Themes & Skins

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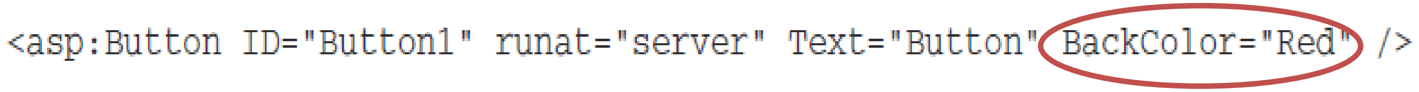
Themes

- A ***theme*** is a collection of files that **define the look of a page**.
  - Typically includes skin files, CSS files, and images.

- Define themes in **`App_Themes`** folder.

Types of Themes

- Two different properties to set a theme:
  - `Theme`
    - Applied late in the page's life cycle, effectively **overriding any customization you may have for individual controls**.
  - `StyleSheetTheme`
    - Applied very early in the page's life cycle, shortly **after the page instance has been created**.
    - An individual page can **override the settings from the theme by applying inline attributes on the controls**.



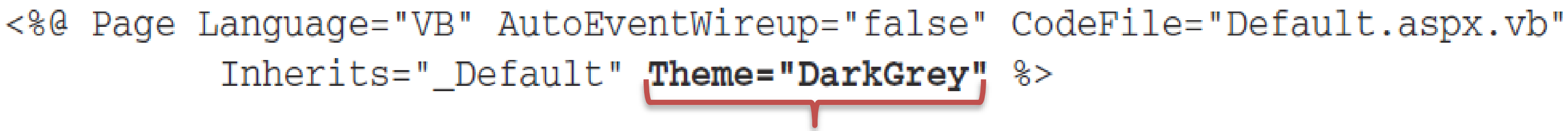
```
<asp:Button ID="Button1" runat="server" Text="Button" BackColor="Red" />
```

Types of Themes

- If you want to supply default settings for your controls → Use **`StyleSheetTheme`**
  - **Can be overriden at the page level**
- If you want your controls look the way you defined them in the theme → Use **`Theme`**
  - **Cannot be overriden anymore and overwrite any customizations**
  - **`EnableTheming=False`** → Disable theming for a control

Applying Themes

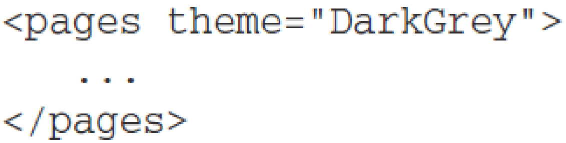
1. At the page level → **Page** directive



```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="Default.aspx.vb"
         Inherits="_Default" Theme="DarkGrey" %>
```

StyleSheetTheme="DarkGrey"

2. At the site level → **web.config** file



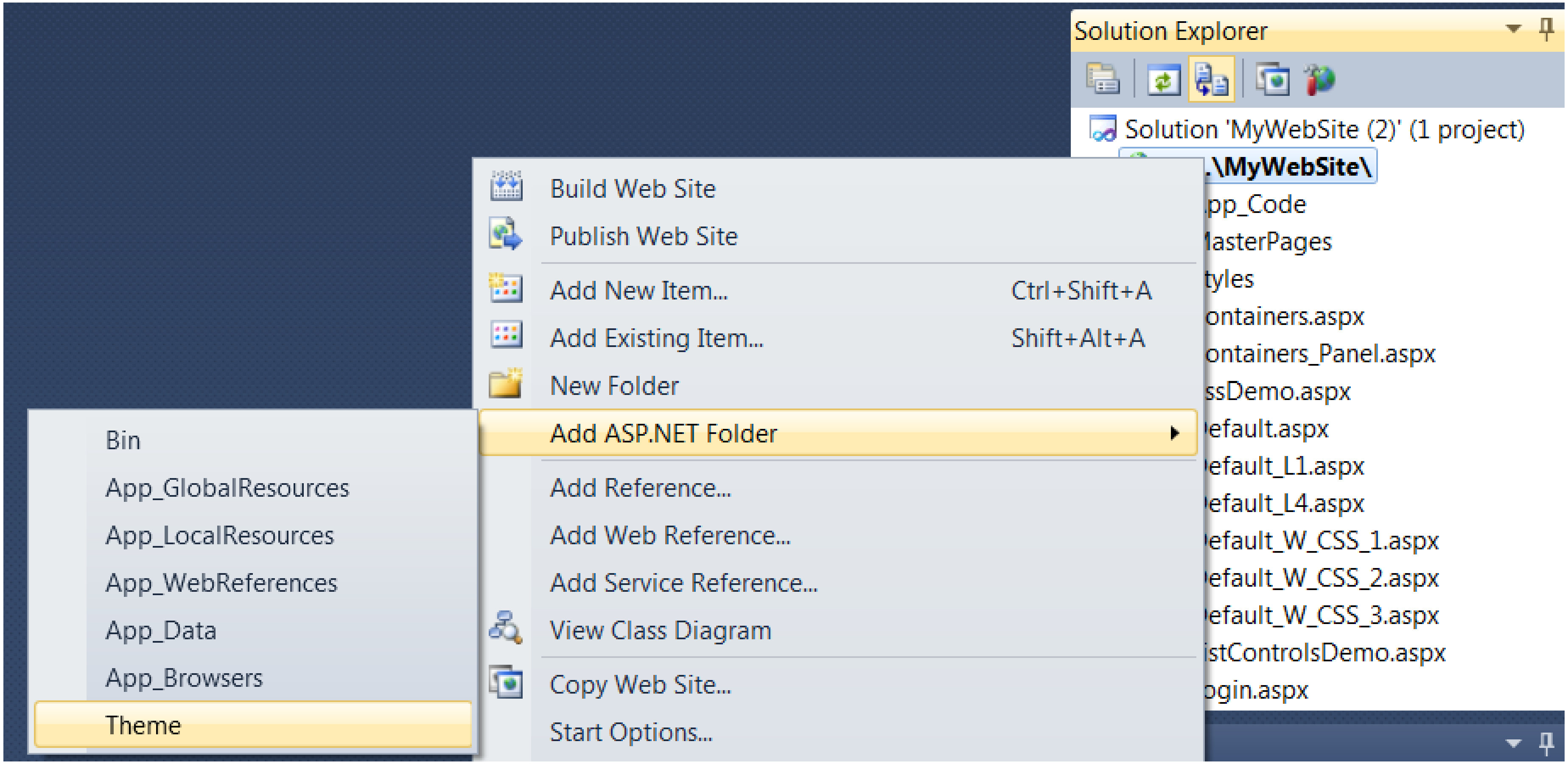
```
<pages theme="DarkGrey">
   ...
</pages>
```

NOTE: XML in the **web.config** file is **case-sensitive**

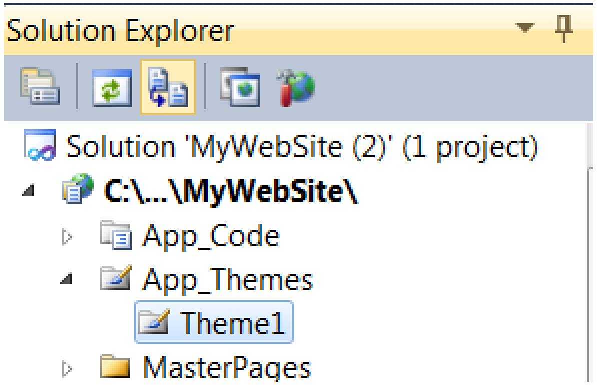
3. Programmatically

Example Theme

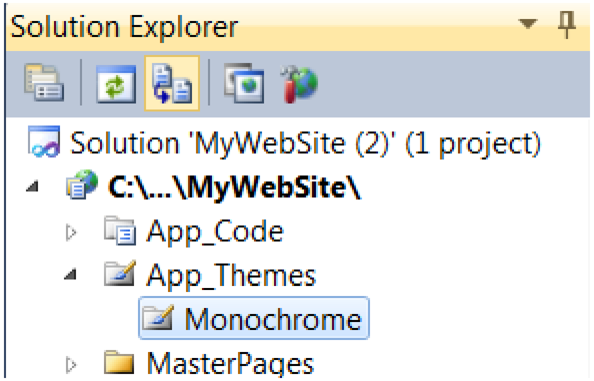
- Add **`App_Themes`** folder



Example Theme



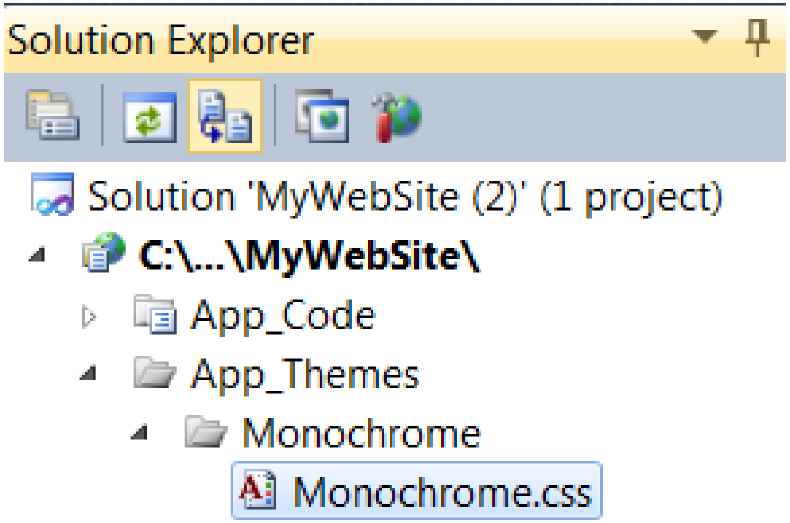
- Type **Monochrome** as theme name



Example Theme

- From the **`Styles`** folder, move the **`Styles.css`** file into this new **`Monochrome`** folder.

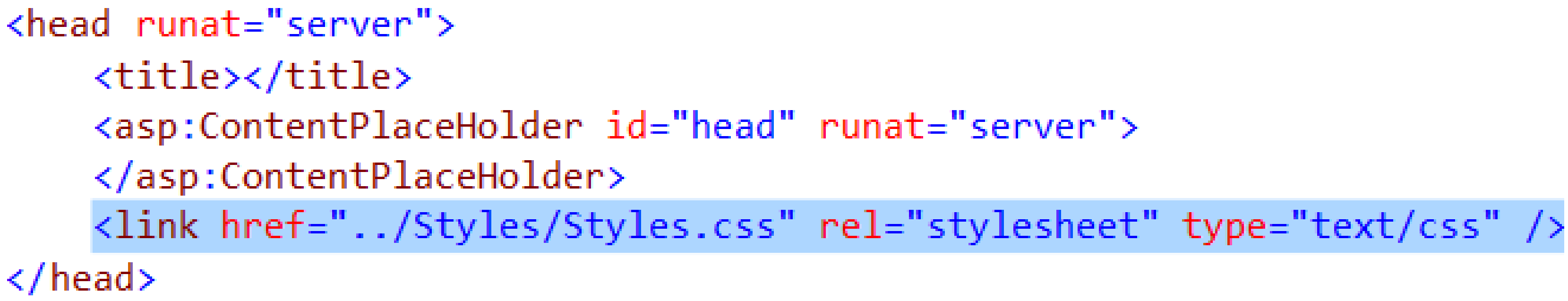
- Rename it → **`Monochrome.css`**



Example
Theme

- Open master page.

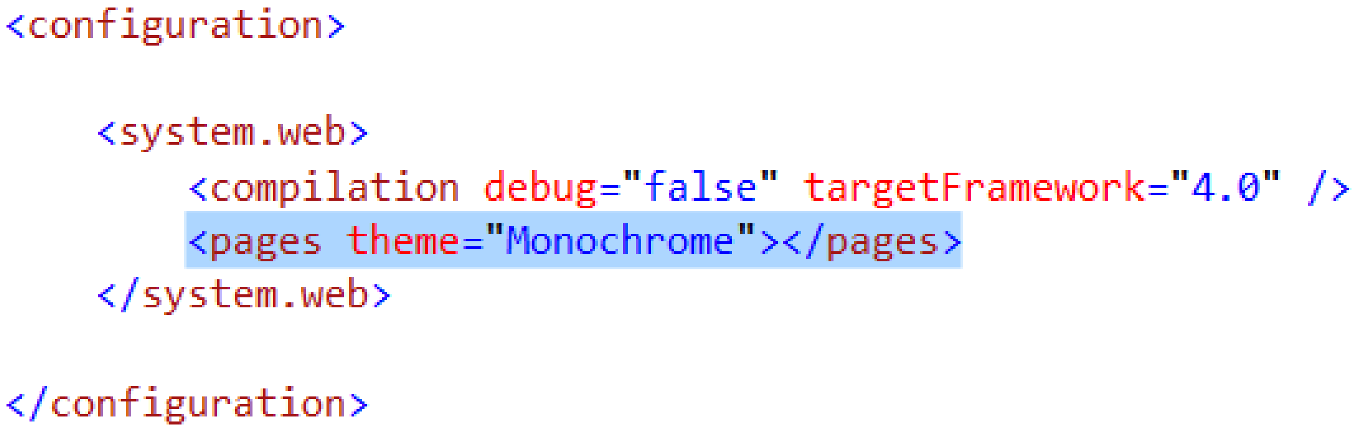
- In Source View → Remove the **<link>** element in the **<head>** section of the master page from the code.



```
<head runat="server">
    <title></title>
    <asp:ContentPlaceHolder id="head" runat="server">
    </asp:ContentPlaceHolder>
    <link href="../Styles/Styles.css" rel="stylesheet" type="text/css" />
</head>
```

Example Theme

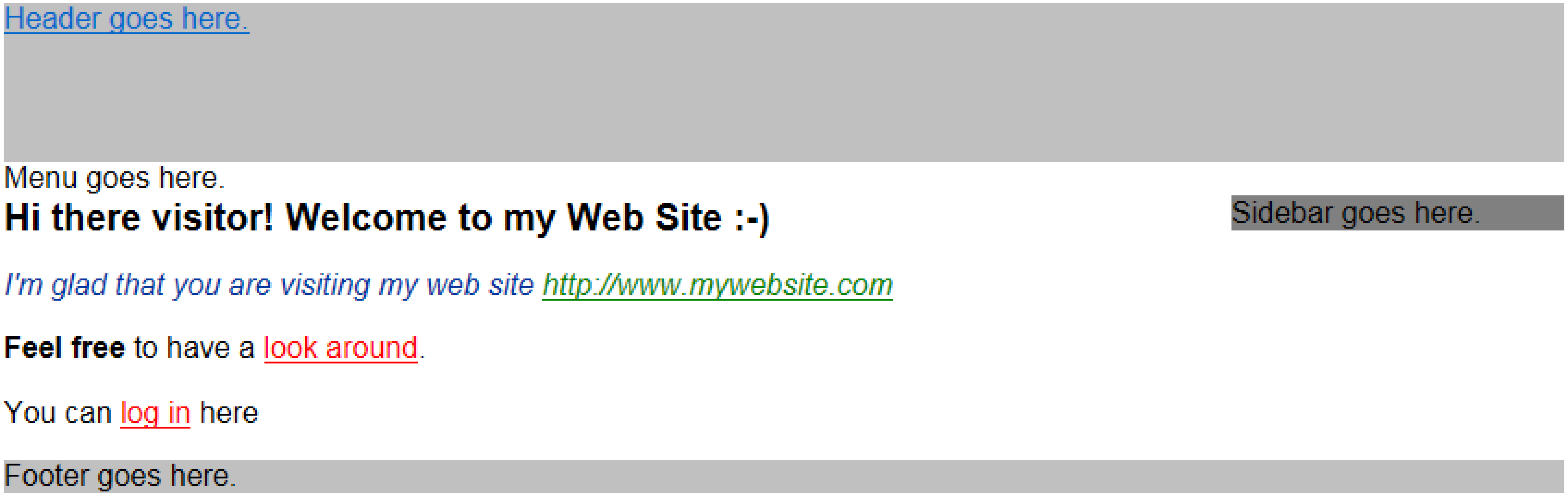
- Open the **web.config** file



```
<configuration>

    <system.web>
        <compilation debug="false" targetFramework="4.0" />
        <pages theme="Monochrome"></pages>
    </system.web>

</configuration>
```

Example Theme

- View **Default.aspx** in browser



Header goes here.

Menu goes here.

Hi there visitor! Welcome to my Web Site :-)

Sidebar goes here.

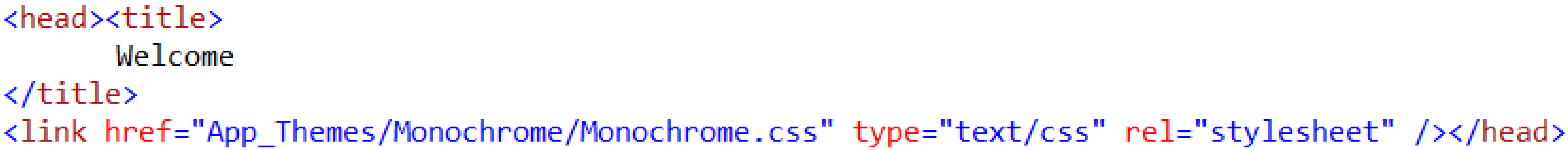
I'm glad that you are visiting my web site http://www.mywebsite.com

Feel free to have a look around.

