GSA401

The Great SharePoint Adventure

Schedule of lectures

1. SharePoint 2007 Developer Roadmap
2. Developing Features
3. SharePoint Architecture
4. Page Design and Provisioning
5. Master Pages and Site Branding
6. Web Part Development
7. AJAX Web Parts
8. Lists and Content Types
9. Document Libraries
10. Site Definitions
11. Forms Services and InfoPath 2007
12. Introduction to SharePoint Workflows
13. Creating MOSS Collaboration Portals
14. Web Content Management (WCM) with MOSS
15. The Business Data Catalog
16. Excel Services and Report Center
17. SharePoint Application Security
18. Visual Studio Tools for Office 2nd Edition (VSTO)

Revision Date: October 22nd, 2007

SharePoint 2007 Developer Roadmap

Getting Started with SharePoint Development

Logistics

- Basic Human Needs
  - Bathrooms
  - Food and coffee
  - Meals
  - Class hours

- Online access to class materials
  - **http://www.TedPattison.net/downloads/courses/GSA401**
  - Student manual in PDF format
  - Large zip file named **Student.zip** with all lab and demos

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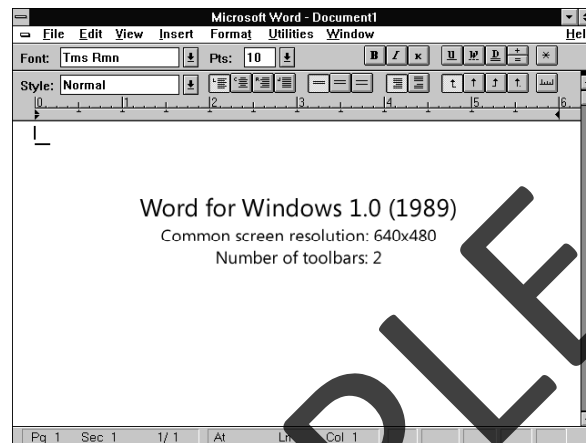## The Great SharePoint Competition

- All students encouraged to submit a solution as entry
    - Contestant should work on solutions throughout the week
    - Solutions must be finished by end of class on Thursday
    - Contestant must demo his/her solution in front of the class
    - Jury of peers will select winners based on applause-o-meter
    - Winners will be awarded with fabulously valuable prizes

- Competition Requirements
    - Each contestant submits single WSS/MOSS solution
    - Solutions can use anything discussed in class
    - Solutions must be deployed in a solution package
    - Solutions will be installed on instructor machine for demo
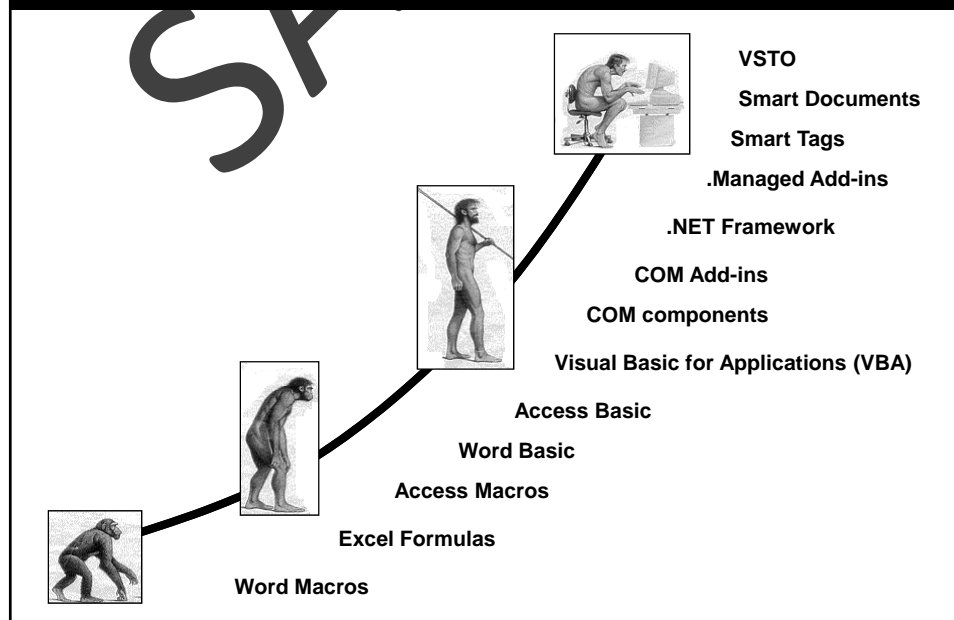
Agenda

- Architectural overview of SharePoint 2007
    - Windows SharePoint Services 3.0 (WSS)
    - Microsoft Office SharePoint Server 2007 (MOSS)
- Basic WSS Terminology
- WSS as a collaboration solution
- Customizing WSS Sites
- Overview of MOSS components and services

Microsoft Office Through the Ages

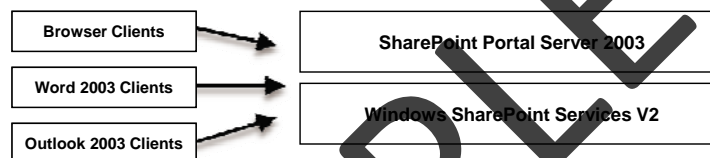- It all started off with a modest productivity tool from a medium-sized company in Redmond

Word for Windows 1.0 (1989)
Common screen resolution: 640x480
Number of toolbars: 2

Evolution of the Office Developer

VSTO

Smart Documents

Smart Tags

.Managed Add-ins

.NET Framework

COM Add-ins

COM components

Visual Basic for Applications (VBA)

