



BUILDING TRAINING SOLUTIONS
FOR THE IT WORLD

Advanced Sharepoint Development

Days: 5
Format: Instructor-Led
Class Code: 50064B
Certification Exams: None
Certification Track: None

Recommended Course Sequence

Knowledge of prerequisites
noted below.

*Course content is subject to change
without notice.*

Course Description:

This five-day instructor-led course provides students with the knowledge and skills to become a top-notch Microsoft SharePoint 2007 Developer. From AJAX to Event Handlers and Features, you will gain important insight into the internal workings of SharePoint 2007.

Target Student:

This course is intended for experienced SharePoint developers and students and will guide them through the process of architecting and developing SharePoint applications and customizations.

Prerequisites:

Before attending this course, students must have:

- 4994 - [Introduction to Programming .NET Framework Applications with Visual Studio 2005 and 2008 \(Essential\)](#)
- 2310D - [Developing Web Applications Using Microsoft Visual Studio 2008 \(Strongly Recommended\)](#)
- 5061 - [Implementing Microsoft Office SharePoint Server 2007](#)

Or

- WSS3.0-1 - [Windows SharePoint Services 3.0 Introduction](#)
- WSS3.0-2 - [Windows SharePoint Services 3.0 Advanced](#)

Delivery Method:

Instructor led, group-paced, classroom-delivery learning model with structured hands-on activities.

Performance-Based Objectives:

Upon successful completion of this course, students will be able to:

- Create a SharePoint site that is customized and personalized to the end user.
- Create and run reports.
- Create custom field types to enhance functionality of lists.
- Note: Modules 2, 11, 13, 16, 19, 20, 21, and 22 are optional, and will be taught as necessary, depending on the student need.

Advanced SharePoint Development

Course Outline

Module 1: Course Overview

Lessons
<ul style="list-style-type: none">■ Overview■ SharePoint = ASP.NET Application.■ ASP.NET Providers.■ Microsoft Single Sign-On.■ Demonstration: Custom Authentication.
Labs
<ul style="list-style-type: none">■ Set Up Web Applications for Lab Use.

Module 2: Custom Authentication

This module explains ASP.NET providers, how to create a single sign-on, and how to configure a SharePoint Web Application.

Lessons
<ul style="list-style-type: none">■ Overview■ SharePoint = ASP.NET Application.■ ASP.NET Providers.■ Microsoft Single Sign-On.■ Demonstration: Custom Authentication.
Lab: Custom Authentication
<ul style="list-style-type: none">■ Create a Username/Password Database.■ Create a User.■ Configure .NET Config File.■ Configure a SharePoint Web Application to Use Forms Authentication with Custom Provider.
Lab: Single Sign-On
<ul style="list-style-type: none">■ Configure a Single Sign-On.■ Program a Single Sign-On.

Module 3: SharePoint Permissions

This module explains the permissions in Microsoft Windows Server Systems (WSS) and how they have been enhanced, explains how to set permissions at an item level, and describes naming conventions.

Lessons
<ul style="list-style-type: none">■ Overview.■ IIS Application Pools.■ SharePoint Windows Groups.■ SharePoint Default Groups.■ ASP.NET Membership/Role Provider.■ Assignable Entities.■ Custom Permission Levels.

Advanced SharePoint Development

<ul style="list-style-type: none">■ Permissions.■ Site/List/Item Permission Inheritance.■ Security Trimmed Interface.■ Web Application Policy.■ SP Security Class.■ Single Sign-On.■ Demonstration: SharePoint Permissions.
Lab: SharePoint Permissions
<ul style="list-style-type: none">■ SharePoint Default Groups.■ Membership Users.■ Custom Permission Sets.■ Site/List/Item Permission Inheritance.■ Web Application Policy.

Module 4: In-Browser Customization

This module explains how to add and edit new pages using web parts, master pages, and themes.

