

# Mindsharp Summit for Developers, Administrators, and Web Designers

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## Customize Windows SharePoint Sites Without Writing Code Using Microsoft Office SharePoint Designer 2007

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### Overview

This 5-day course is designed to give students the tools and knowledge to customize SharePoint sites without writing code by using SharePoint Designer 2007 and in-browser customizations. The course addresses aspects of design such as applying alternate page layouts, creating and styling new pages, modifying site navigation, external data integration, including business intelligence, and custom workflows to enhance business processes. Existing Web designers will also understand how to best leverage cascading style sheets (CSS) to achieve the desired look and feel throughout SharePoint sites.

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.

### Prerequisites

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 CSS is helpful, but not required.

### Intended Audience

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 without writing code. Individuals in these job categories will benefit from this course as follows:



**Web designers** will understand the extent of customizations available using in-browser tools. They will also learn the advantages of using SharePoint Designer 2007 to further enhance SharePoint site customization such as creating master pages and multiple-step workflows, as well as leverage their existing design knowledge to achieve the desired look and feel throughout SharePoint sites.

**Administrators** will learn how SharePoint Designer 2007 can help with administrative tasks such as backing up and restoring sites to alternate locations, and setting design level permissions for end users who work with SharePoint Designer 2007. Administrators will also understand the in-browser customization capabilities made available to end users depending on the permission settings for those users.

**Developers** will understand the alternatives to working with Visual Studio. They will also learn which customizations are achievable using in-browser tools and SharePoint Designer 2007. In addition, developers will learn how to create custom solutions using SharePoint Designer 2007. For example, the course explores:

- Data integration using Web services
- Using conditional formatting and XSLT to format data
- Adding ASP.NET and SharePoint controls
- Developing multiple-step workflows

**Note:** Throughout this course we refer to code-free customizations. By **code-free**, we mean no complex programming languages such as .NET languages or code compilation. However, to help demonstrate the extensibility of functions within SharePoint Designer 2007, we do not exclude use of Cascading Style Sheet (CSS) scripting/class, Extensible Stylesheet Language (XSLT), Extensible Markup Language (XML), XML Path Language (XPath), or existing page code. For example, when discussing master pages, we use the SharePoint Designer 2007 code view to demonstrate alternate methods for manipulating and positioning various master page components.

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## Table of Contents

### Module 0: Course Overview and Web Design Concepts

This module provides an overview of the course modules. It also includes Web site design and Web site design best practices to use when planning SharePoint site design and customization, including cross-browser considerations as well as considerations around SharePoint site accessibility and usability.



## **Module 1: SharePoint 101 (or SharePoint in a nutshell)**

In this module, we cover fundamental SharePoint architecture and functionality to help students understand the scope of customization, design and customization concepts covered throughout this course. This module will also familiarize students with SharePoint terminology. Module 1 includes:

- SharePoint architecture
- An overview of SharePoint publishing infrastructure
- Plug 'n play methodology behind SharePoint functionality

## **Module 2: In-Browser Customizations**

Before learning how to extend code-free customizations using SharePoint Designer 2007, this module covers the types of customizations you can do using the in-browser tools, including a review of the out-of-the-box site templates and their application throughout SharePoint site collections. We include real life working examples of the renowned content query web part as well as making the most of the rich text editor for in-page editing and styling, and consistent formatting throughout pages and sites. Module 2 covers the following topics:

- Create new sites and apply site templates
  - Review the default site templates and application
- Working with publishing and non-publishing sites
- The anatomy of pages and page layouts throughout SharePoint sites
- Create and edit pages, and add content
- Document libraries, lists and content types
- Web Parts
- Application of master pages and CSS to sites and site collections
- SharePoint themes
- Modify navigation
- Office authoring customizations
- Introduction to workflows via the browser
- 3<sup>rd</sup> party add-ons for enhancing the content authoring experience

## **Module 3: Save Sites as Templates**

This module shows you how to save a customized site as a template, both using the in-browser and SharePoint Designer 2007 tools, and then explains how to use the template to create new sites in SharePoint. Module 3 covers the following topics:

- Differences between templates and site definitions in SharePoint
- Publishing versus non-publishing site templates
- Export or save customized site as a SharePoint site template
- Create a new site in SharePoint based on a custom template
- Getting the most out of the Microsoft 'fab 40' templates

## **Module 4: Enter SharePoint Designer 2007!**

Now that you've seen the extent of in-browser customizations, we move on to introduce you to SharePoint Designer 2007 and how it can enhance SharePoint customizations. We



also take a look at other design companion tools, such as the Expression range of products like Expression Blend, and discuss how those tools compare and work with SharePoint Designer 2007 to compliment the overall SharePoint and web customization experience. Module 4 covers the following topics

- Overview of SharePoint Designer
- How SharePoint Designer can enhance SharePoint customizations
- Introduction to creating workflows using SharePoint Designer 2007
- Connect to an existing SharePoint site
  - Considerations around connection protocols
- Navigate within SharePoint Designer
- Create new pages and content
- Editing features

### **Module 5: Create SharePoint Sites with SharePoint Designer 2007**

In this module you create a new SharePoint site from within SharePoint Designer 2007 and then publish the site to an existing site collection. This module also explains how to leverage existing templates for the new site and then configure the new site using the SharePoint Designer 2007 tools including adding Web parts and SharePoint content.