Access Basic

Word Basic
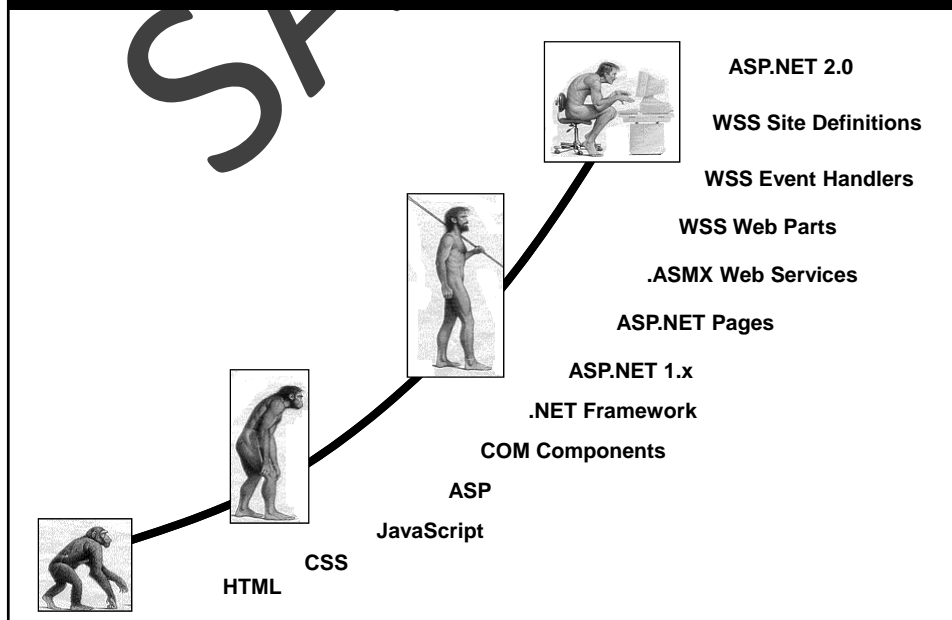
Access Macros

Excel Formulas

Word Macros

Office 2003 Server Components

- Windows SharePoint Services (WSS v2)
  - Site and Workspace Provisioning Engine
  - Accessibility from browser and Office client applications
  - Out-of-the-box Collaboration Services
- MS Office SharePoint Portal Server 2003 (SPS)
  - Aggregation and search features
  - Social networking (Profiles, Audiences, My Sites)

Browser Clients	→	SharePoint Portal Server 2003
Word 2003 Clients	→	Windows SharePoint Services V2
Outlook 2003 Clients	→	

Evolution of the Web/WSS Developer

ASP.NET 2.0

WSS Site Definitions

WSS Event Handlers

WSS Web Parts

.ASMX Web Services

ASP.NET Pages

ASP.NET 1.x

.NET Framework

COM Components

ASP

JavaScript

CSS

HTML

Student Questionnaire

- What's Your Name?
- What Company are you with?
- How have you evolved as a Developer?
- Do you have experience with…
  - The .NET Framework and Visual Studio
  - ASP.NET (what was the latest version)
  - WSS 2.0 and SPS 2003
  - WSS 3.0 and MOSS

Introducing The Office 2007 System

- Windows SharePoint Services 3.0 (WSS)
  - Licensed as part of Windows Server 2003
  - Site provisioning engine and core workspace services
  - Out-of-box collaboration features
  - A development platform
    think of WSS as ASP.NET extensions
- Microsoft Office SharePoint Server 2007 (MOSS)
  - Licensed separately under its own SKUs
  - New components and services built on top of WSS 3.0
  - Unification of SPS 2003 and CMS 2002
 - Lots of functionality rolled in beyond SPS and CMS

The WSS 3.0 Server-side Platform

- Windows SharePoint Services 3.0 (WSS)
  - An engine for creating/running/managing sites
  - Architecture designed to scale to 10,000s of sites
  - Platform for building Web application and solutions
  - Collaboration services included out-of-the-box
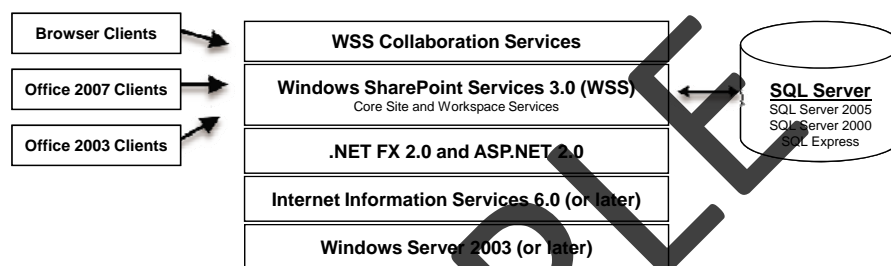
The WSS Farm

- WSS deployment based on a farm
  - Farm requires Web server(s) and database server
  - Farm can be single server or multi-server
 - Each farm has exactly one configuration database
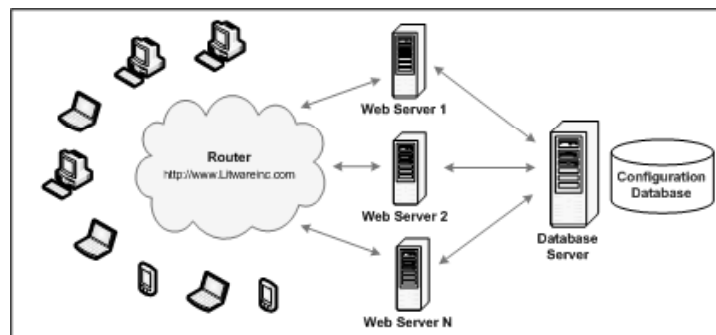
Web Applications

- Web Applications provide HTTP entry points
  - Web Applications based on IIS Web sites
  - Web Application defines one or more URL spaces
  - Web Application security configured independently

Site Collections and Sites

- Sites are partitioned using Site Collections
  - Site collection is scope for administrative privileges
  - Site collection always contains top-level site
  - Site collection may contain hierarchy of child sites
  - Web application can support 1000s of site collections
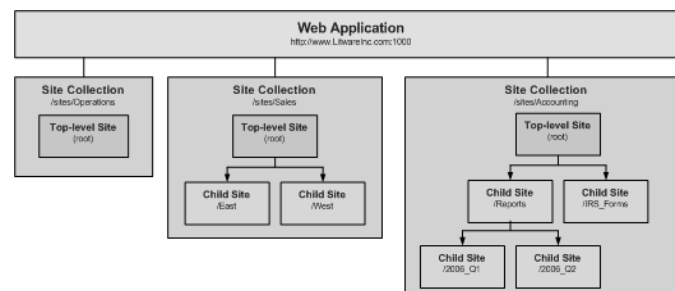
STSADM.EXE Command-line Utility