Lessons
<ul style="list-style-type: none">■ Overview.■ SharePoint UI Overview.■ Default.aspx.■ Everything Is a List.■ Using Web Parts■ Customization Web Parts■ Adding New Pages■ Editing New Pages■ Master Pages■ Themes■ Navigation■ Demonstration: In-Browser Customizations■ Page Layouts■ Content Types■ Content Management Server (CMS)
Lab: In-Browser Customizations
<ul style="list-style-type: none">■ Default.aspx page.■ Adding web parts.■ Add/edit a new page.■ Apply a master page.■ Apply a theme.■ Versioning and content approval.

Advanced SharePoint Development

Module 5: Basic SharePoint Designer

This module explains the SharePoint designer basics, how to create and modify existing sites, and how to create CSS style sheets.

Lessons
<ul style="list-style-type: none">■ Overview.■ SharePoint Designer Basics.■ Creating/Modifying Existing Sites.■ Exploring Team Sites.■ Exploring Portal Sites.■ Demonstration: SharePoint Designer.■ ASP.NET Pages.■ SharePoint Designer Editing Features.■ Demonstration: SharePoint Designer.■ Creating Master Pages.■ Demonstration: SharePoint Designer.■ Using SharePoint Controls.■ Demonstration: SharePoint Designer.■ Creating CSS Style Sheets.■ Demonstration: SharePoint Designer.
Lab: Basic SharePoint Designer Tasks
<ul style="list-style-type: none">■ Create a Site.■ Add an ASPX Page.■ Create a Master Page.■ Override CSS.
Lab: Basic SharePoint Designer Tasks
<ul style="list-style-type: none">■ Check In/Check Out.■ Add Web Parts.■ Add Web Part Zones.■ Adding Images.■ Reset to Site Definition.

Module 6: Advanced SharePoint Designer

This module explains reports, data views, data sources, and how to back up and restore a Web site.

Lessons
<ul style="list-style-type: none">■ Overview.■ Built-In Reports.■ Data Views.■ Data Sources■ Backup Web Site.■ Restore Web Site■ Demonstration: Advanced SharePoint Designer

Advanced SharePoint Development

Lab: Advanced SharePoint Designer

- Reports.
- Data Views.
- Data Sources.
- Backup a Site.
- Restore a Site.

Module 7: Content Types

This module explains different content types, document information panes, and how to create custom content types.

Lessons

- Overview.
- Content Types Introduction.
- Built-In Content Types/ Inheritance.
- Content Type Settings.
- Site/Content Type Columns.
- Document Information Panel.
- Workflows.
- Custom Content Types.
- Demonstration: Content Types.

Lab: Content Types

- Built-in Types.
- Document Information Panel.
- Workflows.

Module 8: Site Definitions

This module explains WSS built-in definitions, Microsoft Office SharePoint Server 2007 built-in definitions, and CAML and describes the different SharePoint templates and themes.

Lessons

- WSS Built-In Site Definitions.
- MOSS Built-In Site Definitions.
- CAML
- Custom Site Definitions.
- Site Definition Elements.
- Site Definition Configuration Element.
- SharePoint Solution Generator.
- SharePoint Templates.
- SharePoint Themes.
- Demonstration: Site Definitions.

Lab: Site Definitions

- Create Site Definition (manually).
- Create Site Definition (Visual Studio).

Lab: SharePoint Solution Generator

- SharePoint Solution Generator.

Advanced SharePoint Development

Lab: SharePoint Templates
■ SharePoint Templates.
Lab: SharePoint Themes
■ Create a SharePoint Theme.

Module 9: Features

This module explains types of features and how to create, activate, and deactivate them.

Lessons
■ Features Overview.
■ Types of Features.
■ Feature Scopes.
■ Feature Dependencies.
■ Feature Localization.
■ Feature Event Receivers.
■ Creating Features.
■ Deploying Features.
■ Activating/Deactivating Features.
■ Demonstration: Features.
Lab: Features
■ Creating a Feature.
■ Deploying a Feature.
Lab: Feature
■ • Create a Feature using Visual Studio.
Lab: Solution
■ Package features into a solution.

