



ASP.NET Web Forms

By Derek Peacock

Master Pages

```
<%@ Master Language="C#" AutoEventWireup="true" CodeBehind="WebDev5.master.cs"
   Inherits="WebAsssistant2.WebDev5.Masters.WebDev5" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
    <asp:ContentPlaceHolder ID="head" runat="server">
        <%--Page Specific Additions Here--%>
    </asp:ContentPlaceHolder>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:ContentPlaceHolder ID="ContentPlaceHolder1" runat="server">
                <%--Page Specific Content Here--%>
            </asp:ContentPlaceHolder>
        </div>
    </form>
</body>
</html>
```

Notice that the master page contains an HTML5 page with two placeholders. The placeholders are ASP controls that need to be submitted to a server before they are converted into appropriate HTML. Also the HTML page body contains a form. In Web Forms a web page can only contain a single form. There is also a comment at the top of the file which defines which language is being used in the code behind file. In this case there is a C# code behind file in which code can be placed to process user requests made when the web page is displayed.

In HTML it is possible to add code in a variety of languages, JavaScript being the most widely used. However it is much better to separate the pages functionality in separate code files than to mix it with HTML whose purpose is to contain the page content.

Master Page <head>

```
<head id="Head1" runat="server">
    <title></title>
    <meta charset="utf-8" lang="en" />
    <link href="../Content/reset.css" rel="stylesheet" />
    <link href="../Content/MainStyles.css" rel="stylesheet" />
    <link href="../Content/Responsive-gs/responsive.gs.12col.css"
        <asp:ContentPlaceHolder ID="head" runat="server">
            <%--Page Specific Additions Here--%>
        </asp:ContentPlaceHolder>
    </head>
```

Store the master page in a folder

The <head> of the master page contains all the links to the style sheets used to control the web sites overall look and feel. Master pages are usually stored inside a Masters folder thus all the links need to be updated!

Master Page <body>

```
<body>
    <form id="form1" runat="server">
        <div class="container">
            <!-- Website Name & Strapline-->
            <header>...</header>
            <!--Main Menu Bar-->
            <nav class="clearfix">...</nav>
            <asp:ContentPlaceHolder ID="ContentPlaceHolder1" runat="server">
                <%--Page Specific Content Here--%>
            </asp:ContentPlaceHolder>
        </div>
        <!--Footer-->
        <footer>...</footer>
    </form>
</body>
```

The body of the master page contains the container <div>, the <header>, the <nav> and the <footer> with the placeholder.

Using the Master Page

```
<%@ Page Title="" Language="C#" MasterPageFile("~/WebDev5/Masters/WebDev5.Master")
   AutoEventWireup="true" CodeBehind="PeacocksWines.aspx.cs"
   Inherits="WebAssitant2.WebDev5.PeacocksWines" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
    <!--Red Wine Filters (use <ul>) -->
    <div class="row">
        <aside class="col span_2">...</aside>
        <!--Main Content Area-->
        <section class="col span_10">
            <!--Summary of the selected wines-->
            <h2>Margaux Red Wines</h2>
            <p>...</p>
            <p>...</p>
            <!--1st Selected Wine-->
            <article class="row">...</article>
            <!--2nd Selected Wine-->
            <article class="row">...</article>
            <!--3rd Selected Wine-->
            <article class="row">...</article>
        </section>
    </div>
</asp:Content>
```

Adding a new item **Web Form Using Master Page** provides a page with two content regions matching the two placeholders in the chosen master page. In this case one row `<div>` with an `<aside>` and one `<section>`. The `<section>` contains in this case three `<articles>`.

Browser View

 **Peacock's French Wines**

Top Quality @ Rock Bottom Prices

Home	Red Wines	White Wines	Sparkling Wines	Contact Us	About Us
------	-----------	-------------	-----------------	------------	----------

Region

- Bordeaux
- Burgundy
- Rhone
- Margaux
- Arcs
- Pauillac
- St-Estephe
- St-Medoc
- Pessac-Léognan
- St-Emilion
- Pomerol
- Medoc
- Barjac

Margaux Red Wine

If Pauillac can be seen as the bastion of "traditional" Red Bordeaux, then Margaux represents its other facet in producing wines that are among the most refined and elegant of Bordeaux. It is the largest commune in the Médoc encompassing the communes of Cantenac, St. Estèphe, Arcas and Moulis to Margaux itself. It is located in the centre of the Haut-Médoc.

