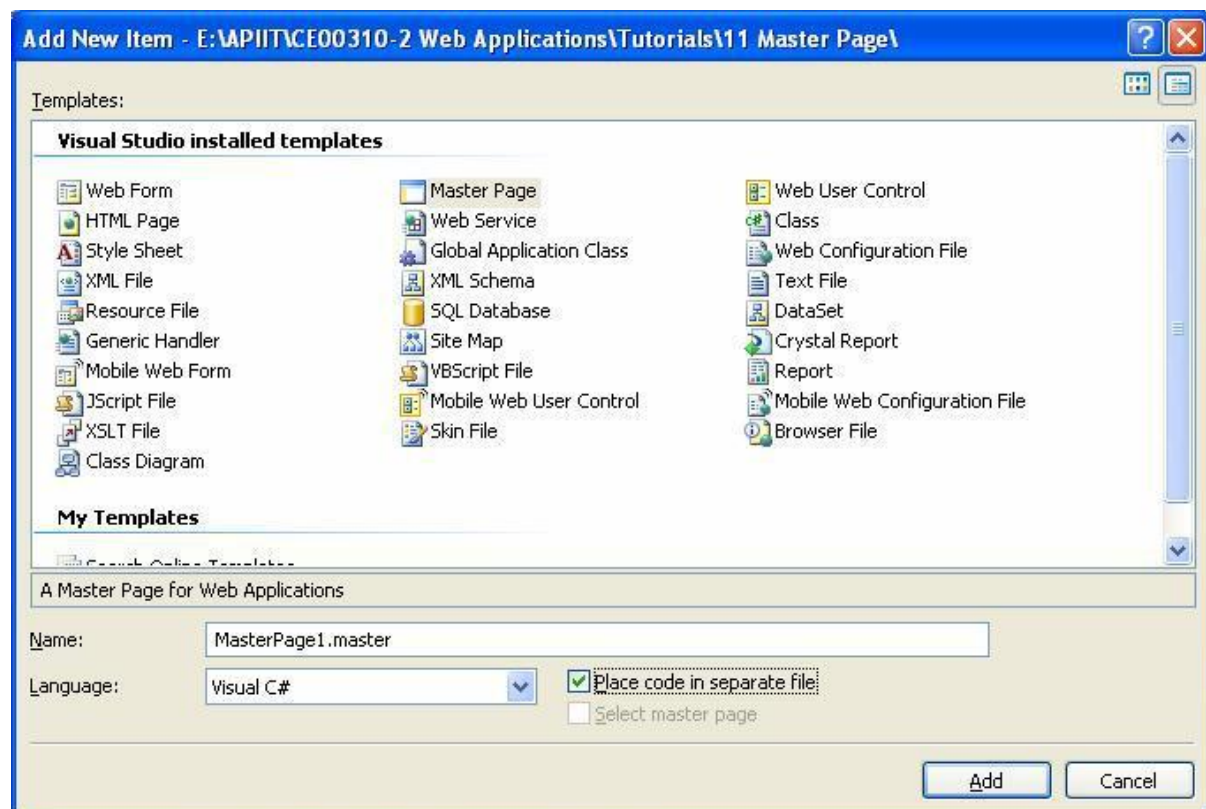# Lab 5: Master Page

- Master pages allow you to create a page layout — a template page — and then create separate pages containing content that is merged with the master page at run time.

Creating Master Page

☐⌨   The master page is the template for how your pages will look. In this section, you will first create a master page.

📄⌨   You will then use a table to lay out the master page with a menu, a logo, and a footer that will appear on each page of your site.

📄⌨   You will also work with a content placeholder, which is a region in the master page that can be replaced with information in a content page.

To create the master page

3. In Solution Explorer, right-click the name of your Web site, and then click **Add New Item**.
4. Under Visual Studio installed templates, click **Master Page**.
5. In the Name box, type **MasterPage1**.
6. Select the **Place code in separate file** check box.
7. In the **Language** list, click the programming language you prefer and then click **Add**.

Laying Out the Master Page

- The master page defines how the pages in your site look. It can contain any combination of static text and controls.
- A master page also contains one or more content placeholders that designate where dynamic content will appear when pages are displayed.