- Useful for running administrative commands
  - Can be used interactively from command line
  - Commands can be scripted using batch files

```
C:\>stsadm.exe -help CreateSite

stsadm.exe -o createsite
               -url <url>
               -owneremail <someone@example.com>
               [-ownerlogin <DOMAIN\name>]
               [-ownername <display name>]
               [-secondaryemail <someone@example.com>]
               [-secondarylogin <DOMAIN\name>]
               [-secondaryname <display name>]
               [-lcid <language>]
               [-sitetemplate <site template>]
               [-title <site title>]
               [-description <site description>]
               [-hostheaderwebapplicationurl <web application url>]
               [-quota <quota template>]

C:\>STSADM.EXE -o CreateSite -url http://Litwareinc.com/sites/Marketing2007
     -ownerlogin LITWAREINC\Administrator -owneremail administrator@litwareinc.com
     -sitetemplate STS#1

Operation completed successfully.

C:\>
```
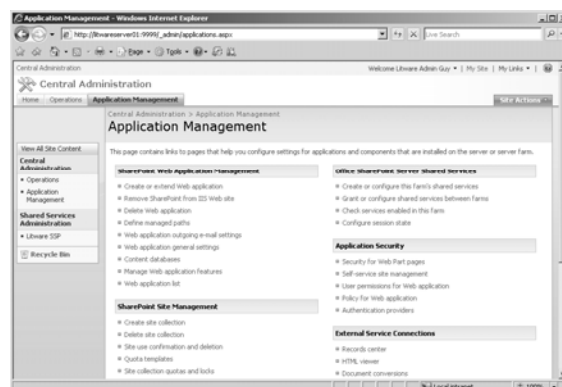
WSS Central Administration (WSS CA)

- WSS CA hosted in separate Web Application
  - Used by farm-level administrators
  - WSS CA pages have more links if MOSS is installed

Start >
  All Programs >
   Administrative Tools >
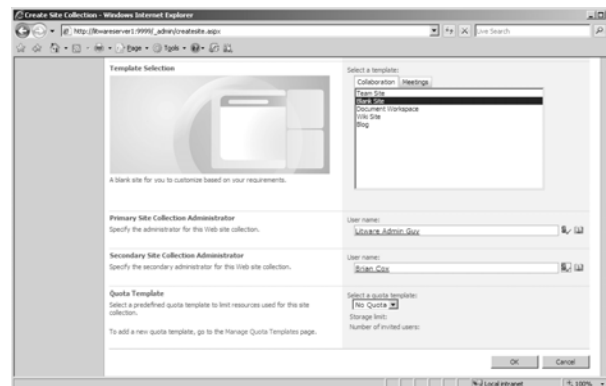   **SharePoint 3.0 Central Administration**

Creating New Site Collections

- Steps to provisioning new site collection
  - Go Application Management tab of WSS CA
  - Click Link titled Create site collection
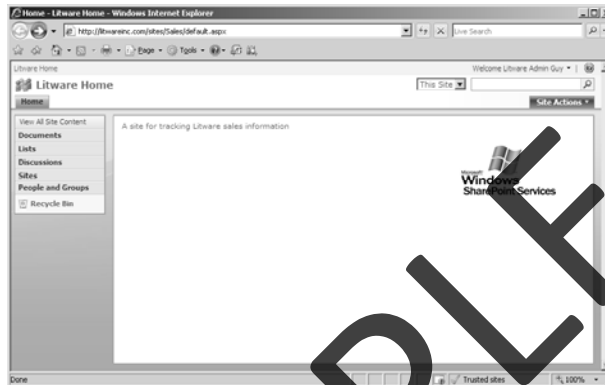 - Fill out input form and click OK
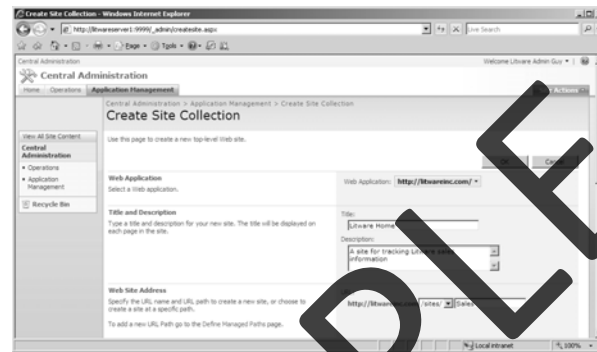
Creating New Site Collections (Part 2)

- Important site collection settings
  - Site template for top-level site
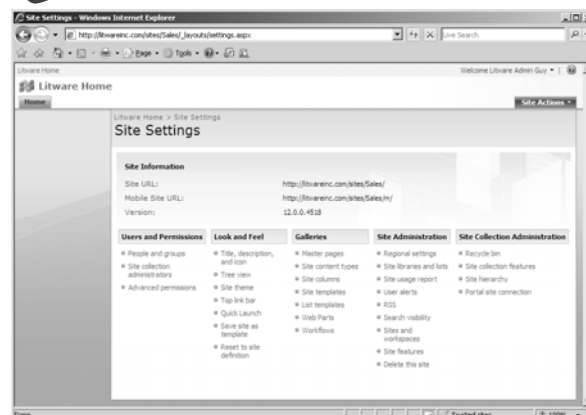 - Site collection owner(s)

A New WSS Site

- New site collection has top-level sites
  - Site collection owner can provision site elements
  - Site collection owner can create child sites

The Site Settings Page

- Site Settings accessible via Site Actions menu
  - Provides links for site and site collection administration