Module 10: Web Services API

This module explains web services API and some common SharePoint Web Services that are available.

Lessons
■ Overview.
■ Web Service APIs.
■ Why Use Web Services.
■ Common SharePoint Web Services.
■ Demonstration: Finding and Using SharePoint Web Services.
Lab: Web Service API
■ Find Web Service.
■ Add Web Service Reference.
■ Use the Web Service.

Advanced SharePoint Development

Module 11: Web Part Development (Optional)

This module explains web part connections, upgrading web parts, and code access security.

Lessons
<ul style="list-style-type: none">■ Overview.■ Web Parts.■ WSS 2.0 vs. WSS 3.0 Web Parts.■ ASP.NET Web Part Class.■ Web Part Connections.■ Web Part Connections (Interfaces)■ Upgrading your Web Parts to WSS 3.0■ When to use SharePoint Web Part Class■ Web Part Permissions■ Code Access Security (CAS)■ Web Part Performance Hints■ Demonstration: WebParts
Lab: WebParts
<ul style="list-style-type: none">■ Creating WebParts.■ Deploying WebParts.■ Build WebParts that Interface with Data Sources.
Lab: WebParts
<ul style="list-style-type: none">■ Implement Web Part Connections.
Lab: WebParts
<ul style="list-style-type: none">■ Implement Synchronous Web Part.■ Implement Asynchronous Web Part.

Module 12: Client Side Scripts / AJAX

This module explains how to emit client side scripts and describes common AJAX uses.

Lessons
<ul style="list-style-type: none">■ Overview.■ Client Side Scripts.■ Emitting Client Side Scripts.■ AJAX Introduction■ Common AJAX Uses■ SharePoint AJAX Support■ Demonstration: Client Side Scripts
Lab: Client Side Scripts / AJAX
<ul style="list-style-type: none">■ Client Side Scripts.■ AJAX.

Advanced SharePoint Development

Module 13: Object Model (Optional)

This module explains object model DLLs and how to use the object model.

Lessons
<ul style="list-style-type: none">■ Object Model Overview.■ Object Model DLLs.■ Using the Object Model■ SPSite vs. SPWeb■ Namespace Changes (2.0 to 3.0).■ Demonstration: Object Model.
Lab: Object Model
<ul style="list-style-type: none">■ Object Model DLLs.■ Using the Object Model.

Module 14: Custom Field Types

This module explains how to create built-in types and custom field types

Lessons
<ul style="list-style-type: none">■ Overview.■ Field Types Introduction.■ Built-In Field Types.■ Custom Field Types.■ Demonstration: Custom Field Types
Lab: Custom Field Types
<ul style="list-style-type: none">■ Building Custom Field Types.

Module 15: SharePoint Events / Timer Jobs

This module explains how to create new events in SharePoint.

Lessons
<ul style="list-style-type: none">■ Overview.■ SharePoint Event Handler History.■ New Events.■ More Event Details.■ SharePoint Timer Service.■ SP Job Definition Class.
Lab: SharePoint Events
<ul style="list-style-type: none">■ Create an Event.■ Assign an Event to a List.■ Assign an Event to a Site
Lab: SharePoint Events
<ul style="list-style-type: none">■ Create a Timer Job.

Advanced SharePoint Development

Module 16: Shared Services (Optional)

This module explains the features of the shared services.

Lessons
<ul style="list-style-type: none">■ Overview.■ Shared Services Features.■ Life without Shared Services Features.■ Life with Shared Services Features.
Lab: Setup Shared Services
<ul style="list-style-type: none">■ Setup Shared Services.

Module 17: Workflows (SP Designer)

This module explains the differences between SharePoint Designer workflows, conditions, and actions.

Lessons
<ul style="list-style-type: none">■ Overview.■ Built-In WSS/MOSS Workflows.■ SharePoint Designer Conditions.■ SharePoint Designer Actions.■ Extending SharePoint Designer Workflows.■ Demonstration: SharePoint Designer Workflows.
Lab: MOSS Workflows
<ul style="list-style-type: none">■ Create and Use Each of the MOSS Workflows.
Lab: Workflows (SP Designer)
<ul style="list-style-type: none">■ SharePoint Designer Workflows.■ Extending SharePoint Designer.