To create a layout table for the master page

§ With the MasterPage1.master file selected in Source view, set the target schema for validation to Microsoft Internet Explorer 6.0. To set this value, you can use either the drop-down list on the toolbar or select **Options** from the **Tools** menu, and then click **Validation**.
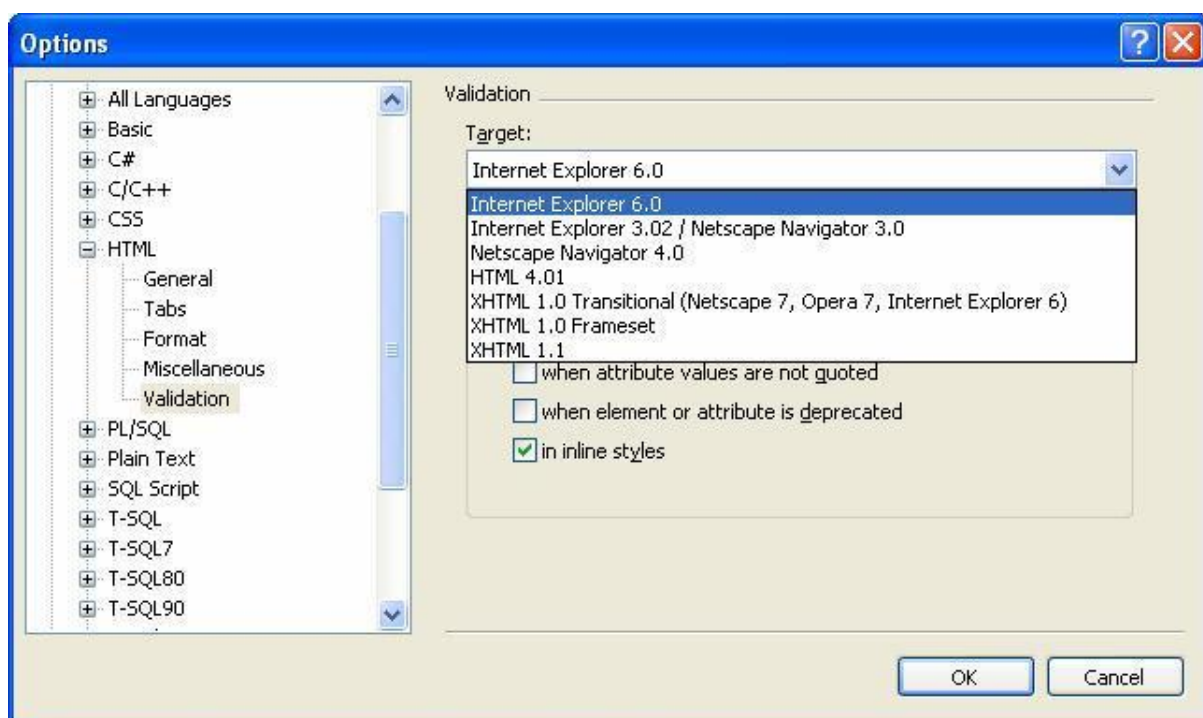
1. Switch to Design view.
2. From the drop-down list at the top of the Properties window, select **DOCUMENT**, and then set **BgColor** to a distinctive color, such as blue.
3. Click the page where you want to place the layout table.
   Note: Do not put the layout table inside the ContentPlaceHolder control.
4. On the **Layout** menu, click Insert **Table**.