The Create Page

- Create page allows provisioning of site elements
  - WSS provides many collaboration list types out-of-box
  - You can also provision new pages and child site
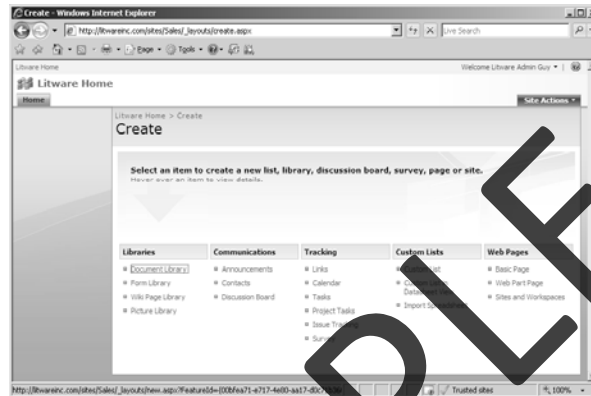
The List Settings Page

- Each List Instance provides a Settings Page
  - You can change list setting and add/remove columns
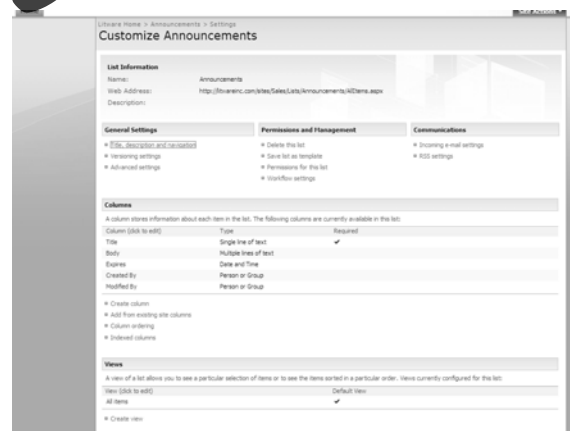
Page Customization using Web Parts

- Web Parts provide page-level customization
    - User can add Web Parts and modify their properties
    - Web Part support customization and personalization

Customization with the SharePoint Designer

Microsoft Office SharePoint Server 2007

- Microsoft Office SharePoint Server 2007 (MOSS)
  - Components and services built on WSS 3.0

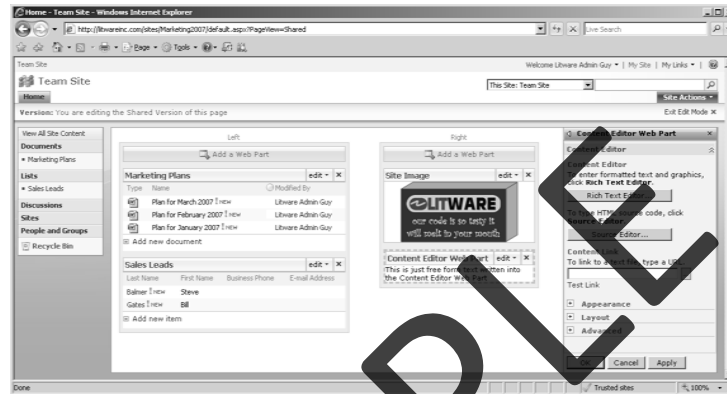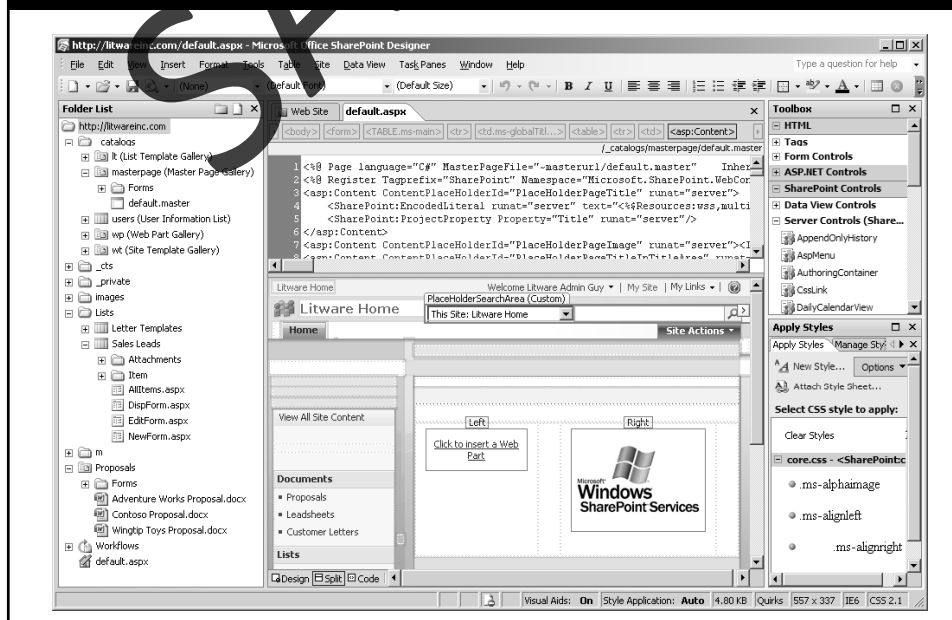| Browser Clients	→	
Office 2007 Clients	→	**Microsoft Office SharePoint Server 2007 (MOSS)** Value-added Applications and Services Built on WSS 3.0
Office 2003 Clients	→	

Windows SharePoint Services 3.0 (WSS)
Core Site and Workspace Services

.NET FX 2.0 and ASP.NET 2.0

Internet Information Services 6.0 (or later)

Windows Server 2003 (or later)
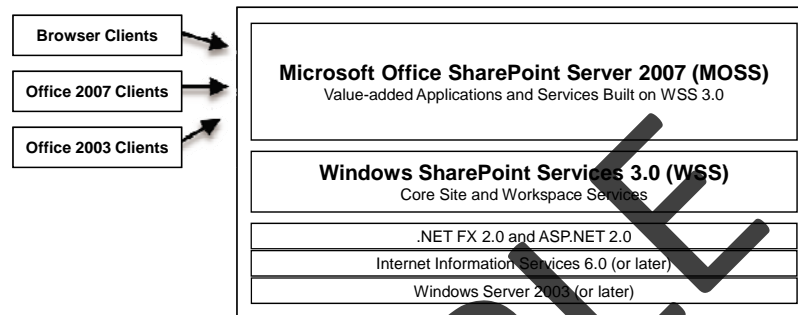
MOSS Services and Components