The soils in Margaux are the lightest and most gravelly of the Médoc with some of the soils also containing a high percentage of sand. Vineyards located in Cantenac and Margaux make up the core of the appellation with the best vineyard sites being located on well-drained slopes. It is these lighter, well-drained soils which give Margaux its soft touch and silty perfumes. Further from the water there is greater clay content and the vines are less dramatically perfumed.

2000 Ch. Margaux, Margaux

Ch. Margaux, Margaux Château Margaux, Cahors/Cognac Blend, Dry, Red, Ready, but will keep (improve), 13% alc.

The 2000 possesses a saturated ruby/purple color to the rim as well as an extraordinarily promising nose of creme de cassis intermixed with white flowers, licorice, and hints of espresso and toasty oak. There is great intensity, compelling purity, a multi-layered, full-bodied palate

1 Bottle £92.00 [Add to Basket](#) 1

Drink or Keep

1982 Chateau Palmer, Margaux

Chateau Palmer Cahors/Cognac Blend, Dry, Red, Drink now, 12.5% alc.

The vintage speaks for itself 1982 is the iconic mature Bordeaux vintage - the mature version of 2000 or 2005. This is juicier and richer than the 89 and the 85 though still with the lovely softness that only mature claret can achieve.

1 Bottle £34.00 [Add to Basket](#) 1

2004 Ch. Giscours, Margaux

Ch. Giscours Margaux Château Giscours Cahors/Cognac Blend, Dry, Red, Ready, but will keep, 12.5% alc.

In 2004 Giscours has produced a restrained and precise example. Powerful yet sophisticated, deliciously fruited yet refined, this is one of the most masculine wines of the Margaux appellation. I think 2004 is a seriously under-rated vintage and it's in a style that I like, with cool elegant fruit a structure which allows the terroir to shine through.

1 Bottle £62.00 [Add to Basket](#) 1

Copyright (2013) Dr-Derek Peacock
DMU HND Computing 2013 CTEC2402 Software Development Project



About Web Page

```

<%@ Page Title="" Language="C#" MasterPageFile="~/WebDev5/Masters/WebDev5.Master" AutoEventWireup="true" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
    <!--Main Content Area-->
    <section>
        <h2>About Us</h2>
        <p>
            Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus non erat
        </p>
    </section>
</asp:Content>

```



Peacock's French Wines

Top Quality @ Rock Bottom Prices

[Home](#) |
 [Red Wines](#) |
 [White Wines](#) |
 [Sparkling Wines](#) |
 [Contact Us](#) |
 [About Us](#)

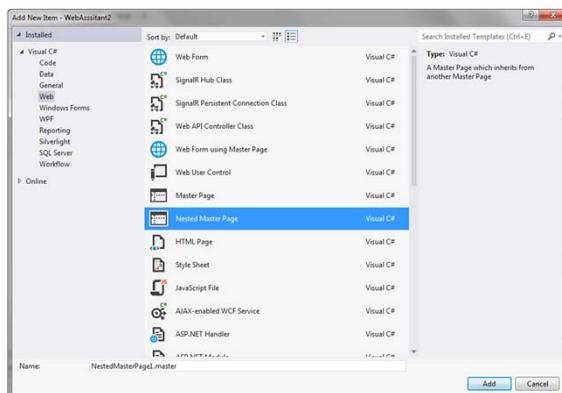
About Us

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus non erat leo. Curabitur vestibulum dapibus pulvinar. Sed a rhoncus nunc. Quisque non tempor nulla. Mauris sed accumsan nibh. Morbi eget dui et mauris interdum ultrices in in felis. Vestibulum dapibus lorem et tincidunt posuere. Quisque placerat, massa vel auctor porta, dolor risus aliquet risus, eu porta mauris est at massa. Donec velit felis, molestie ut congue a, tempus at tellus. Nullam faucibus pulvinar mauris, et lacinia nulla sagittis ac. Morbi tempus massa ac nunc varius convallis. Praesent molestie lorem malesuada, sodales augue ac, auctor turpis. Nulla lacinia auctor sem vitae luctus.

Copyright (2013) Dr Derek Peacock
 DMU HND Computing 2013 CTEC2402 Software Development Project


Unnecessary Duplication

- Which pages will contain unnecessary duplication using this master page?
- The only solution is to use nested master pages



Nested Masters

- Top Level Master
 - Header
 - Main Menu Bar
 - Footer
- Nested Master I
 - Aside Navigation
- ASP Form
 - Main Content

If the side bar is used for secondary navigation and that navigation is the same for several pages, then Nested Masters is the only way in Web Forms to go in order to avoid unnecessary duplication. Several different Nested master can use the same top level master as their parent. In MVC a much better solution is available. Even Dreamweaver has a better solution using templates and library items to control the duplication.