



### SharePoint 2007 Web Developer

#### Abstract:

For those web developers new to ASP.NET and SharePoint Web Customization. This course addresses aspects of design such as applying alternate page layouts, creating and styling new pages, modifying site navigation, and external data integration and custom workflows. After taking this course students will understand the difference between using SharePoint Designer 2007 and in-browser tools including what is achievable with each tool, and how and when to use those tools to effect SharePoint site customization. The course also factors in Web site design concepts that focus on creating user-centric SharePoint sites.

#### Target Audience/Who should attend:

The primary audiences for this course are Web designers, administrators, and developers who use and work with Office SharePoint Server 2007, and want to learn how to customize SharePoint sites. These include Web Developers, Webmasters, and Power-users with web development experience.

#### What you will learn:

Provide students with the knowledge and skills necessary to complete branding projects and make functional customizations to Windows SharePoint Services v3 and Microsoft Office SharePoint Server 2007. Understand the extent of customizations available using in-browser tool and learn the advantages of using SharePoint Designer 2007 to further enhance SharePoint site customization such as changing master pages and creating multiple-step workflows. How SharePoint Designer 2007 can help with administrative tasks such as backing up and restoring sites to alternate locations.

#### Pre-requisites:

Prior to taking this course, students should have a general knowledge of Web site design and methodologies. They should also be familiar with SharePoint from an end user or administrative point of view. An understanding of ASP.NET 2.0 master pages and cascading style sheets is helpful, but not required. You should have basic CSS, XML and HTML and an understanding of SharePoint basics. An understanding of C# and .NET programming IS REQUIRED.

#### Delivery Method:

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

#### Modules:

##### Overview (20 minutes)

##### ASPNET (419 minutes)

##### Lesson: Architecture and Compilation

- Architecture
- Compilation
- ASP.NET Special Directories

##### Lesson: Controls

- User Controls





## Course Outline

- Server Controls

### Lesson: Master Pages

- Yesterday: Chaos Rules
- In Between: OO Helped
- Today: We Are Masters!
- First Look
- Configuration
- Hierarchies
- Advanced Concepts

### Lesson: Navigation Controls - Web Development Patterns Explored

- Every Site Requires Navigation
- ASP.NET 2.0 Site Navigation
- SiteMapPath
- TreeView
- Menu
- Site Navigation Security

### Lesson: Declarative Data Sources & Access Layers - Data Access Made Even Easier!

- Data Binding Fundamentals
- Binding To Controls
- GridView Control
- Declarative Data Binding
- IDataSource
- DataSourceView
- DataSourceControl Classes

### Lesson: .Net Providers - More Code Re-Use Patterns

- Provider Patterns
- ProviderBase Class
- Built-In Providers
- Provider Configuration
- Database Provider
- Security Provider
- Role Provider
- Custom Provider

### Lesson: Web Parts

- Web Part Manager
- Page Modes
- Web Parts
- SharePoint Web Parts

### Lab: ASP (30 minutes)

- Understand the new ASP.NET Architecture



## Course Outline

- Understand the new ASP.NET Compilation Features
- Explore SharePoint Web Application

### Lab: ASP (30 minutes)

- Create User Controls
- Create Server Controls
- Explore SharePoint User Controls
- Explore SharePoint Server Controls

### Lab: ASP (30 minutes)

- Understand how to use Master Pages
- Explore SharePoint Master Pages

### Lab: ASP (30 minutes)

- Understand how to use Navigation Controls
- Use SiteMapPath control
- Use Menu control
- Use TreeView control
- Explore SharePoint Navigation

### Lab: ASP (30 minutes)

- Using Declarative Data Sources
- SharePoint Data Sources

### Lab: ASP (45 minutes)

- Understand the Provider Model in ASP.NET 2.0
- Understand the Security Provider Model
- Understand the Membership Provider Model
- Understand how to implement your own Custom Providers

### Lab: CustomAuthentication (30 minutes)

- Change the default Authentication Method of SharePoint to use a custom MembershipProvider (ASP.NET 2.0)

### Lab: ASP (30 minutes)

- Understand how to use Web Parts

### Localization (122 minutes)

#### Lesson: Localization

- ASP.NET Localization
- Culture and UICulture
- RESX Files
- Implicit versus Explicit