You can log in here

Footer goes here.

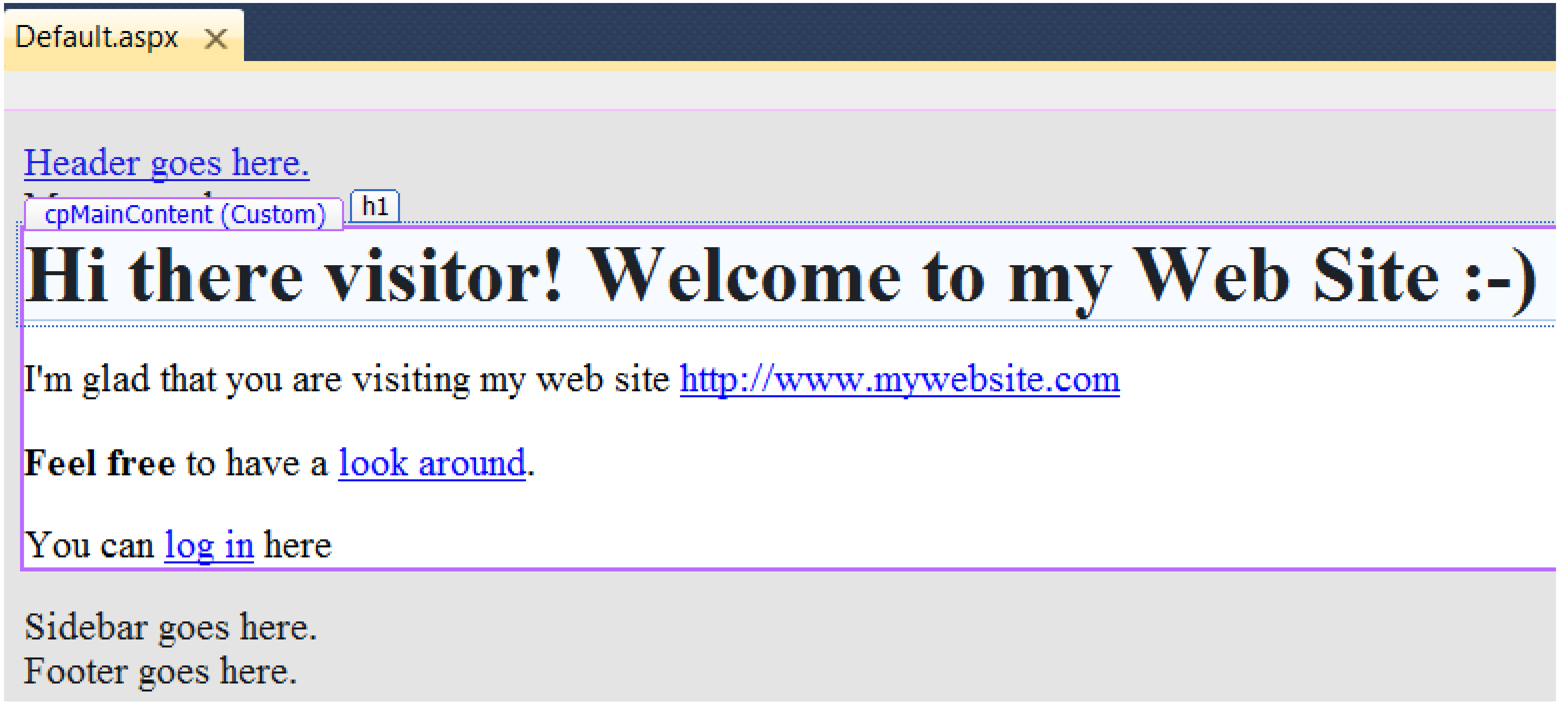
- View source in browser



```
<head><title>
	Welcome
</title>
<link href="App_Themes/Monochrome/Monochrome.css" type="text/css" rel="stylesheet" /></head>
```

Example Theme

- Go back to Visual Studio in Design View



Header goes here.

Hi there visitor! Welcome to my Web Site :-)

I'm glad that you are visiting my web site http://www.mywebsite.com

Feel free to have a look around.

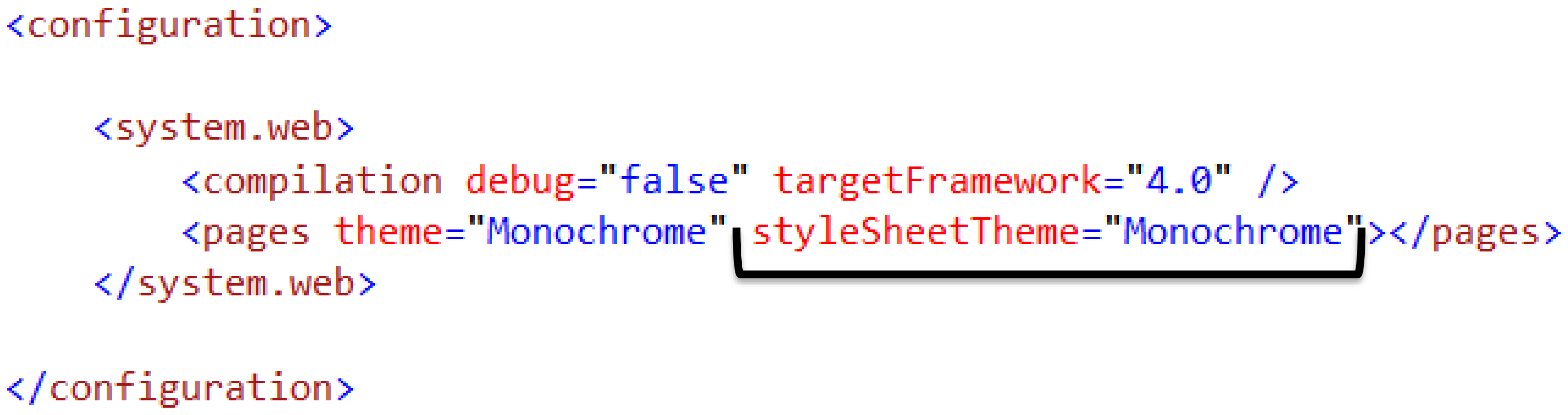
You can log in here

Sidebar goes here.
Footer goes here.

- Visual Studio does not display the theme.

Example Theme

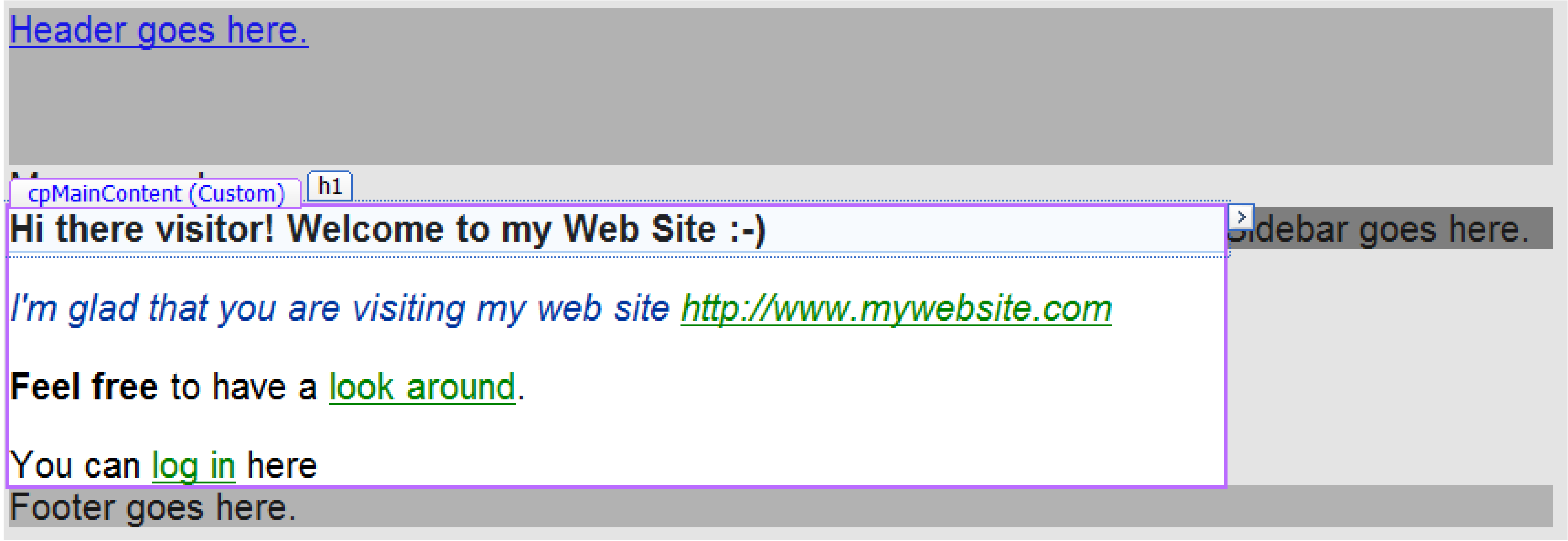
- Open **web.config** file
- To enable **design-time support**:



```
<configuration>

    <system.web>
        <compilation debug="false" targetFramework="4.0" />
        <pages theme="Monochrome" styleSheetTheme="Monochrome"></pages>
    </system.web>

</configuration>
```

Example Theme

- In Design View:



Header goes here.

Hi there visitor! Welcome to my Web Site :-)

idebar goes here.

I'm glad that you are visiting my web site http://www.mywebsite.com

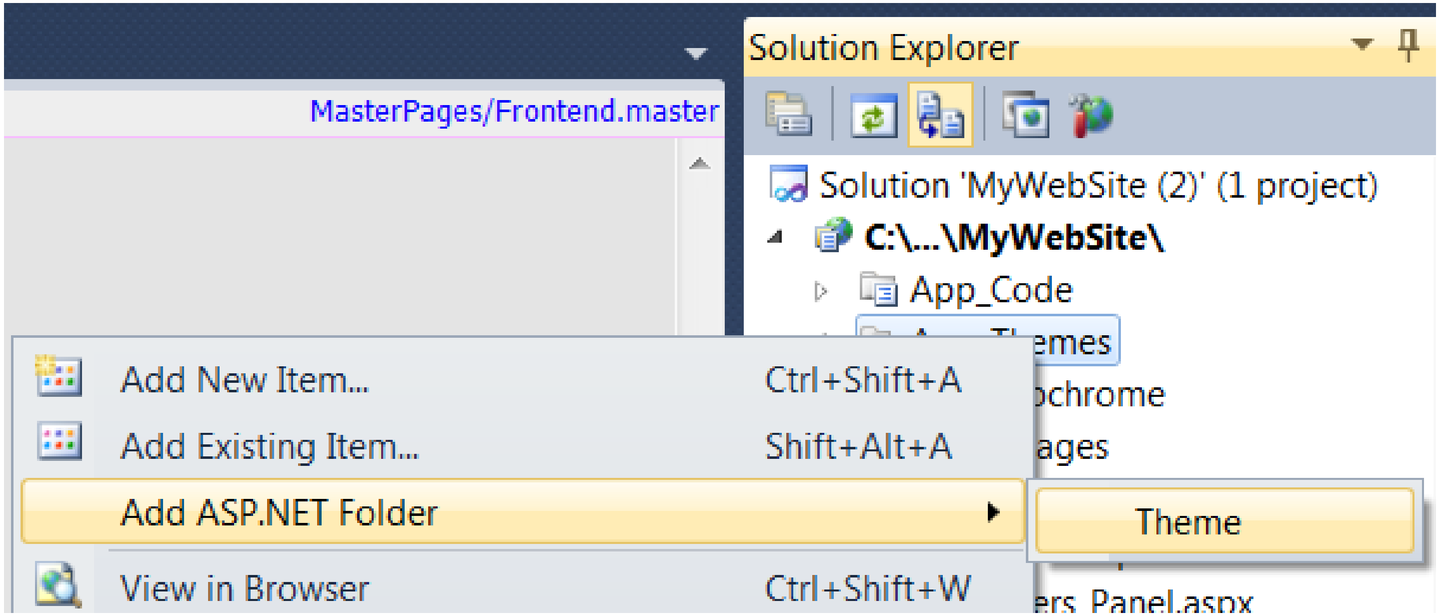
Feel free to have a look around.

You can log in here

Footer goes here.

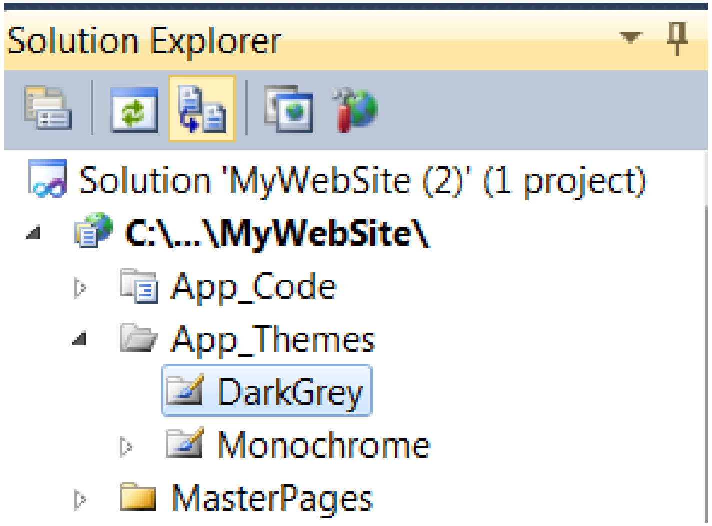
Example
Theme

- Add new folder to **`App_Themes`** folder


MasterPages/Frontend.master
Solution Explorer
Solution 'MyWebSite (2)' (1 project)
C:\...\MyWebSite\
App_Code
emes
chrome
ages
ers Panel.aspx
Add New Item... Ctrl+Shift+A
Add Existing Item... Shift+Alt+A
Add ASP.NET Folder
View in Browser Ctrl+Shift+W
Theme

Example Theme

- Rename it → **DarkGrey**



Solution Explorer

Solution 'MyWebSite (2)' (1 project)