- What does MOSS Standard Edition provide?
  - Next-generation features of SPS 2003 (Portal)
  - Next-generation features of CMS 2002 (WCM)

- What does MOSS Enterprise Edition provide?
  - Forms Services
  - Business Data Catalog
  - Excel Services

Portal and Search

- MOSS includes next-generation of SPS features
  - User profiles, audience targeting and MySites
  - Enterprise search
  - Introduces Business Data Catalog
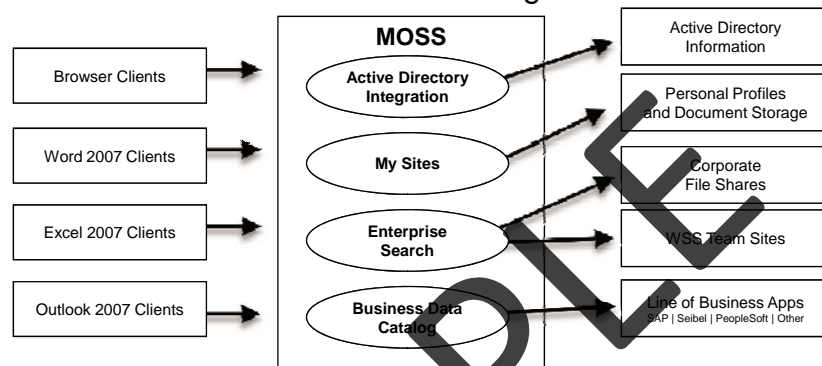
Web Content Management

- WCM features designed for public Web sites
  - Core CMS features integrated into MOSS
  - Features for site branding and customized page layouts
  - Profession publishing features for content approval
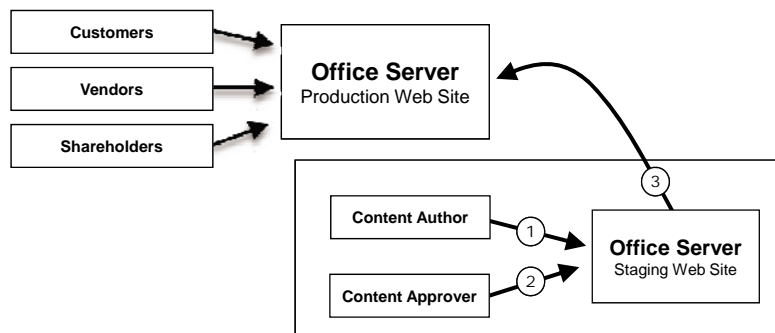
InfoPath 2007 and Forms Services

- InfoPath 2003
  - Capture business data with dynamic, XML-based forms
  - Rich data entry and validation
  - Integration with back-end LOB systems

- InfoPath 2007 and Forms Services
  - Ability to push InfoPath forms to browser-based clients
  - Integration with Office 2007 client applications

SharePoint 2007 Workflows

- WSS and MOSS provide rich workflow support
  - Support built on Windows Workflow Foundation (WF)
  - WSS provides development platform for workflows
  - MOSS provides several valuable workflows out-of-box

| Create Document | Edit / Review | Ready to publish, sign off & approve | Publish |
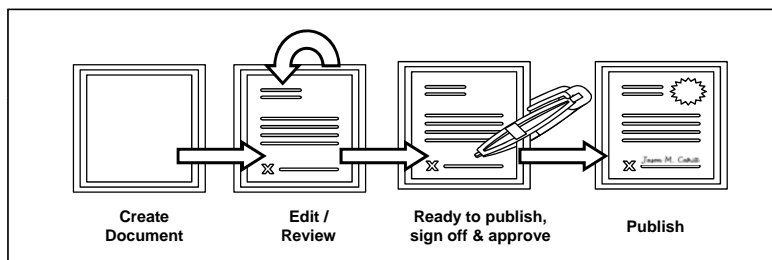
Business Intelligence

- The MOSS Vision for Business Intelligence (BI)
  - Provide business insight to all employees
  - Lead to better, faster, more relevant decisions
  - Integrate with BI features of SQL Server and Excel
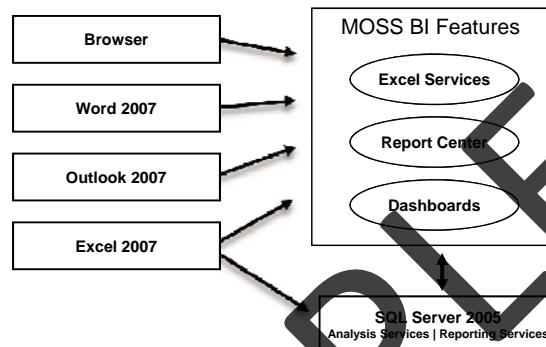
What Do "SharePoint Developers" Build?
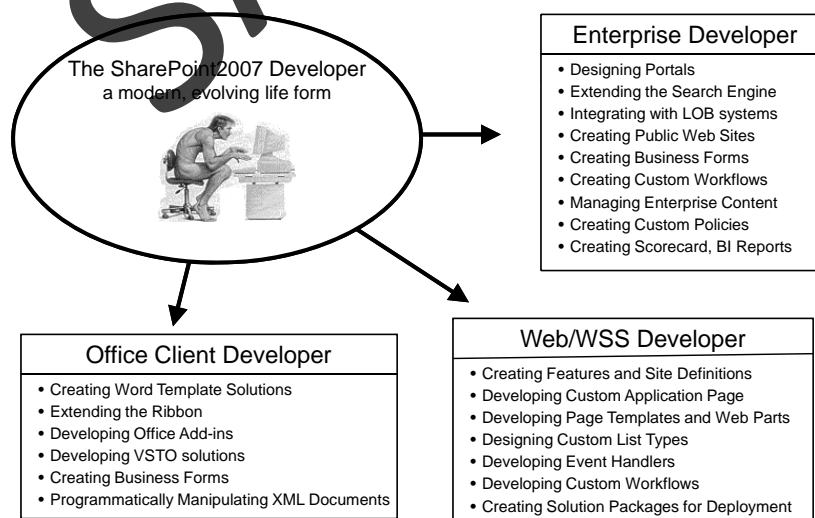
Schedule of Lectures

