.xml file
- Moving the XML data files to the project directory
- Building a Web Part Package
- Adding a Web Part Package
- Deleting a Web Part Package
- Enumerating Web Part Packages
- Adding Web Parts to Web Part Pages

After completing this unit, students will be able to:

- Describe the components of a Web Part package
- Describe the concept of deploying a Web Part package
- Build a Web Part package
- Add a Web Part package
- Delete a Web Part package
- Enumerate Web Part packages
- Export and import .dwp files
- Add Web Parts to Web Part pages
- Set Web Part properties



## Course Outline

### ***Module 7: Web Part Security***

Microsoft ASP.NET 1.1 enables Web applications to operate in a partially trusted environment. This module describes how Windows SharePoint Services implements custom security permissions and policy files.

#### **Lessons**

- Overview
- Web Part Security
- Default Security Permissions in Windows
- SharePoint Services
- Specifying Safe Web Parts
- Code Access Security
- Default Trust Level in the Web.config File
- Creating and Editing Policy Files

#### **Lab A: Specifying Safe Web Parts**

- Creating a Strongly Named Assembly
- Installing a Web Part

After completing this module, students will be able to:

- Describe the manner in which Windows SharePoint Services uses ASP.NET-enabled code to access security
- Define both default security permissions for Windows SharePoint Services
- Designate Web Parts as safe to make them available on the virtual server
- Use code access security to ensure your Web Part assemblies get required permissions
- Identify Windows SharePoint Services default trust level values
- Edit and create policy configuration files

### ***Module 8: Exploring the Windows SharePoint Services Object Model***

In this module, you will use Visual Studio .NET to program the Windows SharePoint Services object model, which is integrated with Microsoft ASP.NET. This enables developers to program the Windows SharePoint Services object model in a Microsoft Visual Studio .NET environment to customize Web Parts for use in a Windows SharePoint Services deployment.

#### **Lessons**

- Overview
- Exploring the Windows SharePoint Services Object Model
- Programming with Windows SharePoint Services Object Model in Visual Studio .NET

#### **Lab A: Programming with Windows SharePoint Services Object Model in Visual Studio .NET**

- Creating a SharePoint Web Application
- Setting a Reference to the Windows SharePoint Services Assembly
- Enumerating a SharePoint Portal Server List

After completing this module, students will be able to:

- Understand the capabilities of Windows SharePoint Services Object Model
- Use Visual Studio .NET to program Windows SharePoint Services Object Model



## Course Outline

### ***Module 9: Developing Web Parts Using Microsoft FrontPage 2003***

This module explains how to modify and present live data from a range of sources, including XML, to build rich interactive data-driven Web sites using Microsoft Office FrontPage 2003.

#### **Lessons**

- Overview
- Developing Web Parts Using FrontPage 2003
- Demonstration: Creating a SharePoint Site with FrontPage 2003
- Using FrontPage Data View
- Demonstration: Creating and Configuring a Data Source from a Web Service
- Demonstration: Inserting and Configuring 1a Data View Web Part
- Packaging and Re-Deploying a Site
- Discussion: Developing Web Parts with FrontPage 2003

After completing this module, students will be able to:

- Develop Web Parts using FrontPage 2003
- Create a SharePoint site with FrontPage
- Use FrontPage Data View
- Create and configure a data source from a Web Service
- Insert and configure a Data View Web Part
- Package and re-deploy a site
- Understand the issues around developing Web Parts with FrontPage