C:\...\MyWebSite\

App_Code

App_Themes

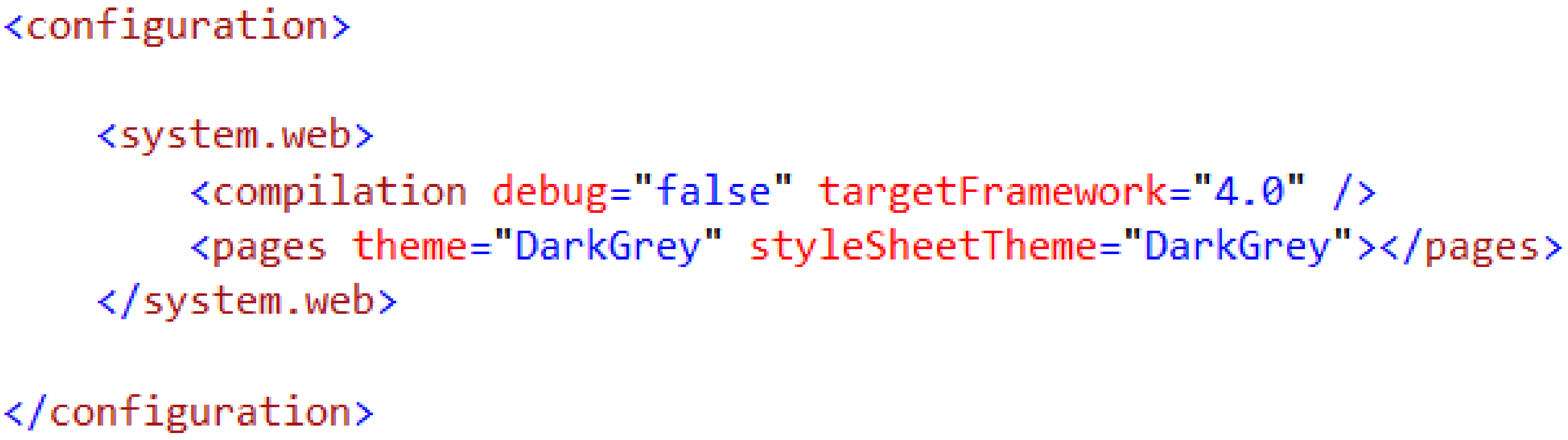
DarkGrey

Monochrome

MasterPages

Example Theme

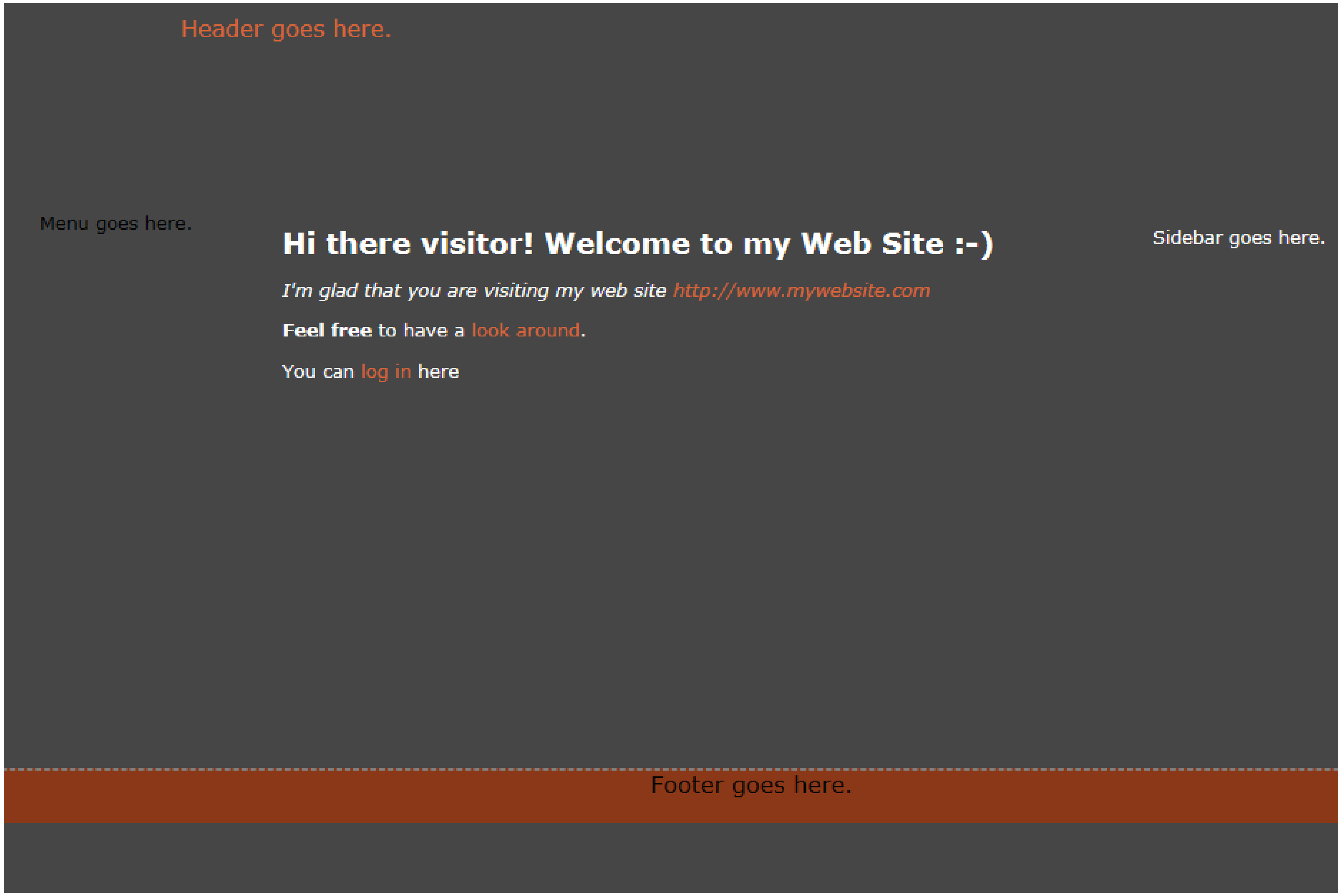
- Add **DarkGrey.css** in to **DarkGrey** folder
- Open the **web.config** file
- Change **Monochrome** → **DarkGrey**



```
<configuration>

    <system.web>
        <compilation debug="false" targetFramework="4.0" />
        <pages theme="DarkGrey" styleSheetTheme="DarkGrey"></pages>
    </system.web>

</configuration>
```

Example Theme

- View `Default.aspx` in browser



Header goes here.

Menu goes here.

Hi there visitor! Welcome to my Web Site :-)

I'm glad that you are visiting my web site http://www.mywebsite.com

Feel free to have a look around.

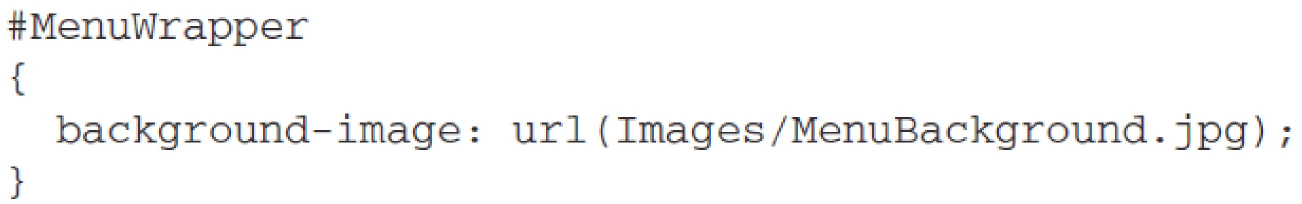
You can log in here

Sidebar goes here.

Footer goes here.

Extending Themes

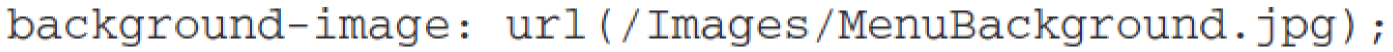
- A theme can also contain images.
- To refer to the **MenuBackground.jpg** file in the **Images** folder of the **Monochrome** theme, you can add the following CSS to **Monochrome.css**:



```
#MenuWrapper
{
  background-image: url(Images/MenuBackground.jpg);
}
```

Extending Themes

- If you wanted to refer to an image in the **Images** folder in the root of the site, you would use this CSS:



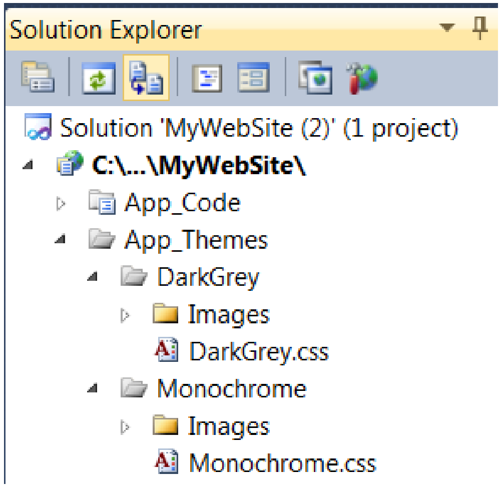
```
background-image: url(/Images/MenuBackground.jpg);
```

Root of the site

Example
Adding Images to the Theme

- In Windows Explorer, select the `Images` folder and `Monochrome.css` and drag into the `Monochrome` folder in Visual Studio.

- In Windows Explorer, select the `Images` folder and `DarkGrey.css` and drag into the `DarkGrey` folder in Visual Studio.

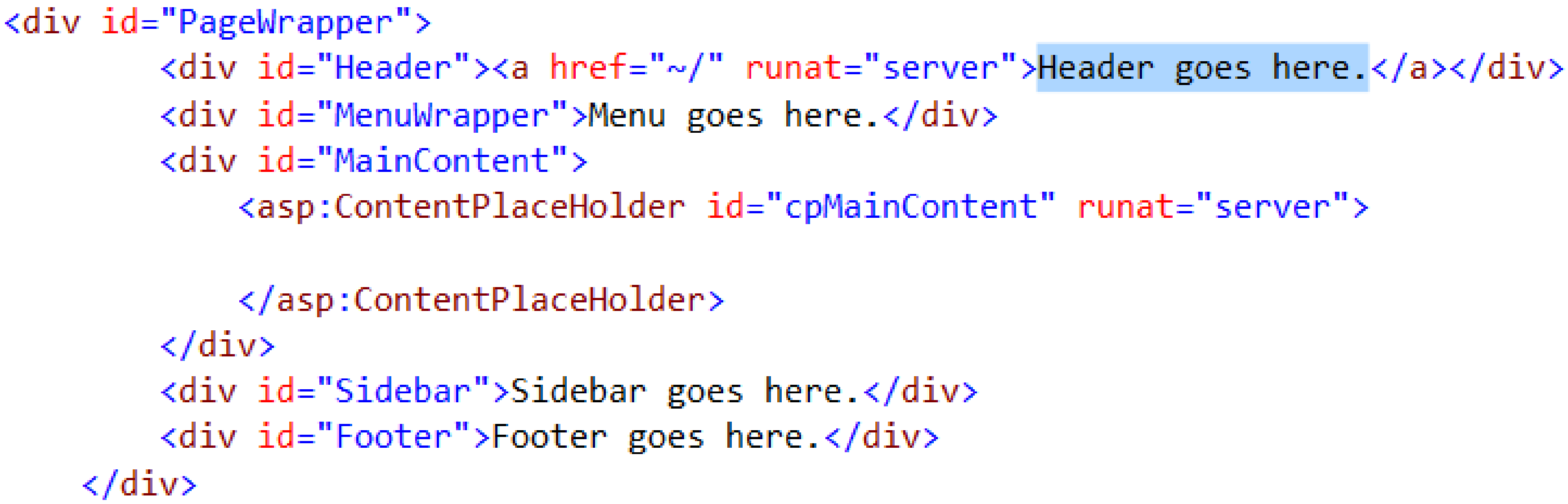


Solution Explorer

```
Solution 'MyWebSite (2)' (1 project)
  C:\...\MyWebSite\
    App_Code
    App_Themes
      DarkGrey
        Images
        DarkGrey.css
      Monochrome
        Images
        Monochrome.css
```

Example
Adding Images to the Theme

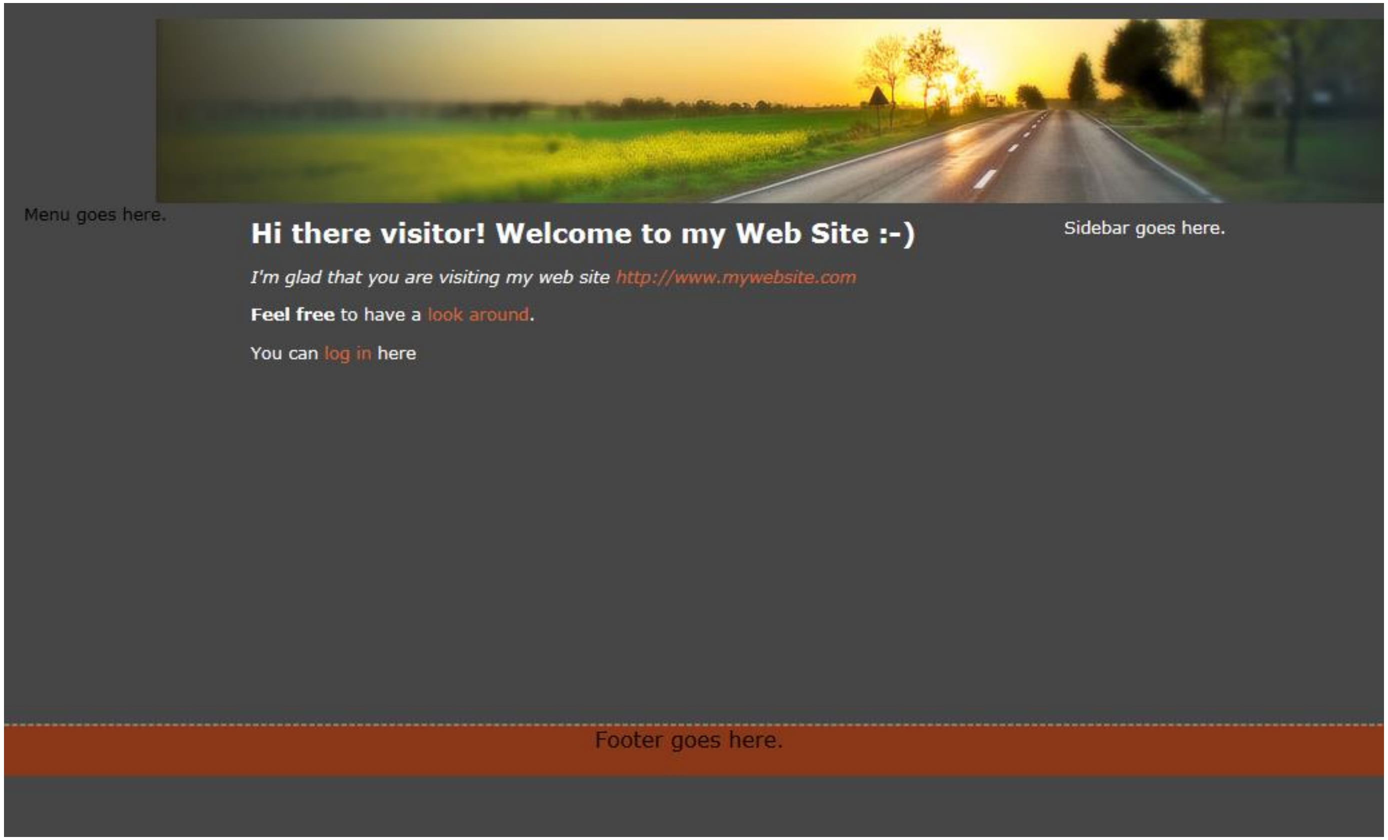
- Open master page in source view.
- Remove the text **Header goes here**.



```
<div id="PageWrapper">
        <div id="Header"><a href="~/" runat="server">Header goes here.</a></div>
        <div id="MenuWrapper">Menu goes here.</div>
        <div id="MainContent">
            <asp:ContentPlaceHolder id="cpMainContent" runat="server">

            </asp:ContentPlaceHolder>
        </div>
        <div id="Sidebar">Sidebar goes here.</div>
        <div id="Footer">Footer goes here.</div>
    </div>
```

Example
Adding Images to the Theme

- View `Default.aspx` in browser.



Menu goes here.

Hi there visitor! Welcome to my Web Site :-)

I'm glad that you are visiting my web site http://www.mywebsite.com

Feel free to have a look around.

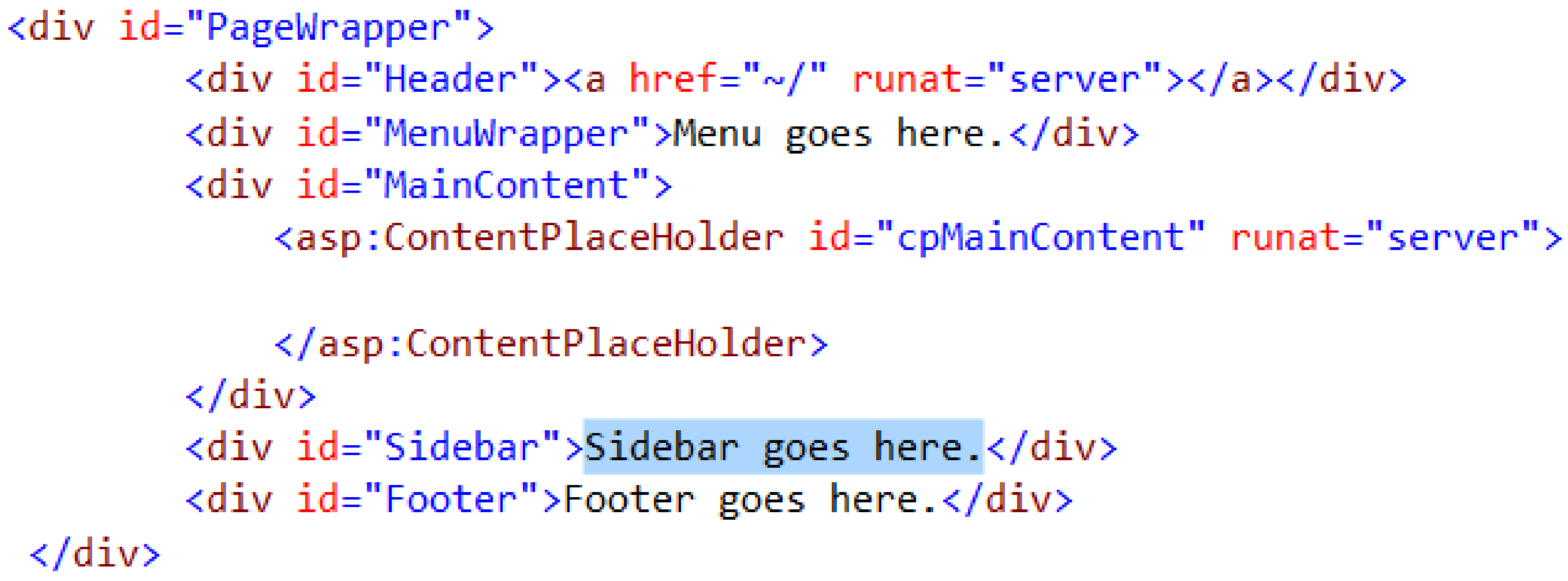
You can log in here

Sidebar goes here.

Footer goes here.