1. **Roadmap to WSS Development** *<< YOU ARE HERE*
2. **Developing Features**
3. **SharePoint Architecture**
4. **Page Design and Provisioning**
5. **Master Pages and Site Branding**
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18. **Visual Studio Tools for Office 2nd Edition (VSTO)**

Summary

- Architectural overview of SharePoint 2007
  - Windows SharePoint Services 3.0 (WSS)
  - Microsoft Office SharePoint Server 2007 (MOSS)
- Basic WSS Terminology
- WSS as a collaboration solution
- Customizing WSS Sites
- Overview of MOSS components and services

GSA 401 Lab Manual

The Great SharePoint Adventure

Lab Exercises

1) Customizing a WSS Site

2) Developing Your First Feature

3) Developing Custom Application Pages

4) Developing Custom Site Pages

5) Creating Custom Web Parts

6) Site Columns and Content Types

7) Integration with Office Open XML File Formats

8) Working with InfoPath Forms and Forms Services

9) Creating Custom Workflows for SharePoint Server

10) Creating and Customizing a Corporate Portal Site

11) Web Content Management with SharePoint Server

12) Business Data Catalog

13) Excel Services and Report Center

14) Developing Office Solutions with VSTO

Lab Revision Date: October 22nd, 2007

SAMPLE

Lab 01: Customizing a WSS Site

Lab Time: 45 Minutes

Lab Directory: C:/Student/Labs/01_Customization

Lab Overview: In this lab you will be familiarizing yourself with basic SharePoint tasks such as Creating a Site Collection/Top-level Site, Creating a Child Site, Creating a List/Document Library and Making some basic Customizations to a Site.

Back Story: The management team at Litware has decided to use Windows SharePoint Services 3.0 to assist with storing and managing the content associated with their consulting projects. You will be instructed to create a top-level team site with a list that tracks a profile for each consulting project. You will also create a document library for storing various project-related documents such as customer presentations and proposals. You will also create child sites to track information about consultants in various divisions of the Litware corporation.

Important: You must finish this lab as written for a later lab to work correctly!

Exercise 1: Create a new site collection and a top-level site

1. Make sure you are logged on as **LITWAREINC\Administrator**. Launch the WSS Central Administration Web site by using the command in the Windows Start menu. You can find the command at **Start >> Administrative Tools >> SharePoint 3.0 Central Administration**.

2. Once the home page of the WSS Central Administration Web site appears, click on the **Application Management** link at the top of the page to get to the Application Management page. Under the **SharePoint Site Management** section, click the link with the caption **Create site collection**. This will take you to the page where you can create a new site collection and a new top-level site. On the **Create Site Collection** page, fill in the required information (see below for instructions) to create a new site collection.

   A. Make sure the Web Application used for site creation is the one named **Litware Internet Site** that is accessible through the URL **http://litwareinc.com**.

   B. For the Title use **Litware Project Management**.

   C. Create the new site collection so that it's URL is **http://litwareinc.com/sites/ProjectManagementLab**.

   D. Under the **Template Selection** section, look at all the sites templates that are available. Choose **Blank Site** from the **Collaboration** tab as the site template for the new top-level site that will be automatically created.

   E. Assign the primary site collection owner as **LITWAREINC\Administrator**. Be sure to verify this by using Ctrl+ k or by clicking the check person icon 🔍✓ (your entry should become Litware Admin Guy)

   F. Leave the **Quota Template** with the default setting of **No Quota**

   G. Click **OK** to create the new site collection and top-level site. Once you see the page that confirms everything has been created, navigate to the top-level site using the browser (click the link **http://litwareinc.com/sites/ProjectManagementLab**).

3. In this step, you will change the title of your site. The Title you entered of **Litware Project Management** is just a little too boring. Choose the **Site Setting** command under the **Site Actions** menu. Once you are at the **Site Setting** page, click the link with the caption **Title, description and icon** under the **Look and Feel** section. When you reach the **General Setting** Page, enter a different title that is a variation of **Litware Project Management**. Click **OK** and confirm that the home page now reflects the new site title.

4. Over the next several steps you will add custom Litware graphics to your new site to replace the standard Microsoft graphics.

   A. First, using the **Windows Explorer**, look inside the lab directory (**.../student/labs/01A_Customization/**) and locate the subdirectory named **LitwareGraphics**. It contains several graphics files you will use to customize your site. Begin by copying the **LitwareGraphics folder** (not just the images inside but rather the folder itself along with everything it contains) to a location inside the WSS layouts directory so that you can make your graphics files accessible to all WSS sites within the farm. In particular, copy the LitwareGraphics directory into the directory at the following location.

   C:/Program Files/Common Files/Microsoft Shared/web server extensions/12/TEMPLATE/IMAGES

Note that WSS configures the **IMAGES** directory with IIS so that it is a child virtual directory of the **_layouts** virtual directory. This means your graphics files should be accessible using a relative URL within any WSS site that looks like this:

```
.../_layouts/images/LitwareGraphics/
```

5. In this step, you will modify the Site Image Web Part on the site's home page so that it displays a custom Litware graphic instead of the default Microsoft graphic.

    A. Navigate to the home page of the site (**http://litwareinc.com/sites/ProjectManagementLab/**) and place the page into edit mode by choosing the **Edit Page** command under the **Site Actions** menu.

    B. Once the page is in edit mode, find the **Site Image** web part (Right Zone, Top Choice) and on that web part's **edit** drop down **menu** select the **Modify Shared Web Part** command from the Web Part's action menu.

    C. After you have run this command, you should see a task pane appear in the browser that allows you to modify the **Image Link** property.

    D. Assign the **Image Link** property a new value of **/_layouts/images/LitwareGraphics/LitwareSlogan.png** and click **OK**.

    E. In the Right hand corner near the top of the page click **Exit Edit Mode.**

    F. Confirm that the site's home page now shows the new Litware slogan graphic.

6. In this step we will add a Logo to the banner of our home page.

    A. Go to the Site Settings page (**Site Actions** drop down menu > **Site Settings**)and click on the link with the caption **Title, description and icon** under the **Look and Feel** section.

