Code Repository Exercises

User Controls and Master Pages

Purpose: The purpose of this exercise is to familiarize you with two techniques for reusing code in ASP.NET Applications: User Controls and Master Pages. You will learn how to create a custom user control that can be reused across multiple pages. You will also learn how to create a master page that can provide layout and look-and-feel for several pages. Finally, you will learn how ASP.NET pages can programmatically interact with user controls and master pages through the use of public properties.

Directory Name: UCMP

Instructions:

Part 1: User Controls

1. Following the example shown in Figure 11-4 on page 326 of the MacDonald book, create a user control representing a page footer, and an .aspx page named *FooterHost.aspx* that hosts this user control. The user should be able to change the display format of the date on the footer shown in the example. (Note: this example begins under the "Creating a Simple User Control" section on page 320, skips the "Working with Independent User Controls" section on page 323, and concludes in the "Working with Integrated User Controls" section on page 325.)

Part 2: Master Pages

- Go to a Website that offers free HTML/CSS Website templates, such as
 <u>www.freewebsitetemplates.com</u> or <u>www.freshtemplates.com</u>. Find a professional-looking
 template that you could use for your project website (the template doesn't have to be used for
 your project website, but I strongly recommend it, since this will save you some work on your
 second project milestone). Convert the template into an ASP.NET master page, with
 contentplaceholders in all places where dynamic content will be shown.
- 2. Change the *FooterHost.aspx* page that you created in Part 1 so that it uses the master page that you created in the previous step. You will need to add the appropriate directive to the *FooterHost.aspx* page, remove opening and closing html elements, and place the content of this page inside an appropriate <asp:Content> element.
- 3. Add an ASP.NET Web Server control to your master page that can be dynamically changed from a child page. For example, you may add a <asp:Image> control to your master page that the child page can change by altering its ImageUrl property. Or, you may add a <asp:Hyperlink> control that the child page changes by altering its NavigateUrl property. Create a child page called *ChangeMaster.aspx* that includes controls to allow the user to make the change to the master page. (Hint: you will need to define one or more public properties on your master page

to give the child page access to the control that will be changed. See pages 384-385 for an example).

Header on Default.aspx: User Controls and Master Pages

Pages linked from Default.aspx: FooterHost.aspx, ChangeMaster.aspx