Example
Letting Users Select a Theme

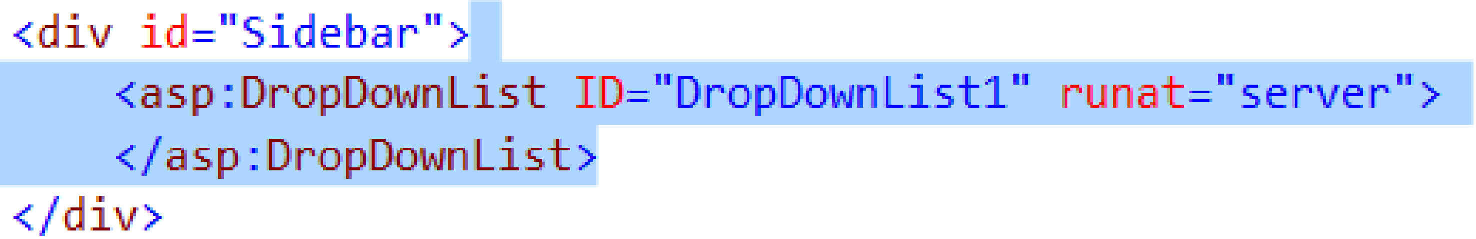
- Open master page.
- Remove the text **Sidebar goes here**.



```
<div id="PageWrapper">
        <div id="Header"><a href="~/" runat="server"></a></div>
        <div id="MenuWrapper">Menu goes here.</div>
        <div id="MainContent">
            <asp:ContentPlaceHolder id="cpMainContent" runat="server">

            </asp:ContentPlaceHolder>
        </div>
        <div id="Sidebar">Sidebar goes here.</div>
        <div id="Footer">Footer goes here.</div>
 </div>
```

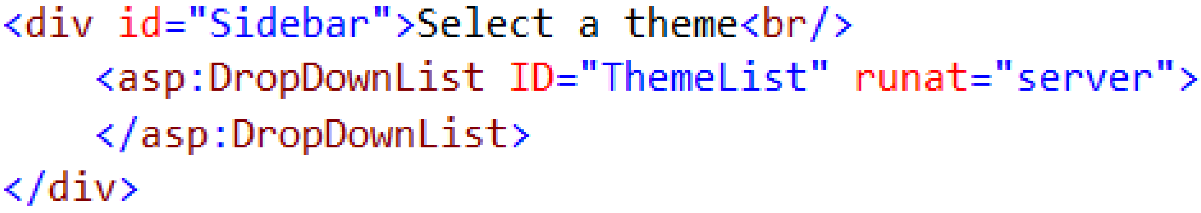
Example
Letting Users Select a Theme

- Drag a **DropDownList** inside **Sidebar**



```
<div id="Sidebar">
    <asp:DropDownList ID="DropDownList1" runat="server">
    </asp:DropDownList>
</div>
```

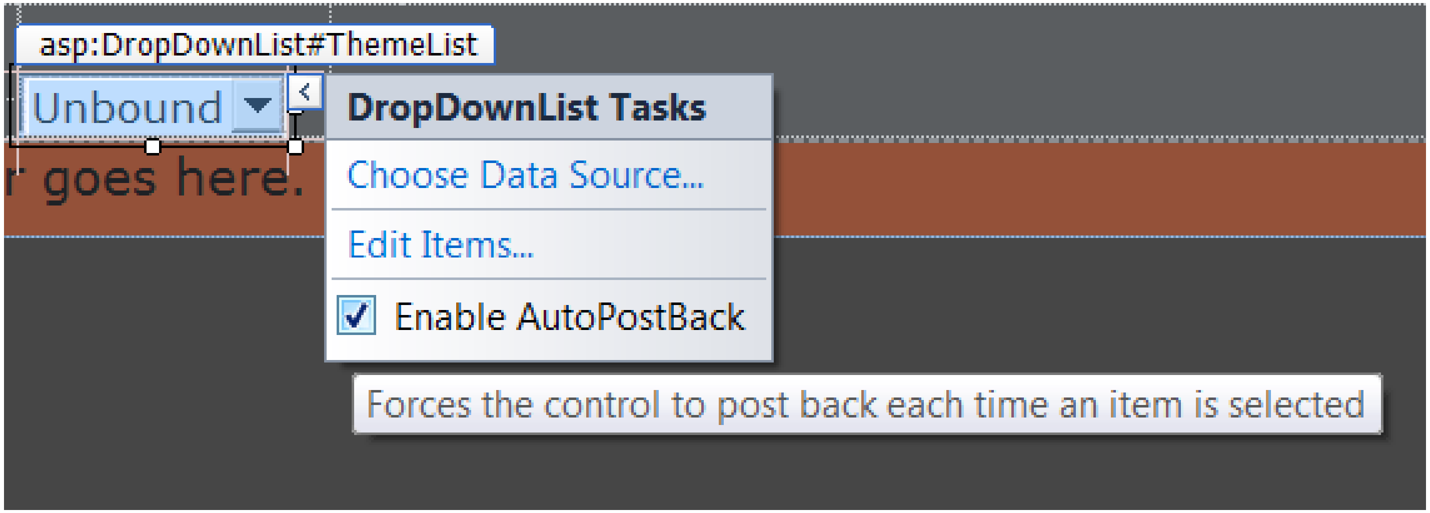
- Add text → **Select a theme**
- Add **<br/>**
- Change **ID**



```
<div id="Sidebar">Select a theme<br/>
    <asp:DropDownList ID="ThemeList" runat="server">
    </asp:DropDownList>
</div>
```

Example
Letting Users Select a Theme

- In Design view → **Enable AutoPostBack**



asp:DropDownList#ThemeList

Unbound

r goes here.

DropDownList Tasks

Choose Data Source...

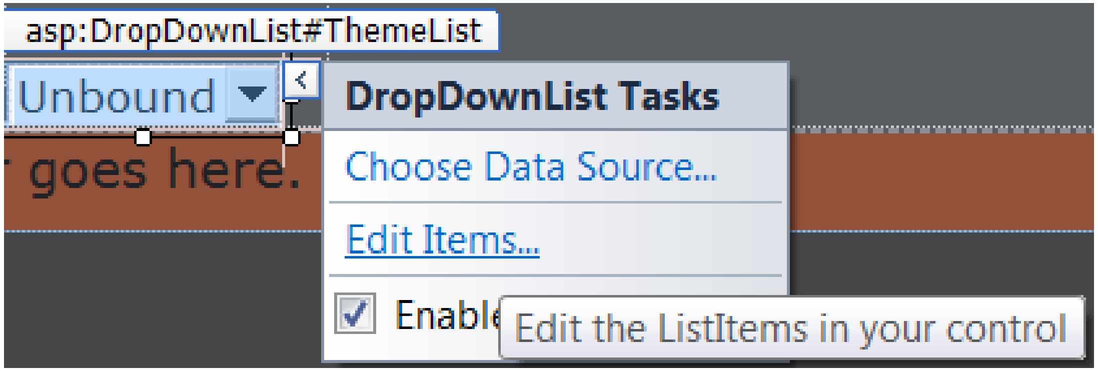
Edit Items...

☑ Enable AutoPostBack

Forces the control to post back each time an item is selected

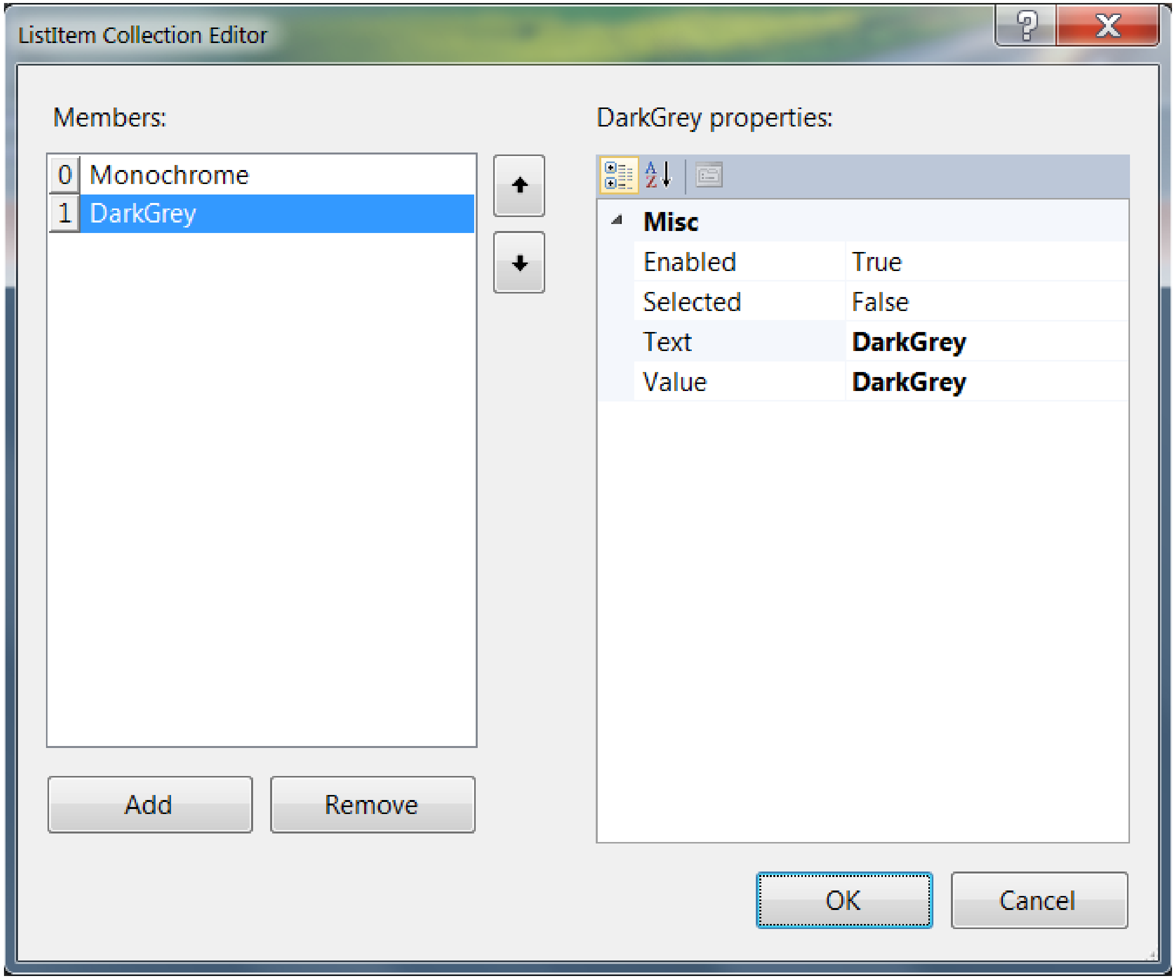
Example
Letting Users Select a Theme

- On the Smart Tasks panel → Click **Edit Items**



Example
Letting Users Select a Theme

- Insert 2 items: **Monochrome** and **DarkGrey**



Members:

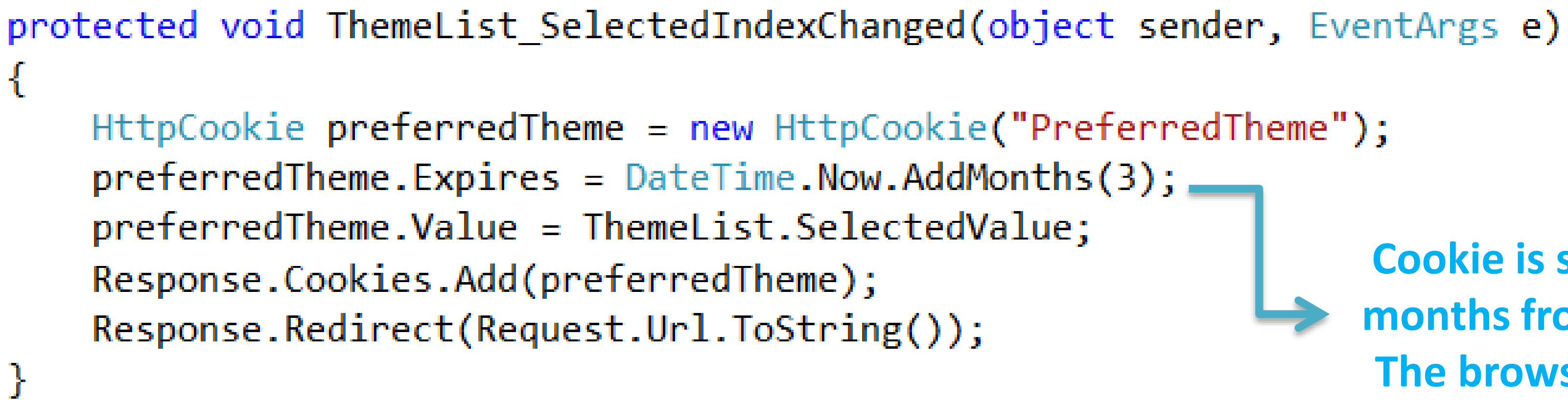
0 Monochrome
1 DarkGrey

DarkGrey properties:

Misc	
Enabled	True
Selected	False
Text	**DarkGrey**
Value	**DarkGrey**

Example
Letting Users Select a Theme

- Double-click **`DropDownList`**

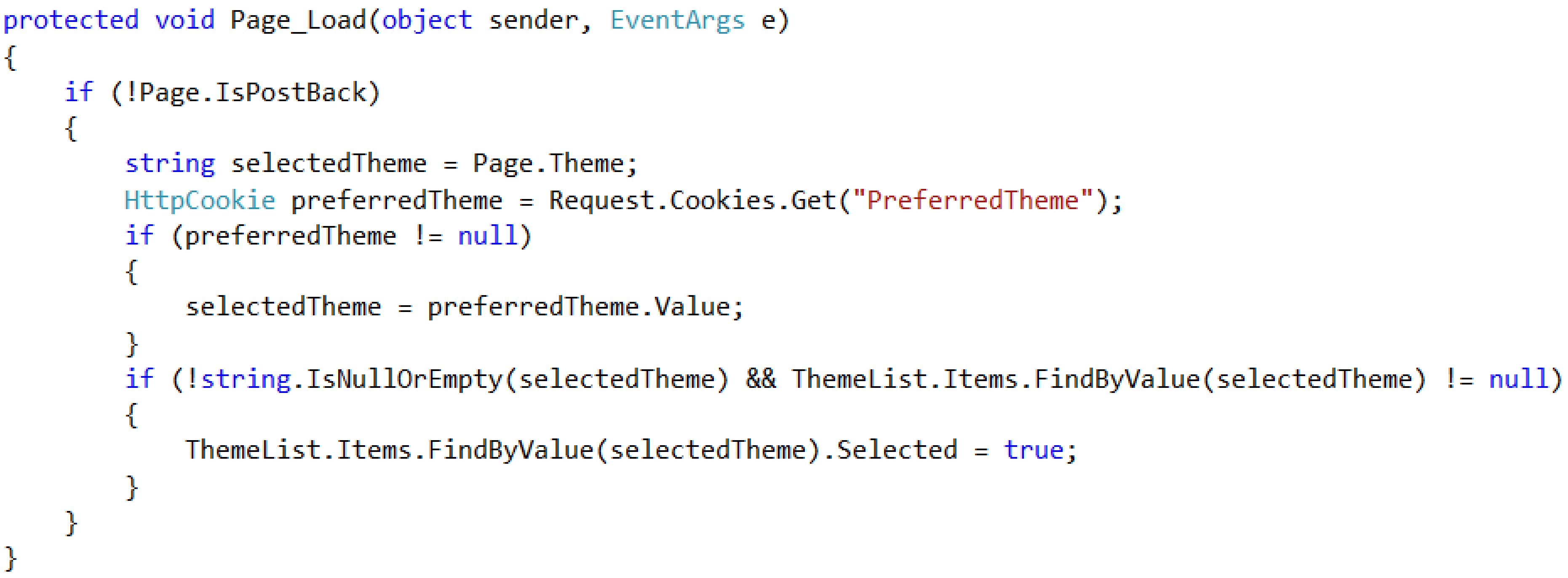


```
protected void ThemeList_SelectedIndexChanged(object sender, EventArgs e)
{
    HttpCookie preferredTheme = new HttpCookie("PreferredTheme");
    preferredTheme.Expires = DateTime.Now.AddMonths(3);
    preferredTheme.Value = ThemeList.SelectedValue;
    Response.Cookies.Add(preferredTheme);
    Response.Redirect(Request.Url.ToString());
}
```

Cookie is set to 3 months from now. The browser will discard it <u>automatically</u> after that period.