Module 18: Workflows (Visual Studio)

This module explains the types of workflows and how to use them with Visual Studio and SharePoint.

Lessons
<ul style="list-style-type: none">■ Overview.■ Windows Workflow Foundation.■ Workflow Persistence.■ Workflow Types.■ Workflows with Visual Studio.■ SharePoint Workflows.■ SharePoint Workflows Forms.■ Debugging a Workflow.■ Comparison of Visual Studio vs. SharePoint Designer.■ Demonstration: Workflows (Visual Studio).

Advanced SharePoint Development

Lab: Workflow (Visual Studio)

- | |
|---|
| <ul style="list-style-type: none">■ Create a Custom Workflow. |
|---|

Module 19: ASP.NET Localization (Optional)

This module explains how to use RESX files, SharePoint resource files, and SharePoint language Packs.

Lessons

- | |
|--|
| <ul style="list-style-type: none">■ Overview.■ ASP.NET Localization.■ Culture and UI Culture.■ RESX Files.■ Implicit vs. Explicit■ SharePoint Resource Files■ Browser Language■ SharePoint Language Packs.■ Demonstration: ASP.NET Localization. |
|--|

Lab: ASP.NET Localization

- | |
|---|
| <ul style="list-style-type: none">■ RESX Files.■ Browser Language. |
|---|

Module 20: SharePoint/Microsoft FrontPage RPC (Optional)

This module explains how to use FrontPage RPC and SharePoint RPC.

Lessons

- | |
|--|
| <ul style="list-style-type: none">■ Overview.■ FrontPage RPC.■ SharePoint RPC. |
|--|

Lab: SharePoint RPC

- | |
|--|
| <ul style="list-style-type: none">■ Call a Simple SharePoint RPC Method. |
|--|

Module 21: Excel Services (Optional)

This module explains how to use Excel Services.

Lessons

- | |
|--|
| <ul style="list-style-type: none">■ Overview.■ Excel Services Trusted Locations.■ Excel Services Web Parts.■ Excel Services Object Model/Web Services |
|--|

Lab: Excel Services

- | |
|---|
| <ul style="list-style-type: none">■ Create and Upload an Excel File.■ Add a Trusted Location■ Configure Excel Web Parts |
|---|

Advanced SharePoint Development

Module 22: Business Data Catalog (Optional)

This module explains Business Data Catalogs.

Lessons
<ul style="list-style-type: none">■ Overview.■ Application Definition Files.■ Business Data Catalog Web Parts■ Business Data Catalog Indexing■ Business Data Catalog with Single Sign-On
Lab: Business Data Catalog
<ul style="list-style-type: none">■ Install a BDC Application.■ Setup BDC Web Parts.■ Create a List that Uses BDC Data.

Module 23: Business Intelligence

This module explains how to use the report center, KPIs, dashboards, and Reporting Services Integration.

Lessons
<ul style="list-style-type: none">■ Overview.■ Report Center.■ Key Performance Indicator (KPI).■ Dashboards.■ Reporting Services Integration.
Lab: Business Intelligence
<ul style="list-style-type: none">■ Integrate SQL Server Reporting Services.■ Create a Report.■ Use the Reporting Services Web Part.

Module 24: Upgrading WSS 2.0 to 3.0

This module explains how to use Prescan.exe and database migration and explains some migration issues.

Lessons
<ul style="list-style-type: none">■ Overview.■ Prescan.exe.■ In-Place Upgrade.■ Side-By-Side/ Gradual Upgrade.■ Side-By-Side/Gradual Upgrade Steps.■ Database Migration Upgrade■ Upgrading Site Definitions■ Migration Issues
Lab: 1-4: Migrating SharePoint
<ul style="list-style-type: none">■ In-Place Upgrade.■ Gradual Upgrade.■ Database Migration.■ Migration Issues.