Module 5 covers the following topics:

- Create a new site and publish the site to the existing site collection
- Add new SharePoint content to the site including Web Parts, forms, and tables
- Custom behaviors
- Web components

### **Module 6: Create and Modify SharePoint Master Pages**

This module covers master pages that are based on the ASP.NET 2.0 framework and how master pages work with SharePoint sites and site collections. Module 6 includes the following topics:

- Out-of-the-box master pages
- Create new master pages using SharePoint Designer 2007
- Add and configure navigation controls on master pages
- Marrying CSS to master pages
- Best practices for deploying master pages to SharePoint sites and site collections
- Tips and tricks around customizing the application.master page and MySites

### **Module 7: Create New Content Pages (Page Layouts)**

In this module you learn how to create new page layouts using SharePoint Designer 2007. This module covers how page layouts and master pages work hand-in-hand to determine the final composition of SharePoint pages. Module 7 covers the following topics:

- Architecture of page layouts
- Revisit out-of-the-box page layouts
- Learn all about the inner workings of page layouts
- Build and deploy new page layouts using SharePoint Designer 2007



## **Module 8: Styling SharePoint with CSS**

This module explains how you can apply a custom style sheet to either a single site or an entire SharePoint site collection. You also learn about the SharePoint cascading style sheet (CSS) files including how to modify the out-of-the-box CSS, create new CSS files, and the best practices for managing SharePoint CSS files. We show you how to effectively work with CSS using SharePoint Designer 2007 and 3<sup>rd</sup> party tools, as well as tips and tricks around debugging CSS. Module 8 covers the following topics:

- Review the out-of-the-box CSS files and classes
- CSS standards and compliance
- Create new CSS files and manage the CSS lifecycle
- Tips ‘n tricks around styling the rich text editor
- Different types of CSS files and their application and relevance throughout the SharePoint design lifecycle
- How to effectively inherit CSS throughout sites and site collections

## **Module 9 - Create SharePoint Themes**

In this module, we take CSS to the next level by creating and deploying a custom theme. We learn about some of the inherent benefits and issues around working with and deploying themes and pros and cons around using themes in SharePoint as opposed to using master pages and CSS to achieve an overall look and feel throughout sites and site collections. Module 9 covers the following topics:

- Create a new theme
- Modify properties of themes
- Best practices for modifying and deploying updates to themes
- Tips ‘n tricks for working with temporary theme files

## **Module 10: Create and Configure Data Sources**

This module explains how to use data sources to SharePoint libraries and lists throughout your site collection, databases, XML files, server-side scripts, Web services, and Business Data Catalogs. You will learn how to import data into your SharePoint site from each of these connections using the data source properties in SharePoint Designer 2007 and integrate with business critical applications. We also cover best practices around security protocols when connecting to and configuring data source connections. Module 10 covers the following topics:

- Overview of supported data sources
- Connect with external databases
- Link data sources
- Tips ‘n tricks around authenticating to data sources

## **Module 11: Data Views and Conditional Formatting**

This module explains how to use data views and data forms to present, configure and update data sources. You will work with data sources to add data to SharePoint pages and manipulate the data display using custom queries and conditional formatting. You’ll see how you can leverage data views and data form Web parts with ease to add powerful features to your SharePoint sites. Module 11 covers the following topics:



- Data view Web parts for interactive SharePoint sites
- Conditional formatting
- XPath expressions
- Apply filtering and style

### **Module 12: ASP.NET Controls**

In this module you learn how to configure ASP.NET controls within SharePoint sites. You also bind and populate those controls using data connections. Module 12 covers the following topics:

- Understand the overall role of controls in SharePoint Server 2007
- Review types of controls available
- Populate and format data using ASP.NET controls
- SharePoint controls

### **Module 13: In-Browser Workflows**

In this module you learn how to effectively work with the default workflows using the browser. It also explains how to create workflows for document libraries and lists throughout your SharePoint sites. Module 13 covers the following topics:

- How workflows can benefit your existing business processes
- Review the SharePoint default workflows
- Create an Approval workflow
- Create and deploy content type workflows
- Administrate workflows
- Bestpractices around workflow history, versioning and deployment strategies

### **Module 14: Create Workflows with SharePoint Designer 2007**

This module explains how to take workflows to the next level using SharePoint Designer 2007. In this module you work with a number of scenario-based workflow solutions including multi-step workflows and multi-conditional workflows. Module 14 includes the following topics:

- Relationship between SharePoint Designer 2007 workflows and Windows Workflow Foundation
- Use the SharePoint Designer 2007 Workflow Designer Wizard to create custom workflows
- Location and composition of workflow files
- Deploy workflows created in SharePoint Designer 2007 to SharePoint document libraries and lists
- Save and execute your workflow
- Run the workflow and review workflow status in your SharePoint site
- Review workflow logs on the SharePoint server
- Work through a series of real world workflow scenario-based labs that include detailed instructions
- Use custom actions to extend the built-in SharePoint Designer 2007 actions



## **Module 15: Administrate SharePoint Sites with SharePoint Designer 2007**

In this module you learn how to leverage administrative features in SharePoint Designer to remotely administrate your SharePoint sites and configure contributor settings. Module 15 covers the following topics:

- How to configure and deploy contributor settings
- Extended reports and usage analysis
- Migrate SharePoint sites including back up and restore