Example
Letting Users Select a Theme

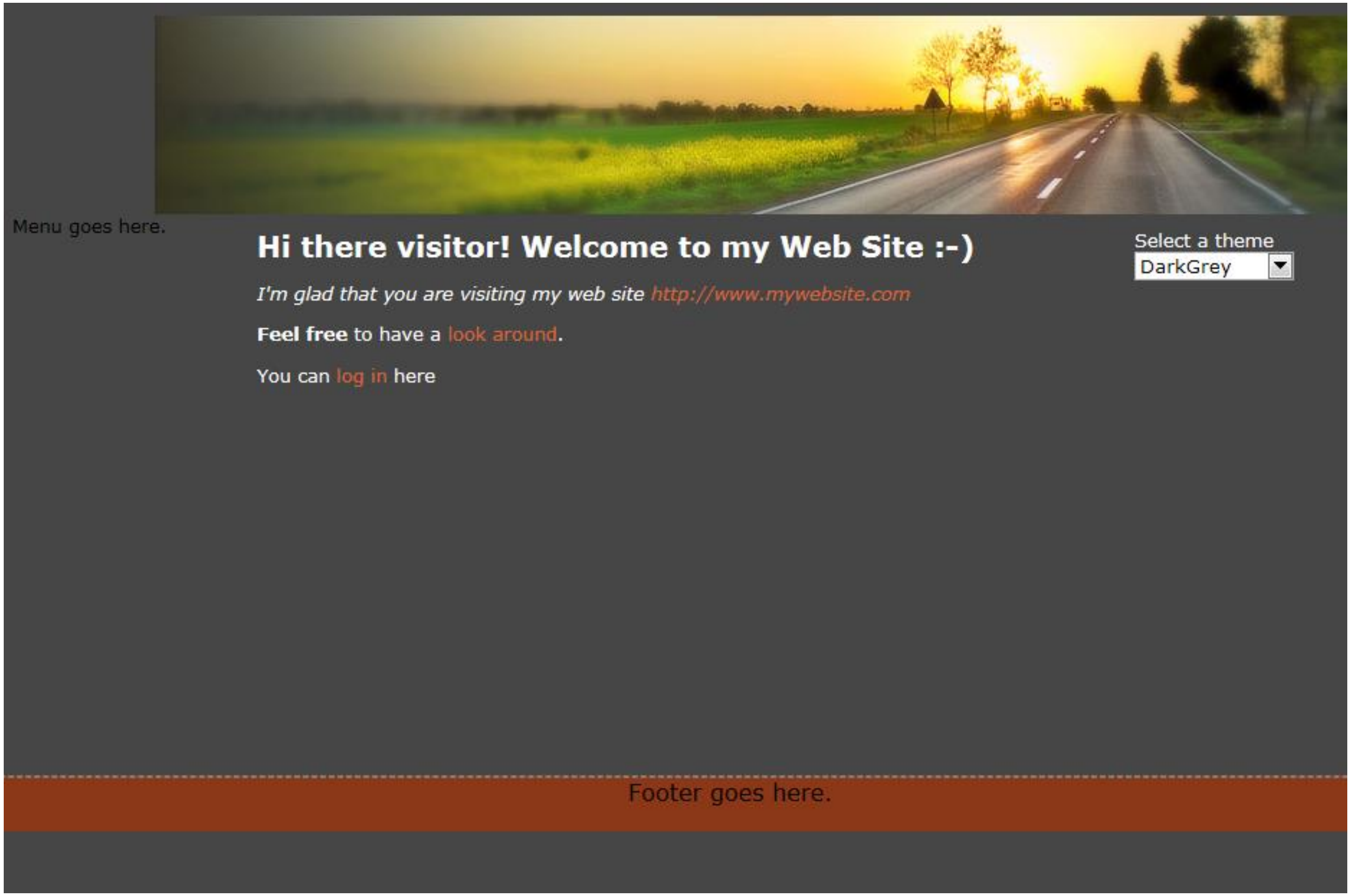
- Add code that preselects the correct item in the list again when the page loads.



```
protected void Page_Load(object sender, EventArgs e)
{
    if (!Page.IsPostBack)
    {
        string selectedTheme = Page.Theme;
        HttpCookie preferredTheme = Request.Cookies.Get("PreferredTheme");
        if (preferredTheme != null)
        {
            selectedTheme = preferredTheme.Value;
        }
        if (!string.IsNullOrEmpty(selectedTheme) && ThemeList.Items.FindByValue(selectedTheme) != null)
        {
            ThemeList.Items.FindByValue(selectedTheme).Selected = true;
        }
    }
}
```

Example
Letting Users Select a Theme

- View `Default.aspx` in browser



Menu goes here.

Hi there visitor! Welcome to my Web Site :-)

I'm glad that you are visiting my web site http://www.mywebsite.com

Feel free to have a look around.

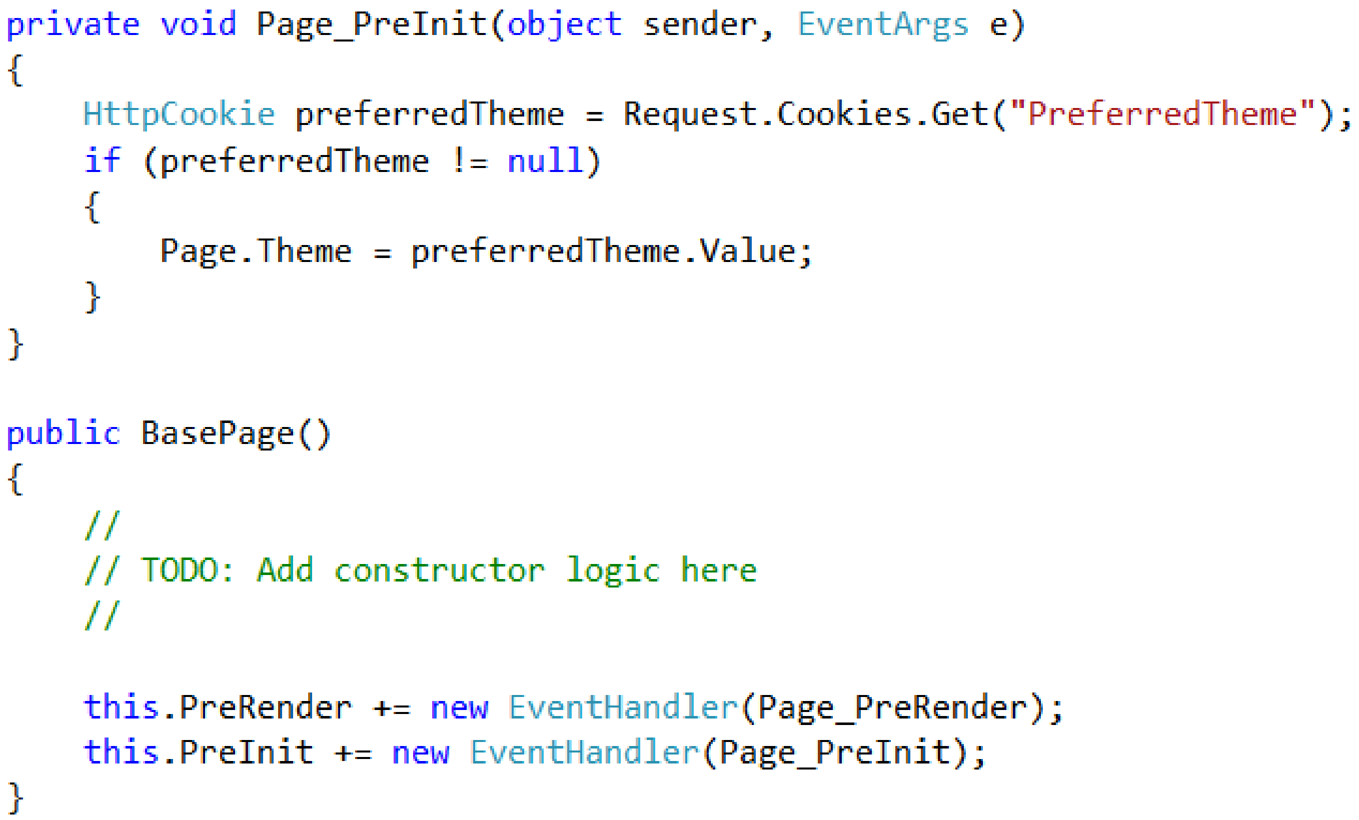
You can log in here

Select a theme: DarkGrey

Footer goes here.

Example
Applying the User Selected Theme

- Open the **BasePage** from the **App_Code** folder.
- Add:

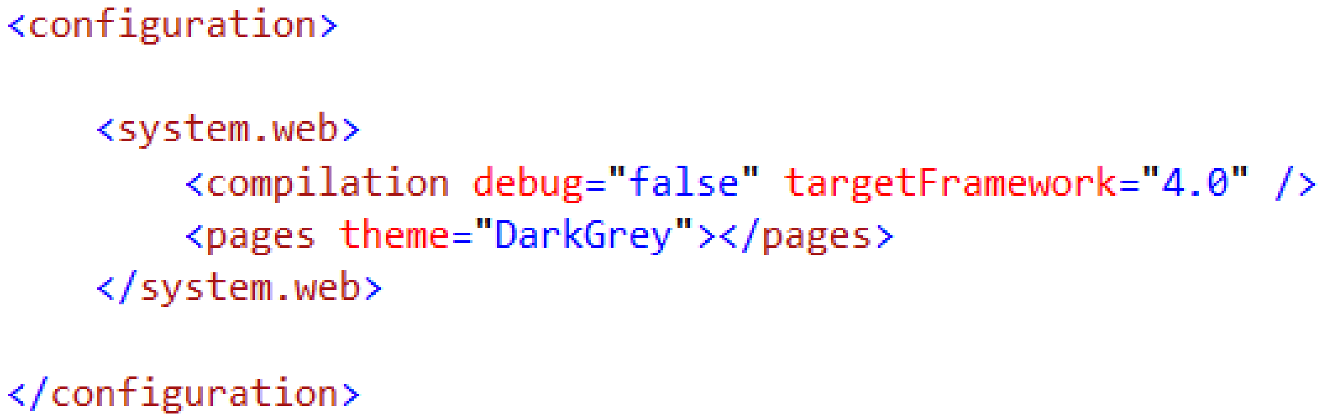


```
private void Page_PreInit(object sender, EventArgs e)
{
    HttpCookie preferredTheme = Request.Cookies.Get("PreferredTheme");
    if (preferredTheme != null)
    {
        Page.Theme = preferredTheme.Value;
    }
}

public BasePage()
{
    //
    // TODO: Add constructor logic here
    //

    this.PreRender += new EventHandler(Page_PreRender);
    this.PreInit += new EventHandler(Page_PreInit);
}
```

Example
Applying the User Selected Theme

- Open **web.config** file.
- Not to see the combination of two themes

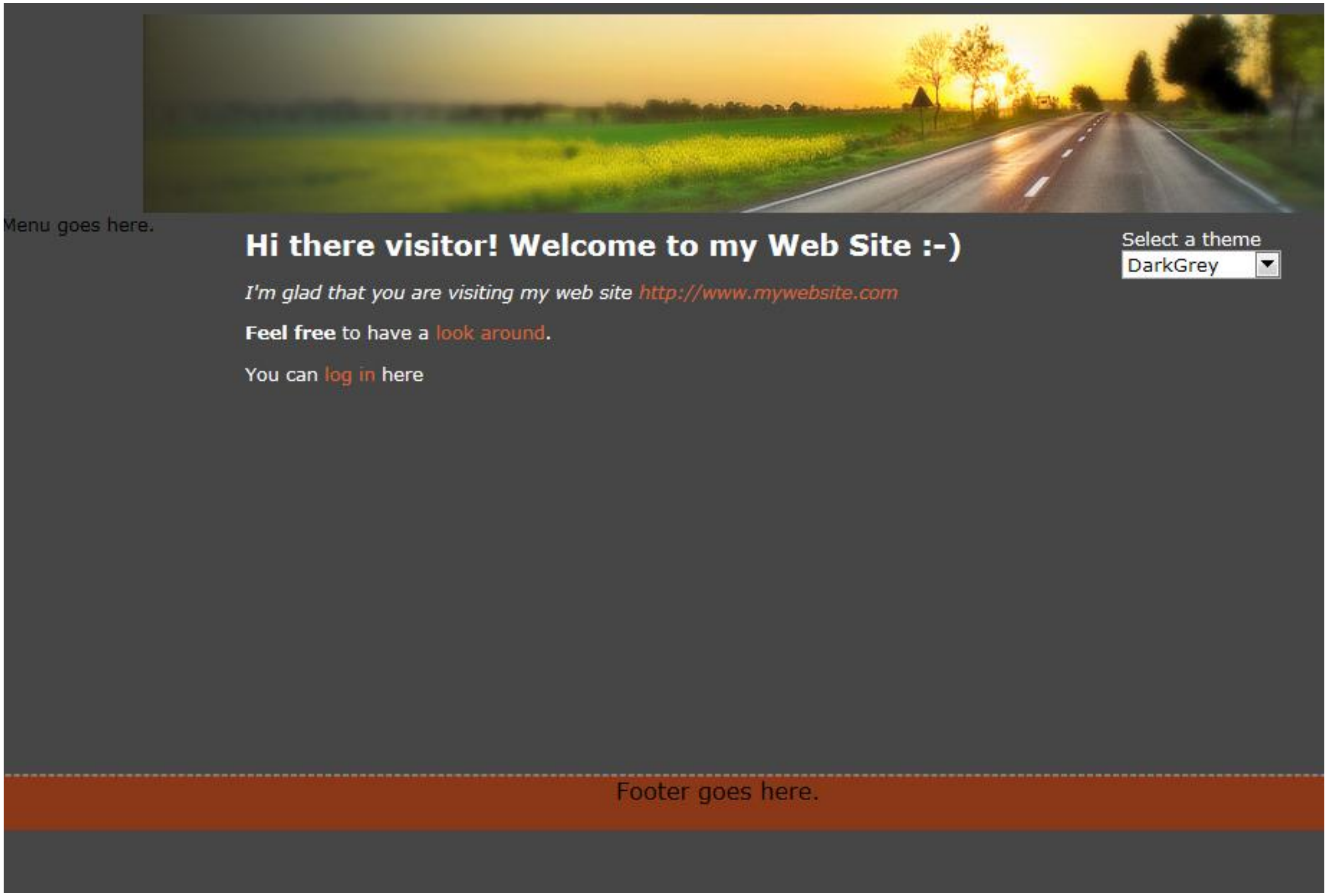
Remove **styleSheetTheme**



```
<configuration>

    <system.web>
        <compilation debug="false" targetFramework="4.0" />
        <pages theme="DarkGrey"></pages>
    </system.web>

</configuration>
```

Example
Applying the User Selected Theme

- View **Default.aspx** in browser



Menu goes here.

Hi there visitor! Welcome to my Web Site :-)

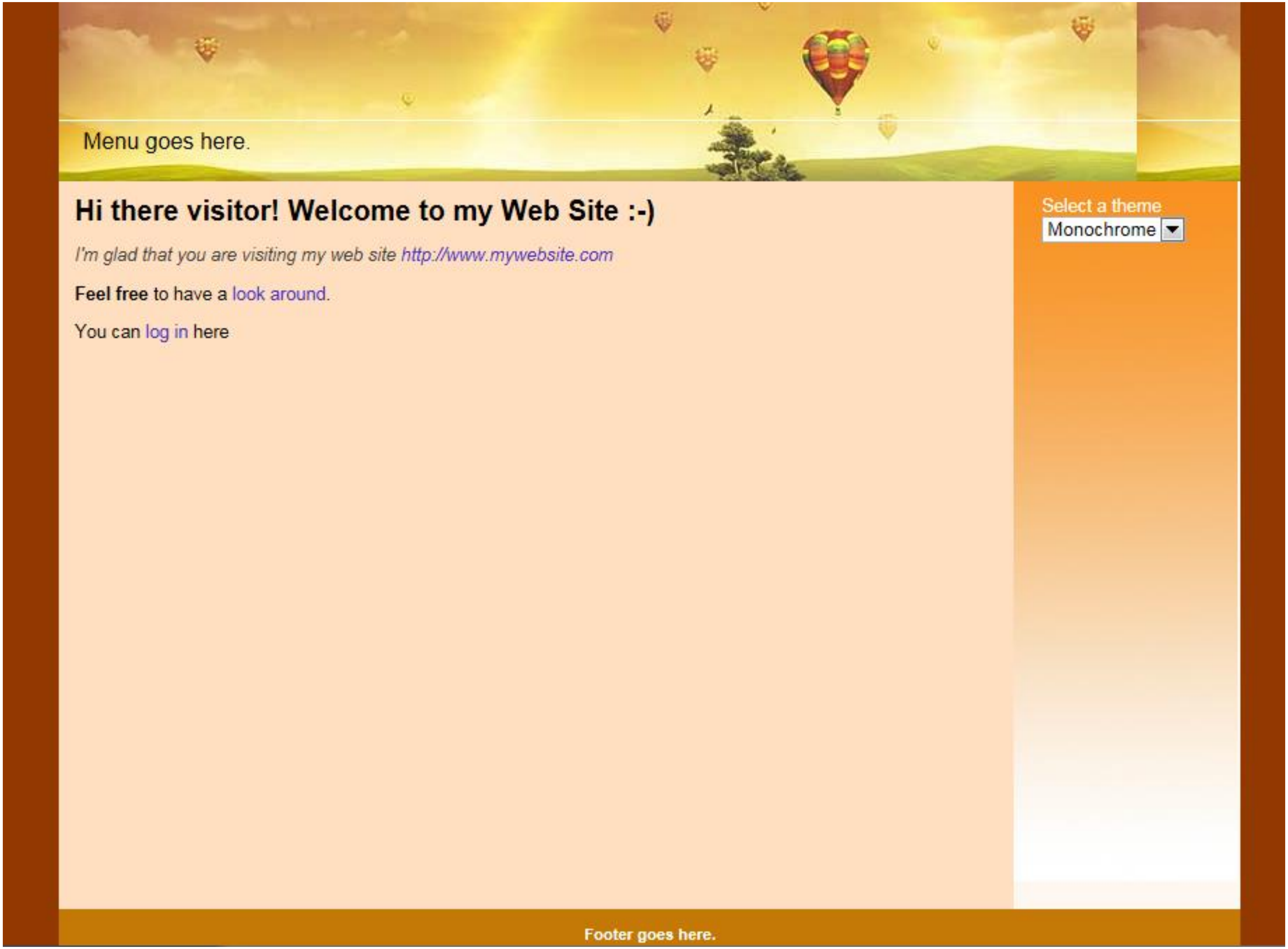
I'm glad that you are visiting my web site http://www.mywebsite.com

Feel free to have a look around.