    B. Now enter a path to assign an URL to the graphics file named LitwareLogo.png. You path should be **/_layouts/images/LitwareGraphics/LitwareLogo.png**.

    C. Click the **Click here to test** and make sure that you can see the small logo, if not check your Url and try again.

    D. Click **OK**

    E. Click on the **Home tab** on your page to navigate back to the main page (upper left side first and only tab on the page)

    F. Verify that the Litware logo appears on the banner of the home page (Upper left corner of web page), if not go back to step 6 and try again.

Exercise 2: Create new list for tracking profiles for consulting projects

1. Over the next few steps, you will create and modify a new SharePoint custom list for managing Litware consulting projects.

    A. Start by clicking the **Create** command from the **Site Actions** menu to navigate to the **Create** Page.

    B. Create a new list by clicking the **Custom List** link in the **Custom Lists** section. This will take you to a page that allows you to name the new list.

    C. Name the new list **Projects** and click **Create**.

2. Next we are going to modify the settings for our list to disable the uploading of attachments to the Projects list.

    A. Once the **Projects** list has been created, locate and drop down the **Settings** menu on the list's AllItems.aspx page (note: **NOT** the one on the Site Actions menu) and click the **List Settings** command. This will take you to the list settings page that has a title of **Customize Projects** list.

    B. From this page, click on the **Advanced Settings** link in the **General Settings** section. Take note of the different modifications you can make to the list from the **Advanced Settings** page.

    C. In the **Attachments** sections, change the default option to **Disable Attachments** and click **OK** to return to the list setting page. In this case, there is no need to the list to support attaching documents to items within the **Projects** list.

3. From the **List Settings** page, you can add and modify columns for the **Project** list. In this step you will modify the **Projects** list so its set of columns matches the set of columns defined below. (For detailed directions see steps A - H

below)

Column Name	Type	Notes
Project	Single Line of Text	**Do not create this column as a new column.** Instead, rename the **Title** column to **Project**.
Client	Single Line of Text	Make this a required column
Contract Signed	Yes/No	Set default value to No
Contract Amount	Currency	Set currency formatting to whatever seems most appropriate
Begin Date	Date and Time	Format this column to show date only
End Date	Date and Time	Format this column to show date only
Created By	Person or Group	**You do not have to create this column**. It is automatically created when you create a new list
Modified By	Person or Group	**You do not have to create this column.** It is automatically created when you create a new list

A. From the **Projects List** click on the **Settings** drop down and click on **List Settings** (Note: we are already on this screen from step 2).

B. Scroll down to the **Columns section** and click on the **Title** Column to edit it.

C. Change the **Column name** to **Project** and click **OK**

D. From the **Columns section** click **Create Column** and using the chart above configure the following settings:

E. Type the **Column Name**

F. Select the **data type** for the column

G. Examine the **Notes field from the above table** for extra configuration options for each column

H. Configure extra options as needed and then click **OK**

I. Repeat until all columns are created and then from the **Customize Projects Menu** underneath the **Columns section** click on **Column ordering**

J. Organize the order of the columns so that they match the order in the list above. Note: there may be nothing to do here other than verify the order depending on how you created your columns.

K. Using the breadcrumbs navigational element (i.e. the one that is near the top of the screen that looks like **Litware Project Management > Projects > Settings**) click on the Projects link to navigate back to the Projects List.

4. When you are done creating the Project list structure, add the following four items so that you have some test data to work with.

Project	Client	Contract Signed	Contract Amount	Begin Date	End Date
Wing001	Wingtip Toys, Inc	Yes	$250,000	1/1/2005	4/15/2006
AdWks001	Adventure Works	No	$120,000	1/15/2006	6/1/2006
NW001	Northwind Traders	Yes	$1,200,000	4/1/2006	6/1/2007
Cont001	Contoso	No	$75,000	6/1/2005	9/1/2006

A. From the **Projects List** click on the **New** Drop down menu and using the table above create 4 records.

5. When finished navigate back to the Litware Project Management Home page (i.e. click on the **Home tab** on the left side near the top)

Exercise 3: Creating a new document library for project-related documents

1. Over the next few steps, you will create and modify a new SharePoint document library for storing and managing documents associated with Litware consulting projects.

A. Start by clicking the **Create** command from the **Site Actions** menu to navigate to the **Create** Page.

B. Create a new document library by clicking the **Document Library** link in the **Libraries** section. This will take you to a page that allows you to name the new document library.

C. Name the new document library **Project Documents** and click **Create** to create it.

2. In this step, you will add a new column to associate custom metadata with each document that is added to the document library.

   A. Locate and drop down the **Settings** menu on the document library's AllItems.aspx page and click the **Document Library Settings** command. This will take you to the document library settings page that has a title of **Customize Project Documents**.

   B. Add a new lookup column to the document library named **Project**.

      i. Underneath the columns section of this page click **Create column**.

      ii. We will use the **Project** column of the **Projects** list you created in the previous exercise as the source for this new lookup Column.

         i. Type Project for the **Column name:**

         ii. Choose **Lookup (information already on this site)** for the **type** selection (i.e. the option button list)

         iii. Type **Project identifications taken from the Project List** for the **Description:**

         iv. Make sure to select the option so that the **Project** column is required.

         v. Be sure to choose **Projects** for the **Get information from:** drop down list choice.

         vi. Choose **Project** for the **In this column:** drop down list choice.

         vii. Click **OK** to add the new column.

         viii. Using the breadcrumbs navigation bar on this page (i.e. **Litware Project Management > Project Documents > Settings**) navigate back to the Project Documents Library (i.e. click on the **Project Documents** link)

3. Now that you have created the **Project Documents** document library and added the lookup column Project, it's time to upload a few documents to test it out.

   A. Using the Windows Explorer, look inside the lab directory and locate the subdirectory named **LitwareDocuments**. It contains several .DOCX files and PPTX files that you can upload to your document library.