## Course Outline

### Lesson: SharePoint Localization

- SharePoint Resource Files
- Browser Language
- SharePoint Language packs

### Lab: Localization (30 minutes)

- How to change the localization of your SharePoint sites

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### CSS (94 minutes)

#### Lesson: CSS

- Overview
- Inline CSS
- Header CSS
- External/Internal CSS
- CSS IDs
- CSS Grouping
- CSS Rules
- CSS classes
- Cascading

#### Lesson: SharePoint CSS

- SharePoint CSS

### Lab: CSS (30 minutes)

- Apply CSS
- Inline CSS (Header)
- Internal CSS
- External CSS
- Cascading CSS
- CSS Order
- SharePoint CSS

### XSLT (99 minutes)

#### Lesson: XSLT

- What is XSLT
- XPath
- XSLT Elements
- XSLT Functions
- Unsupported XSLT



## Course Outline

### Lab: XSLT (45 minutes)

- Create simple XSLT
- XSLT Elements
- XSLT Functions

### AJAX (141 minutes)

#### Lesson: Client Side Scripts

- Client Side Scripts
- Emitting Client Side Script

#### Lesson: AJAX

- AJAX Introduction
- Common AJAX uses
- SharePoint AJAX Integration

### Lab: ClientSideScriptsAJAX (45 minutes)

- Use AJAX in your web parts!

### Lab: ClientSideScriptsAJAX (60 minutes)

- Explore AJAX Control Toolkit controls

### SharePoint Architecture (131 minutes)

#### Lesson: SharePoint Architecture

- IIS & ASP.NET
- SharePoint Architecture
- 12 Hive
- Content Databases
- Customized vs. Uncustomized pages

### Lab: SharePointArchitecture (30 minutes)

- Explore HttpHandlers
- Explore HttpModules
- Explore a SharePoint config file

### Lab: SharePointArchitecture (30 minutes)

- Learn Content Database structure
- Use Sql Profiler to reverse engineer the web front end and stsadm

### Lab: SharePointArchitecture (15 minutes)

- Create a Customized Page
- Analyze a Customized Page
- Reset a Customized Page



## Course Outline

### **In Context Web Applications (80 minutes)**

#### **Lesson: In-Context Web Applications**

- Layouts Directory
- In-Context Web Applications
- Examples
- Migrating Web Applications

#### **Lab: InContextWebApplications (30 minutes)**

- Learn how to create a new ASP.NET Application on the SharePoint Server

### **Debugging SharePoint (76 minutes)**

#### **Lesson: Debugging SharePoint**

- W3WP Process
- Logs Directory

#### **Lab: DebuggingSharePoint (30 minutes)**

- Learn to Debug SharePoint via Log Files
- Learn to Debug Via Visual Studio
- Log to the SharePoint log File

### **In Browser Customizations (149 minutes)**

#### **Lesson: In-Browser Customization**

- SharePoint UI Overview
- Default.aspx
- Everything is a List
- Using Web Parts
- Customization Web Parts
- Adding New Pages
- Editing Pages
- Master Pages
- Themes
- Navigation

#### **Lab: InBrowserSharePointCustomization (45 minutes)**

- Add/Move/Configure Web Parts
- Add a Page View Web Part
- Add a Content Editor Web Part
- Add a Content Query Web Part
- Create new Web/Web Part Pages
- Create a Master Page
- Applying a Master Page
- Create/Apply custom CSS



## Course Outline

- Apply custom Theme
- Enable Versioning and Content Approval

### **Lab: InBrowserSharePointCustomization (30 minutes)**

- Modify Site Navigation
- Modify Quick Launch Navigation
- Regional Settings
- Create a Content Query Web Part
- Create a new Page Layout
- Create a new Page using a Page Layout

### **SharePoint Designer (367 minutes)**

#### **Lesson: Customization With SharePoint Designer**

- SharePoint Designer Basics
- Creating and Modifying Existing Sites
- Exploring Team Sites
- Exploring Portal Sites
- ASP.NET Pages
- Creating Master Pages
- Creating CSS Style Sheets