You can log in here

Select a theme DarkGrey

Footer goes here.



Menu goes here.

Hi there visitor! Welcome to my Web Site :-)

I'm glad that you are visiting my web site http://www.mywebsite.com

Feel free to have a look around.

You can log in here

Select a theme: Monochrome

Footer goes here.

Skins

- Simple text files
- Enables you to **define the look and feel of** one or more **server controls** from a central location.
- Placed in a **`theme`**'s folder with a **`.skin`** extension
- Server-side presentational elements of a control.

Skins

- The control in the skin file **cannot** have an **`ID`** attribute.

- The **`ID`** is used to **uniquely identify a control** in a page, and *because* the skin is applied to all controls, there’s **no point in giving it an `ID`**.

Skins

- **Not all** properties of a control are skinnable.
  - Generally;
    - Properties that influence the ***appearance*** (**`BackColor`**, **`ForeColor`**, **`BorderColor`**, and so on) **can be** skinned
    - Properties that influence ***behavior*** (**`Enabled`**, **`EnableViewState`**, and more) **cannot be** set.
  - Check from MSDN documentation.

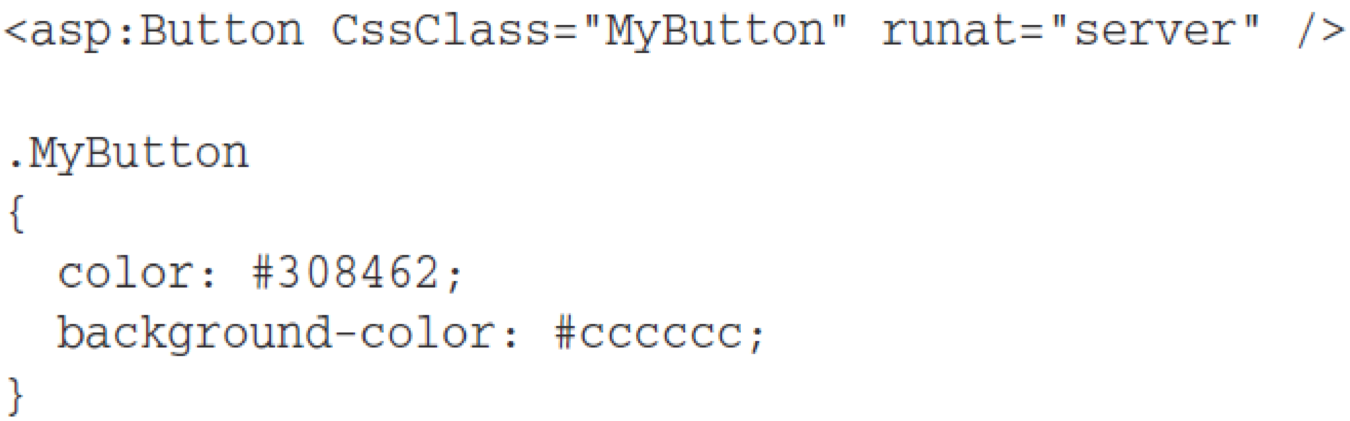
Skins

- You can define multiple controls **in a single skin file**.

- However, **from a maintainability point of view**, it's often easier to name each skin file after the control it represents.
  - `Button.skin`, `Label.skin`, and so on.

Skins

- Better to use the **CssClass** property to point to a **CSS class** in one of your CSS files.



```
<asp:Button CssClass="MyButton" runat="server" />

.MyButton
{
  color: #308462;
  background-color: #cccccc;
}
```

- Easier to make site-wide changes.

Creating a Skin File

- Skin files must be created in the **theme's folder** directly.

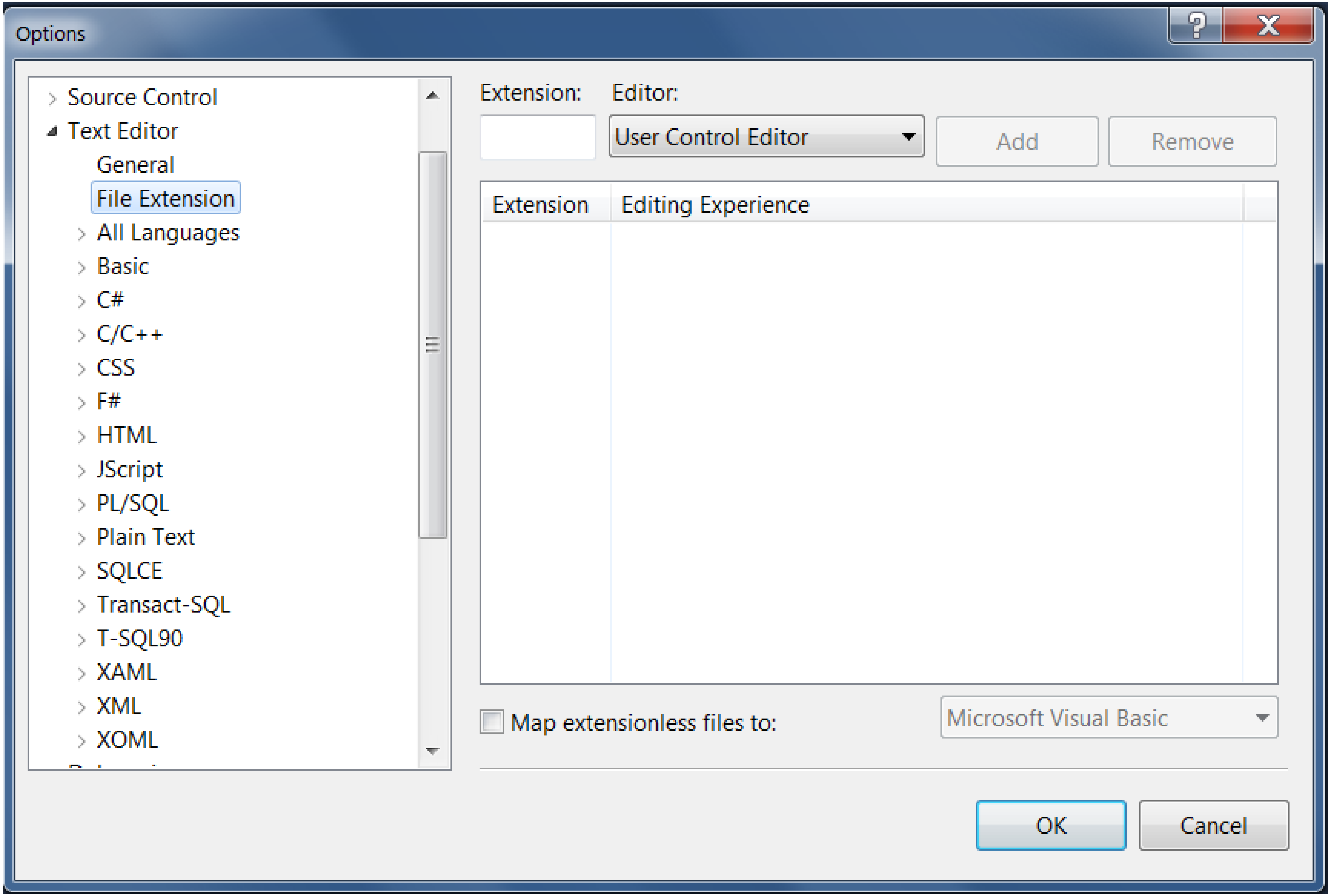
- You **can't store** them **in a subfolder** like you do with the theme's images.

Creating a Skin File

- When you start typing in a skin file, you'll notice that the familiar IntelliSense doesn't work in skin files.

- To get Intellisense in skin files:
  - **Tools ⇨ Options**

Creating a Skin File



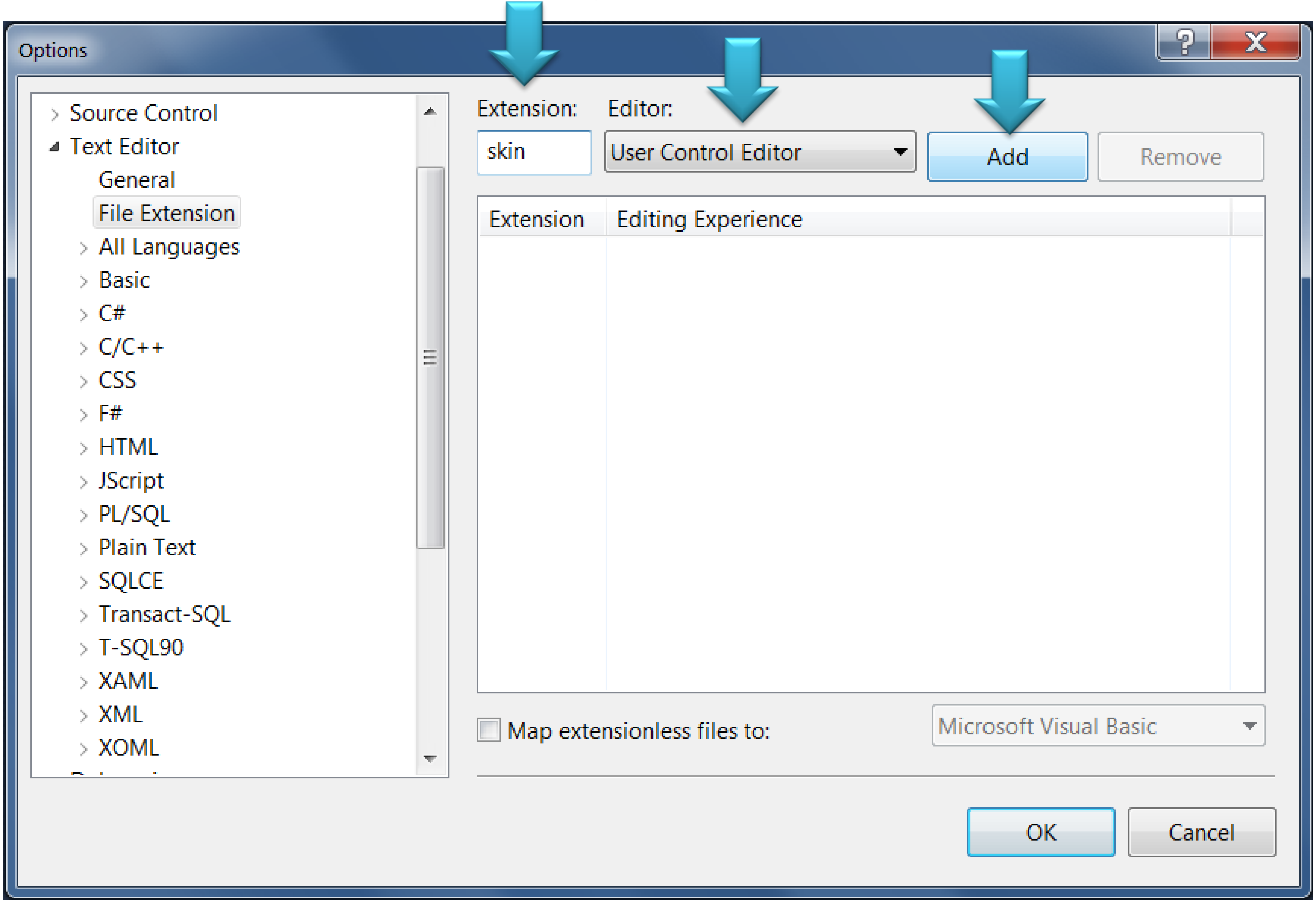
Extension:

Editor: User Control Editor

Extension	Editing Experience

□ Map extensionless files to: Microsoft Visual Basic

Creating a Skin File

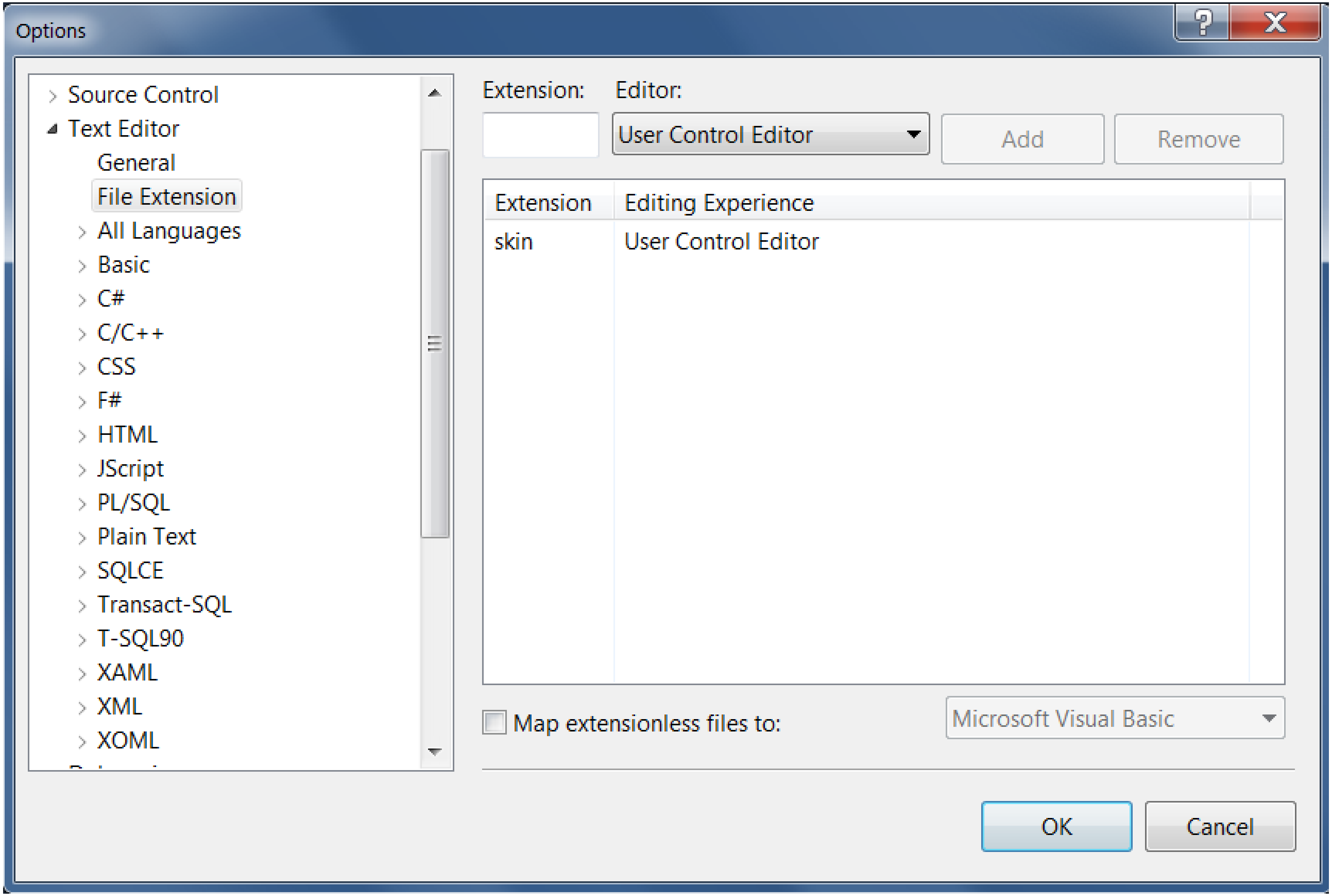


Extension: skin

Editor: User Control Editor

□ Map extensionless files to: Microsoft Visual Basic

Creating a Skin File



Extension:

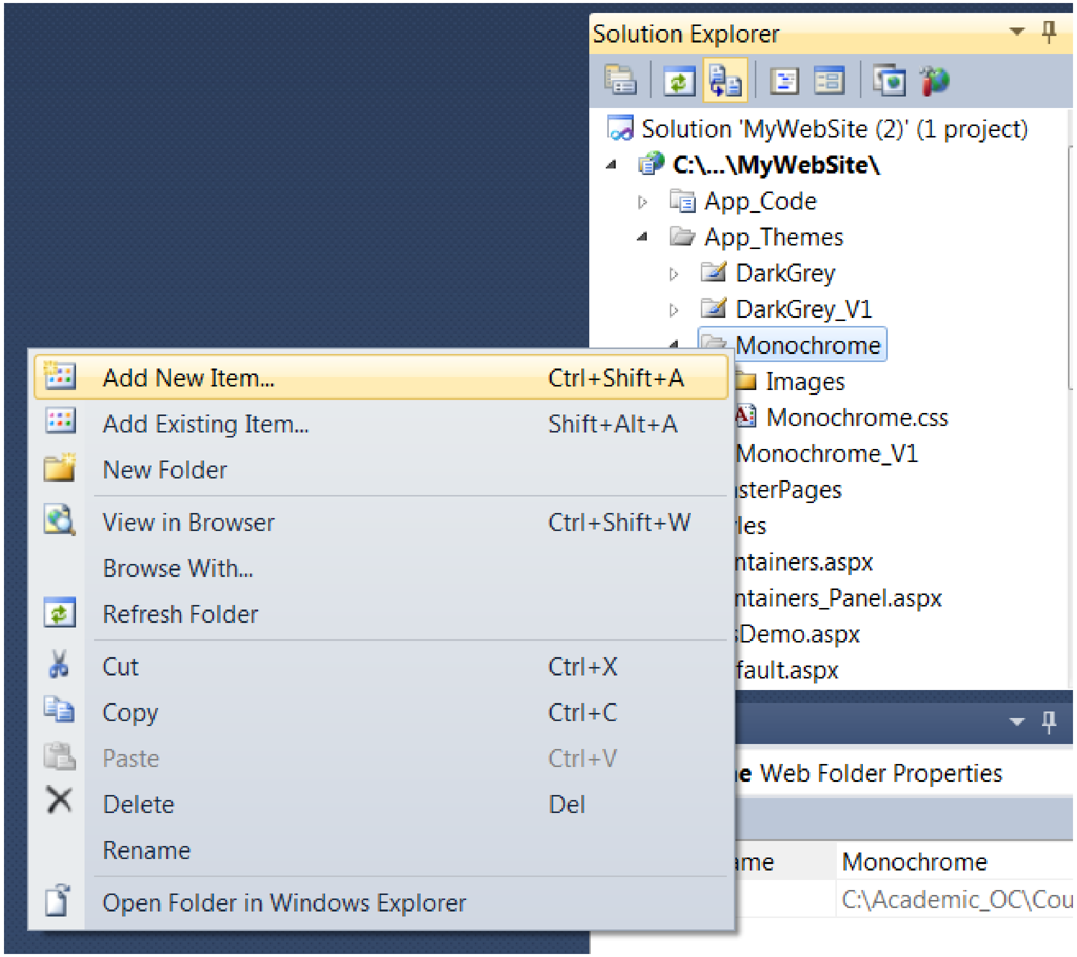
Editor: User Control Editor

Extension	Editing Experience
skin	User Control Editor

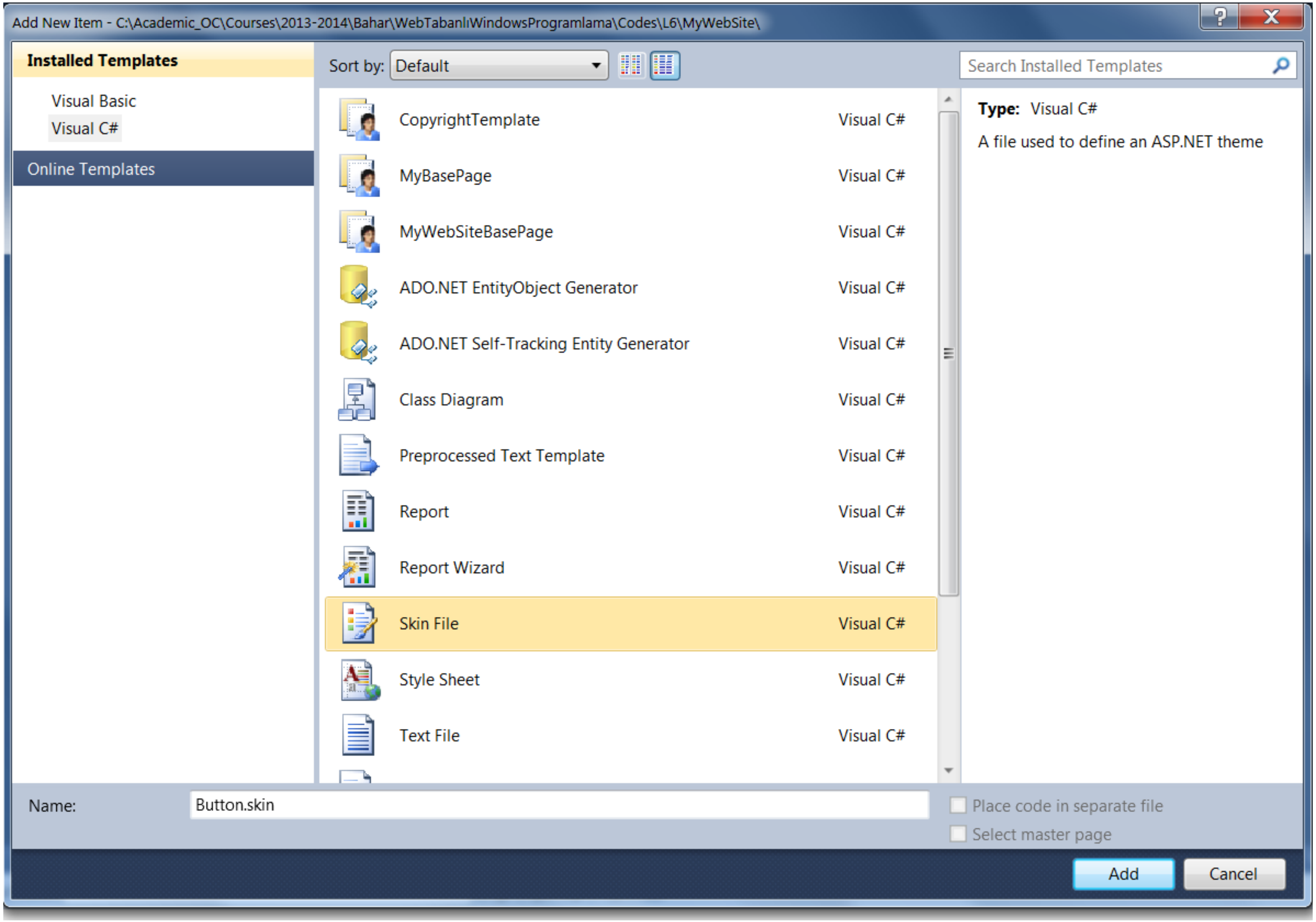
□ Map extensionless files to: Microsoft Visual Basic

Example
Creating a Skin for the Button Control

- In **Monochrome** theme folder



Example
Creating a Skin for the Button Control



Add New Item - C:\Academic_OC\Courses\2013-2014\Bahar\WebTabanlıWindowsProgramlama\Codes\L6\MyWebSite\

Installed Templates

Visual Basic

Visual C#

Online Templates

Sort by: Default

CopyrightTemplate	Visual C#
MyBasePage	Visual C#
MyWebSiteBasePage	Visual C#
ADO.NET EntityObject Generator	Visual C#
ADO.NET Self-Tracking Entity Generator	Visual C#
Class Diagram	Visual C#
Preprocessed Text Template	Visual C#
Report	Visual C#
Report Wizard	Visual C#
Skin File	Visual C#
Style Sheet	Visual C#
Text File	Visual C#

Type: Visual C#

A file used to define an ASP.NET theme

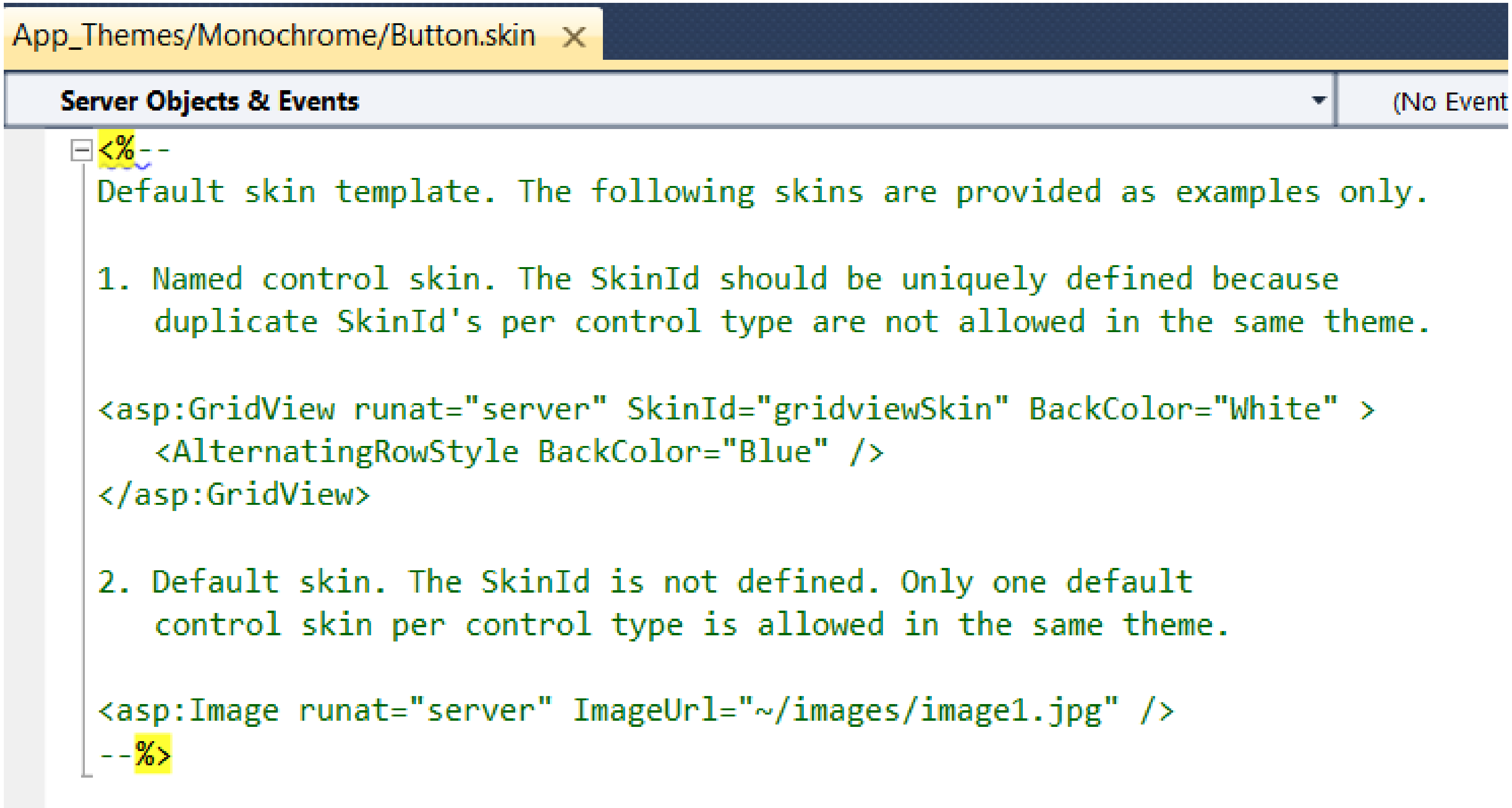
Name: Button.skin

□ Place code in separate file

□ Select master page

Example
Creating a Skin for the Button Control

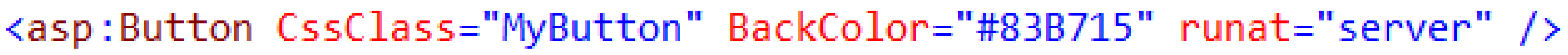
- You can remove the comments if you want.



```
<%--
Default skin template. The following skins are provided as examples only.

1. Named control skin. The SkinId should be uniquely defined because
   duplicate SkinId's per control type are not allowed in the same theme.

<asp:GridView runat="server" SkinId="gridviewSkin" BackColor="White" >
   <AlternatingRowStyle BackColor="Blue" />
</asp:GridView>

2. Default skin. The SkinId is not defined. Only one default
   control skin per control type is allowed in the same theme.

<asp:Image runat="server" ImageUrl="~/images/image1.jpg" />
--%>
```

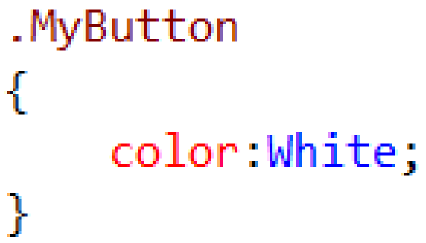
Example
Creating a Skin for the Button Control

- Add:



```
<asp:Button CssClass="MyButton" BackColor="#83B715" runat="server" />
```

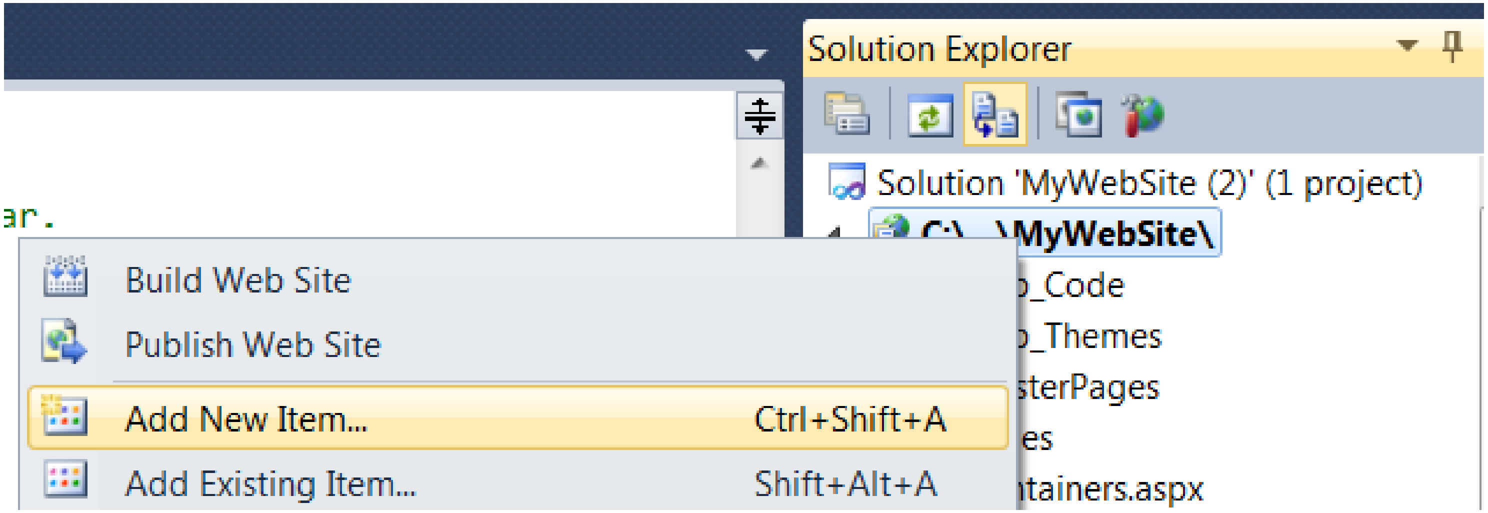
- Open **Monochrome.css** & add:



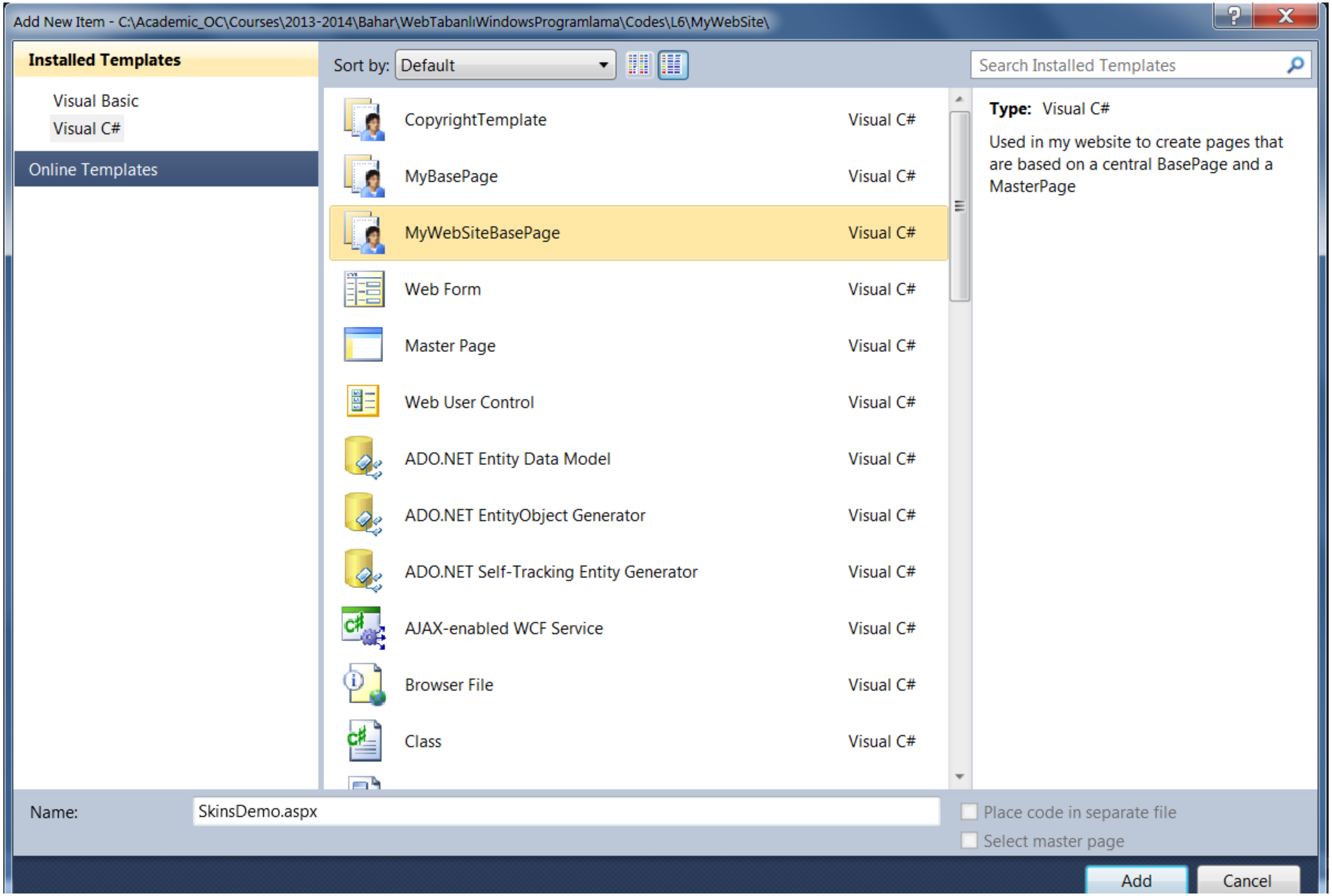
```
.MyButton
{
    color:White;
}
```

Example
Creating a Skin for the Button Control

- Add New Item in the Solution Explorer



Example
Creating a Skin for the Button Control



Add New Item - C:\Academic_OC\Courses\2013-2014\Bahar\WebTabanlıWindowsProgramlama\Codes\L6\MyWebSite\