   B. Upload each document inside this directory. You should observe that whenever you upload a document into the **Project Documents** document library, WSS brings up a page to prompt you to assign a value to the **Project** column. You should observe that the **Projects** column provides extra metadata for each document and that WSS forces users to associate each and every document inside this document library with a specific project. **Important: You MUST upload each document SEPARATELY if you use the Upload Multiple Documents choice you will bypass the metadata screen altogether for each document.**

      i. On the **Project Documents Library** Page select the **Upload Drop Down arrow** and then click **Upload Document** or just click on **Upload**

      ii. Navigate to **...\Student\Labs\01A_Customization\LitwareDocuments**

      iii. You are going to repeat the next set of steps one time for each of the 4 items in this directory (3 PowerPoint and 1 Word document(s))

         i. **Select** the next **item** (From the top 3 PowerPoint and 1 Word document(s)) on the **Choose file** screen and click **Open**

         ii. On the **Upload Document: Project Documents** screen click **OK.**

         iii. The next screen informs you that the document is currently checked out to you; you need to fill in the requisite metadata and check the document into the library to finish this process.

            i. In the **Project** drop down box pick the appropriate project for this document matching up

the Document Name field to the Project. (use the table below for reference as necessary.

Project	Client
Wing001	Wingtip Toys, Inc
AdWks001	Adventure Works
NW001	Northwind Traders
Cont001	Contoso

    iv. Click the **Check In** button to finish the upload process.

    v. Repeat step 3. > B > iii once for each of the 4 documents.

  iv. When finished uploading the four documents navigate back to the Litware Project Management Home page (i.e. click on the **Home tab** near the top left corner of the screen) .

Exercise 4: Customizing the home page

1. In this exercise you will customize the appearance of the Quick Launch navigation control on the left-hand side of the home page.

  A. Start by clicking the **Site Settings** command from the **Site Actions** menu to navigate to the **Site Setting Page**.

  B. Next, click on the **Quick Launch** link under the **Look and Feel** section. Once you get to the **Quick Launch** page, you will be able to add, edit and delete links and headings from the **Quick Launch** control. In this case, you want to remove the heading for **Discussions**

    i. On the **Quick Launch page** click on the **Edit Discussions** icon 📝 (i.e. the one to the left of the **Discussions** section)

    ii. On the **Edit Heading page** click the **Delete** button

    iii. Click **OK**

    iv. Navigate back to the Litware Project Management home page (i.e. click on the **Home tab** near the upper left corner of the page)

  C. Verify that the Quick Launch control now looks like this.

2. Next, you will add two Web Parts to the home page to display the **Projects** list and the **Project Documents** document library.

  A. If necessary, Navigate to the home page of the site

  B. From the site Home page, place the page into edit mode by choosing the **Edit Page** command under the **Site Actions** menu.

  C. Once the page is in edit mode, you should click the **Add a web part** link at the top of the left **Web Part Zone**.

  D. Select to add a Web Part for both the **Projects** list and the **Project Documents** document library.

  E. Click **Add**.

F. To see what your site should look like click **here**.

G. When finished be sure to click the **Exit Edit Mode** hyperlink (near the upper right corner of the page).

3. Finally we will create a Portal Navigation Point to link our new Site Collection back to the main portal page.

   A. Click on **Site Actions > Site Settings**

   B. In the **Site Collection Administration** column select the **Portal site connection** choice.

   C. On the Portal Site Connection page:

      i. Select **Connect to portal Site**

      ii. enter **http://litwareinc.com** as your Portal Web Address:

      iii. enter **Litware Inc.** for the Portal Name:

      iv. click **OK**

Exercise 5: Creating child sites

1. Now you are going to create two new child sites to track Litware consultants by corporate division. One site will be for the **Litware North Division** and the other will be for the **Litware South Division**. However, keep in mind when you create these child sites you want to make it easy for uses to navigate between them. Therefore, you want to create a resulting top link bar on the parent site and both child sites to look like this:

2. In this step, you will create a child site named **North Division**.

   A. Start by clicking the **Create** command from the **Site Actions** menu to navigate to the **Create** page.

   B. Create a child site by clicking the **Sites and Workspaces** link in the **Web Pages** section. This will take you to a page that allows you to create a new child site.

   C. Name the site **North Division**

   D. Make it's URL **NorthDivision** (no space in the name)

   E. choose **Blank Site** as the site template

   F. In the **Navigation** and **Navigation Inheritance** sections of the New SharePoint Site page, choose **Yes** as the option to **Use the top link bar from the parent site** and **Yes** for the option **Display this site on the top link bar of the parent site**. (i.e. just accept the defaults)

   G. Finally, and click **Create** to create the new child site.

3. In this step, you will modify the Site Image Web Part in the **North Division** site so that it displays a Litware North graphic instead of the default Microsoft graphic.

   A. Navigate to the home page of the **North Division** site and place the page into edit mode by choosing the **Edit Page** command under the **Site Actions** menu.

   B. Once the page is in edit mode, find the **Site Image Web Part** (Right Zone) and select **Edit** > **Modify Shared Web Part** command from the Web Part's action menu.

   C. After you have run this command, you should see a task pane appear in the browser that allows you to modify the **Image Link** property. Assign the **Image Link** property a new value of **/_layouts/images/LitwareGraphics/LitwareNorth.png**

   D. Click **OK**.

   E. Confirm that the child site's home page now shows the Litware North graphic.

4. Now you should be able to navigate back and forth between the top-level **Project Management** site and the child **North Division** child site using the top link bar.

5. Now click the **home tab** to return to the top-level site and create a second child site named **South Division**.

   A. Create this new site using the same set of instructions (i.e. Ex 5 Step 2) as you used to create the **North Division** site (note: replace North with South as appropriate).

   B. Also, modify the Site Image Web Part in the South Division site so that it displays the graphic file at **/_layouts/images/LitwareGraphics/LitwareSouth.png** (i.e. follow the instructions in Ex 5 step 3 if you need help)

6. At this point, you should be able to quick navigate between the top-level site and either child site with a single click on the top link bar. This is all the work you will do within the child sites at this time. **Note: You will return to these child sites in a later lab and add some custom lists to track information about Litware consultants.**

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