3. In the **Insert Table** dialog box, click **Template**. In the list click **Header**, **footer** and **side**, and then click OK. The template defines the arrangement of rows and cells in the table. The template you have selected creates three rows, and the middle row is split into two cells.
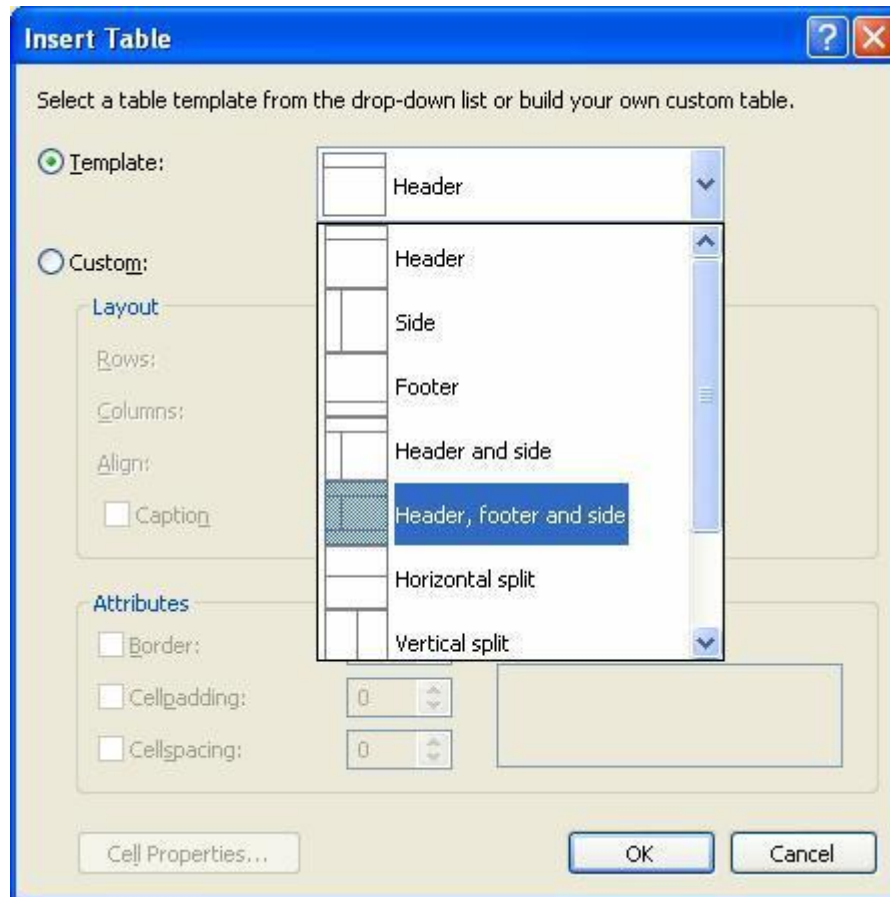

4. Make the following settings:
    In the middle row, click the leftmost column, and then set its **Width** to 48 in the Properties window.
    Click the top row, and then set its **Height** to 48 in the Properties window.
    Click the bottom row, and then set its **Height** to 48 in the Properties window.
Note: You can set the width and height by dragging the table cell borders or by selecting the cell and setting values in the Properties window.
5. Select all cells in the table and set **BgColor** to a different color than the background color, and set **VAlign** to **top**.
6. After laying out the table, you can add content to the master page that will appear on all pages. You will add a copyright message as a footer, and add a menu. If you have a logo graphic available, you can add that as well.

To add static content to the master page

1. Click the bottom cell, and then type footer text such as **Copyright 2007 ABC Inc**.
2. In the **Toolbox**, from the **Navigation** control group, drag a **Menu** control into the top cell.

3. Create a menu by following these steps:
    Set the **Menu** control's **Orientation** property to **Horizontal**.
    Click the smart tag on the Menu control, and click Copyright 2007 ABC Inc in
    the **Menu Tasks** dialog box.
4. Under **Items**, click the **Add a root node** icon twice to add two menu items:
    Click the first node, and then set **Text** to **Home** and **NavigateUrl** to
    Home.aspx.
    Click the second node, and then set **Text** to **About** and **NavigateUrl** to
    About.aspx.
   Click **OK** to close the **Menu Item Editor** dialog box.
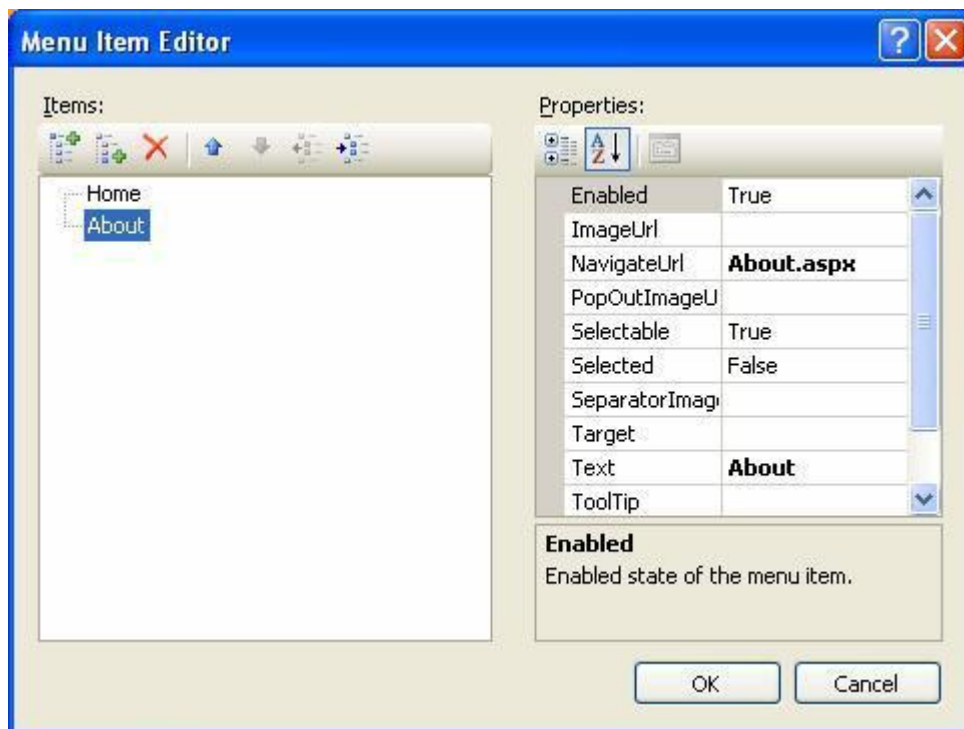
4. If you have a graphics file available to use as a logo, follow these steps to place it on
    the master page:
    In Solution Explorer, right-click the name of your Web site, and then click
    Add Existing Item.
    Navigate to your graphics file, select the graphic file, and then click **Add**.
    In the **Toolbox**, from the **Standard** group, drag an **Image** control to the
    middle left column of the table.
    Set the **Image** control's **ImageUrl** property to the name of the graphics file.
5. You can now position the content placeholder to specify where the master page can
    display content at run time.