CopyrightTemplate	Visual C#
MyBasePage	Visual C#
MyWebSiteBasePage	Visual C#
Web Form	Visual C#
Master Page	Visual C#
Web User Control	Visual C#
ADO.NET Entity Data Model	Visual C#
ADO.NET EntityObject Generator	Visual C#
ADO.NET Self-Tracking Entity Generator	Visual C#
AJAX-enabled WCF Service	Visual C#
Browser File	Visual C#
Class	Visual C#

Type: Visual C#

Used in my website to create pages that are based on a central BasePage and a MasterPage

Name: SkinsDemo.aspx

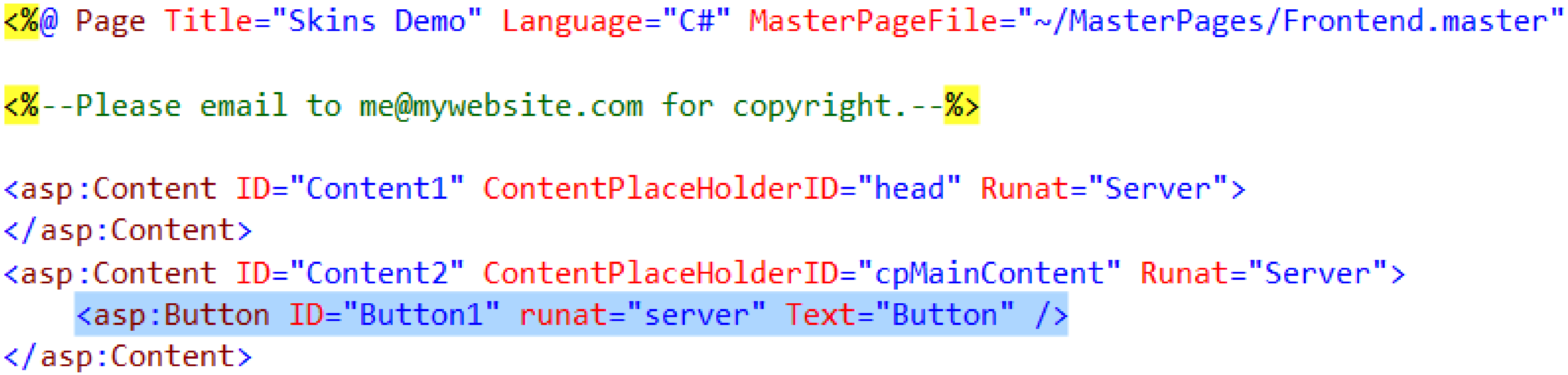
☐ Place code in separate file

☐ Select master page

Example
Creating a Skin for the Button Control

- Give the page a **Title**

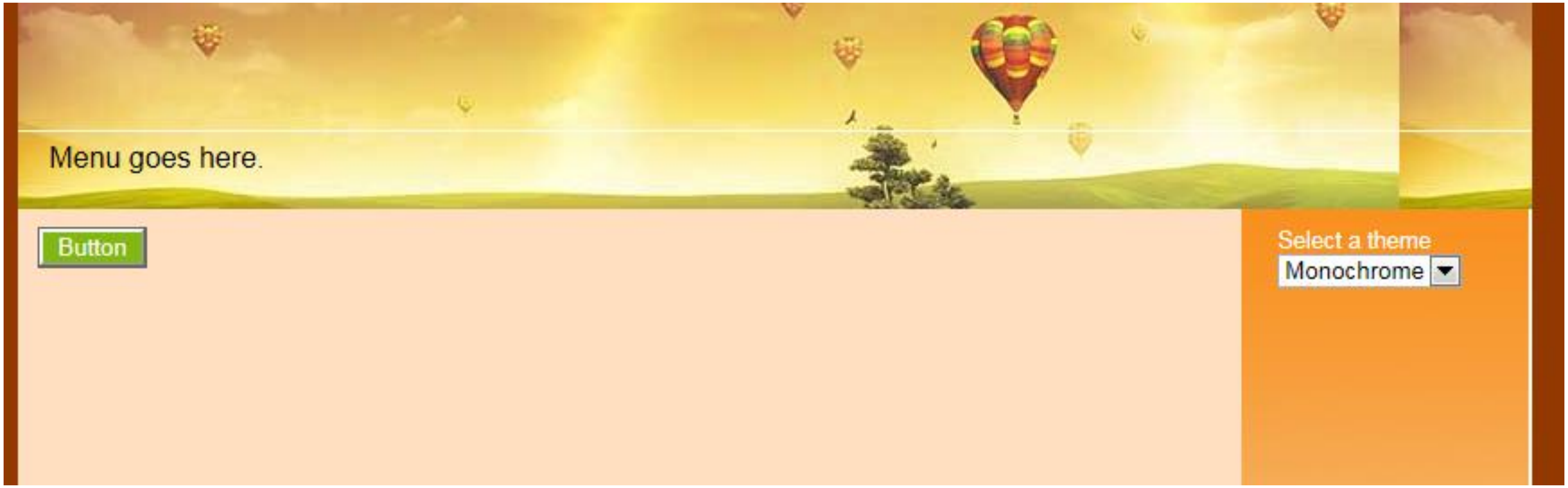
- Drag a **Button** into the **cpMainContent** area

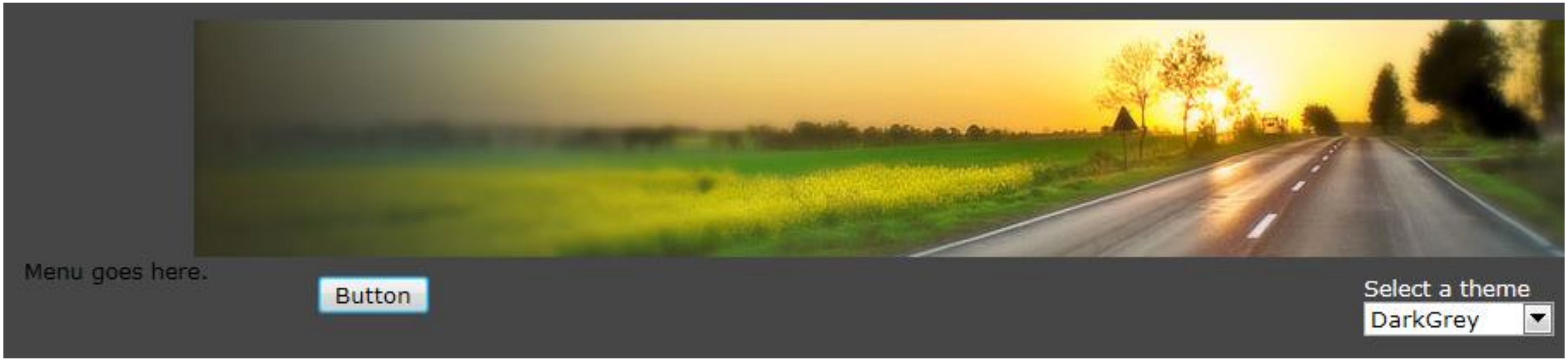


```
<%@ Page Title="Skins Demo" Language="C#" MasterPageFile="~/MasterPages/Frontend.master"

<%--Please email to me@mywebsite.com for copyright.--%>

<asp:Content ID="Content1" ContentPlaceHolderID="head" Runat="Server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="cpMainContent" Runat="Server">
    <asp:Button ID="Button1" runat="server" Text="Button" />
</asp:Content>
```

Example
Creating a Skin for the Button Control

- View in browser





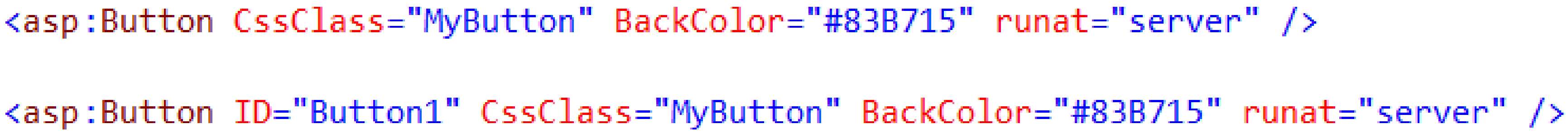
Named Skins

- What if **you don't want all your buttons to change** green and white **at the same time**?
  - What if you need one special button that has a red background?
- You can do this with ***named skins***.

Example
Named Skin

- Open **`Button.skin`**

- Copy all the code & Paste it

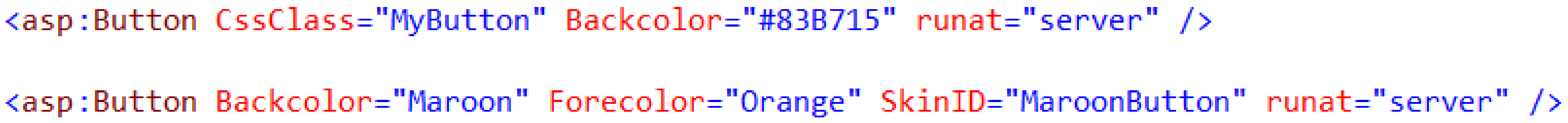


```
<asp:Button CssClass="MyButton" BackColor="#83B715" runat="server" />

<asp:Button ID="Button1" CssClass="MyButton" BackColor="#83B715" runat="server" />
```

- Remove **`ID`** and **`CssClass`**

Example
Named Skin

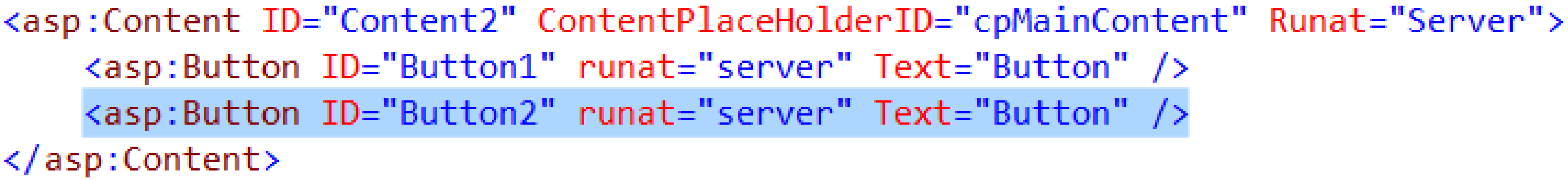
- Change **Backcolor** → **Maroon**
- Add **Forecolor=“Orange”**
- Add **SkinID=“MaroonButton”**



```
<asp:Button CssClass="MyButton" Backcolor="#83B715" runat="server" />

<asp:Button Backcolor="Maroon" Forecolor="Orange" SkinID="MaroonButton" runat="server" />
```

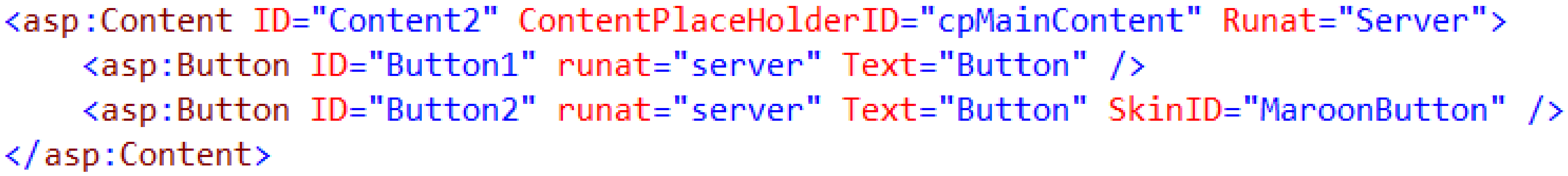
Example
Named Skin

- Open **`SkinsDemo.aspx`**
- Drag a second **`Button`**



```
<asp:Content ID="Content2" ContentPlaceHolderID="cpMainContent" Runat="Server">
    <asp:Button ID="Button1" runat="server" Text="Button" />
    <asp:Button ID="Button2" runat="server" Text="Button" />
</asp:Content>
```

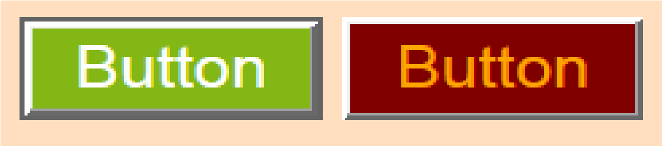
- Add **`SkinID`**



```
<asp:Content ID="Content2" ContentPlaceHolderID="cpMainContent" Runat="Server">
    <asp:Button ID="Button1" runat="server" Text="Button" />
    <asp:Button ID="Button2" runat="server" Text="Button" SkinID="MaroonButton" />
</asp:Content>
```

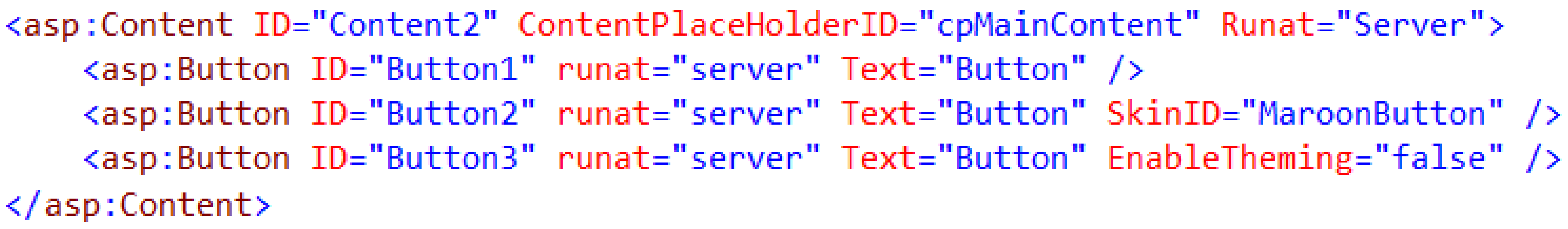
Example
Named Skin

- View in browser



Example
Disable Theming

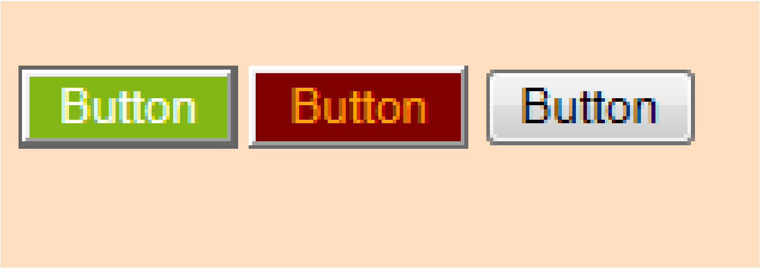
- Add 3rd **`Button`** to **`SkinsDemo.aspx`**



```
<asp:Content ID="Content2" ContentPlaceHolderID="cpMainContent" Runat="Server">
    <asp:Button ID="Button1" runat="server" Text="Button" />
    <asp:Button ID="Button2" runat="server" Text="Button" SkinID="MaroonButton" />
    <asp:Button ID="Button3" runat="server" Text="Button" EnableTheming="false" />
</asp:Content>
```

Example
Disable Theming

- View in browser


Button
Button
Button