#### **Lesson: Reports**

- Built In Reports

#### **Lesson: Data Views**

- Create/Manage Data Views
- Create/Manage Data Sources

#### **Lesson: Backup / Restore**

- Backup Site
- Restore Site

#### **Lesson: Workflows**

- SharePoint Designer Workflows
- Conditions
- Actions
- Looping Workflows
- Custom Conditions / Actions

### **Lab: BasicSharePointDesigner (45 minutes)**

- Open An Existing SharePoint Site
- Create A New SharePoint Site
- Explore SharePoint Folders (Team Site)
- Explore SharePoint Folders (Portal Site)



## Course Outline

- Create ASP.NET Page
- Modify a built-in CSS Style Sheet
- Create/Attach a CSS style sheet
- Create/Attach/Detach a Master Page

### Lab: SharePointDesigner (45 minutes)

- Check-In/Check-Out
- Add Web Parts
- Add Web Part Zone
- Adding Images (\_images directory)
- Reset to Site Definition

### Lab: SharePointDesigner (45 minutes)

- Explore Built In Reports
- Create/Manage Data Views
- Create/Manage Data Sources
- Merge Two Data Sources
- Link Two Data Sources
- Data View Parameters

### Lab: BuiltInActivities (45 minutes)

- Use one of each Built-In Activity

### Lab: CustomActivities (60 minutes)

- Create a custom workflow activity for SharePoint Designer

### Lab: CustomConditions (15 minutes)

- Create a custom condition for SharePoint Designer

## SharePoint Web Development (127 minutes)

### Lesson: SharePoint Web Development

- Adding/Using User Controls
- Adding/Editing Pages
- Security Trimmed Interface

### Lab: SharePointWebDevelopment (60 minutes)

- Adding Application Pages (Bin and Gac deployment) [\_layouts]
- Adding Site Pages [content database]
- SharePoint Server Controls

### Lab: SecurityTrimmedInterface (15 minutes)

- Use the SharePoint SPSecurityTrimmedControl to hide content and controls



## Course Outline

### Using CAML (165 minutes)

#### Lesson: Built-In Definitions

- WSS Built-In Definitions
- MOSS Built-In Definitions

#### Lesson: CAML

- CAML
- Custom Site Definitions
- SharePoint Solution Generator

#### Lesson: Templates and Themes

- SharePoint Templates
- SharePoint Themes

#### Lab: CustomSiteDefinitions (45 minutes)

- Create a new Site Definition (Manually)
- Create a new Site Definition (Visual Studio)

#### Lab: Themes (30 minutes)

- Learn to create your own theme

#### Lab: MS40 (30 minutes)

- Install Microsoft 40 Templates

### Features (199 minutes)

#### Lesson: Features

- Features Overview
- Types of Features
- Feature Scopes
- Feature Dependencies
- Feature Sequence
- Feature Localization
- Feature Event Receivers
- Feature Stapling
- Creating Features
- Deploying Features
- Activating/Deactivating Solutions

#### Lab: Features (75 minutes)

- Learn to create a Feature.xml file
- Use the Feature.xml file to point to a custom user control
- Various Feature Types (List, Module, Content Type)



## Course Outline

### Lab: Features (30 minutes)

- Utilize the Visual Studio Extensions for WSS 3.0 to build Features!

### Lab: Solutions (30 minutes)

- Create several features and package them as a solution file (.wsp)

### Making An Internet Site (127 minutes)

#### Lesson: Making An Internet Site

- SharePoint & ASP.NET
- Creating A Site
- Content Types & Page Layouts
- Reusable Content
- Examples

### Lab: MakingAnInternetSite (60 minutes)

- Strip down the internet site template
- Compete against your classmates! Build a new internet site

### Lab: ReusableContent (15 minutes)

- Create and Use Reusable Content

### Content Deployment Features (161 minutes)

#### Lesson: Content Deployment

- Content Deployment Overview
- Content Deployment Features
- Content Deployment Security
- Content Dependencies
- Quick Deploy
- Variations

### Lab: ContentManagementFeatures (60 minutes)

- Setup Content Deployment Path & Jobs
- Quick Deployment
- Debug Content Deployment

### Lab: Variations (45 minutes)

- Create Variations
- Use Variations
- Variation Label Menu
- Custom Variation Root Landing page