To add a content placeholder

1. Drag the **ContentPlaceHolder** control into the middle right cell. The control's **ID** property is **ContentPlaceholder1**. You can leave this name or change it. If you change the name, make a note of the name because you will need to know the name later.
2. Save the page.

Creating Content for the Master Page

⯐ The master page provides the template for your content. You define content for the master page by creating an ASP.NET page that is associated with the master page.

⯐ The content page is a specialized form of an ASP.NET page that contains only the content to be merged with the master page.

⯐ In the content page, you add the text and controls that you want to display when users request that page.

To create the Home page

4. In Solution Explorer, right-click the name of your Web site, and click **Add New Item**.
5. Under **Visual Studio installed templates**, click **Web Form**.
6. In the **Name** box, type **Home**.
7. In the **Language** list, click the programming language you prefer.
8. Select the **Select master page** check box, and then click Add. The **Select a Master Page** dialog box appears.
9. Click **MasterPage1**.master, and then click **OK**.

To add content to the Home page

1. Switch to Design view.

   The region you created as a **ContentPlaceHolder** control in the master page is displayed as a Content control in the new content page. The rest of the master page content is displayed so you can see the layout, but it appears dimmed because you cannot change it while editing a content page.

2. From the drop-down list in the Properties window, click DOCUMENT, and then set Title to **Home Page**.

   You can set the title of each content page independently, so that the correct title is displayed in the browser when the content is merged with the master page. The title information is stored in the content page's @ **Page** directive.

3. In the **Content** control, type **Welcome**, select the text, and then format the text as a **Heading 1** by selecting the text and selecting Heading 1 from the **Block Format** drop-down list above the **Toolbox**.

4. Press ENTER to create a new blank line in the Content control, and then type **Thank you for visiting our site**.

   The text you add here is not important; you can type any text that will help you recognize this page as the home page.

5. Save the page.

To create the About page

3. Use the same steps that you used for the Home page to add a new content page named About.aspx. Be sure to attach the new page to the Master1.master page as you did with the Home page.
4. Change the page's title to **About Us**.
5. In the content region, type **About Us,** and then format the text as a **Heading 1** by selecting the text and selecting **Heading 1** from the **Block Format** drop-down list above the **Toolbox**.
6. Press ENTER to create a new line, and then type **Since 200, We have provided high-quality Web design services**.

5. Save the page.

Testing the Pages

📑✍️   You can test the pages by running them as you would any ASP.NET page.

To test the pages

§   Switch to the Home.aspx page, and then press CTRL+F5. ASP.NET merges the content in the Home.aspx page with the layout in the Master1.master page into a single page and displays the resulting page in the browser. Notice that the URL of the page is Home.aspx; there is no reference in the browser to the master page.

1.   Click the About link. The About.aspx page is displayed. It is also merged with Master1.master page.