

(420-PS4-AB)

Master Pages in ASP .NET Web Forms

Summer 2018

Outline

- Working with Master Pages
- Creating Master Pages
- Creating Content Pages
- Changing Master Pages dynamically

Defining a Common Page Layout

Common
Header



Common
Menu

Page Content

Working with Master Pages

- **Master Pages allow a common page layout to be defined across a Website using a single file**
- **Master Page Features:**
 - Extend the UserControl class
 - Can be nested to handle more complex page layout needs
 - Define areas where content should be placed within the defined page layout
 - Have a .master extension
 - Can have a code behind page

Creating Master Pages

- Can be created by adding a new item of type master Page
- Master Pages allow the overall layout of pages to be defined in one place:

```
<%@ Master %>

<html >
<body bgcolor="White">
    <b>Header</b>
    
    <asp:ContentPlaceholder id="ph1"
        runat="Server"/>
    <b>Header</b>
</body>
</html>
```

MySite.master

Demo: Master Pages

- Add a new master page to the any of the ASP .NET web forms Application
- Add the following in the master page:
 - Header with title name (big font and bold on the right)
 - Date label on the left
 - Footer with copy rights

Time Tracker Web Application	[!bDate]
© 2017	

Demo: Details

Add New Item - TimeTracker2

Sort by: Default

Visual C#
Code
Data
General
Web
General
Markup
Scripts
Web Forms
MVC
Razor
SignalR
Web API
Windows Forms
WPF
ASP.NET Core
SQL Server
Search Results
Online

Web Form with Master Page
Web Forms Master Page
Web Forms Master Page (Nested)

Visual C#
Visual C#
Visual C#

Name: Site1.Master

```

4
5 <html>
6 <head runat="server">
7   <title>Time Tracker Application</title>
8
9   <asp:ContentPlaceHolder ID="head" runat="server">
10    </asp:ContentPlaceHolder>
11 </head>
12 <body>
13   <!-- HEADER -->
14   <div style="float:left;width:50%;text-align:left;font-size:16pt;font-weight:bold">
15     TIME TRACKER Web Application
16   </div>
17   <div style="float:right;width:45%;text-align:right;">
18     <asp:Label ID="lbDate" runat="server" Text=""></asp:Label>
19   </div>
20   <br />
21   <!-- MAIN BODY -->
22   <form id="form1" runat="server">
23     <div>
24       <asp:ContentPlaceHolder ID="mainContentPH" runat="server">
25       </asp:ContentPlaceHolder>
26     </div>
27   </form>
28   <br />
29   <!-- FOOTER -->
30   &copy; 2018
31 </body>
32 </html>
33

```

Creating Content Page

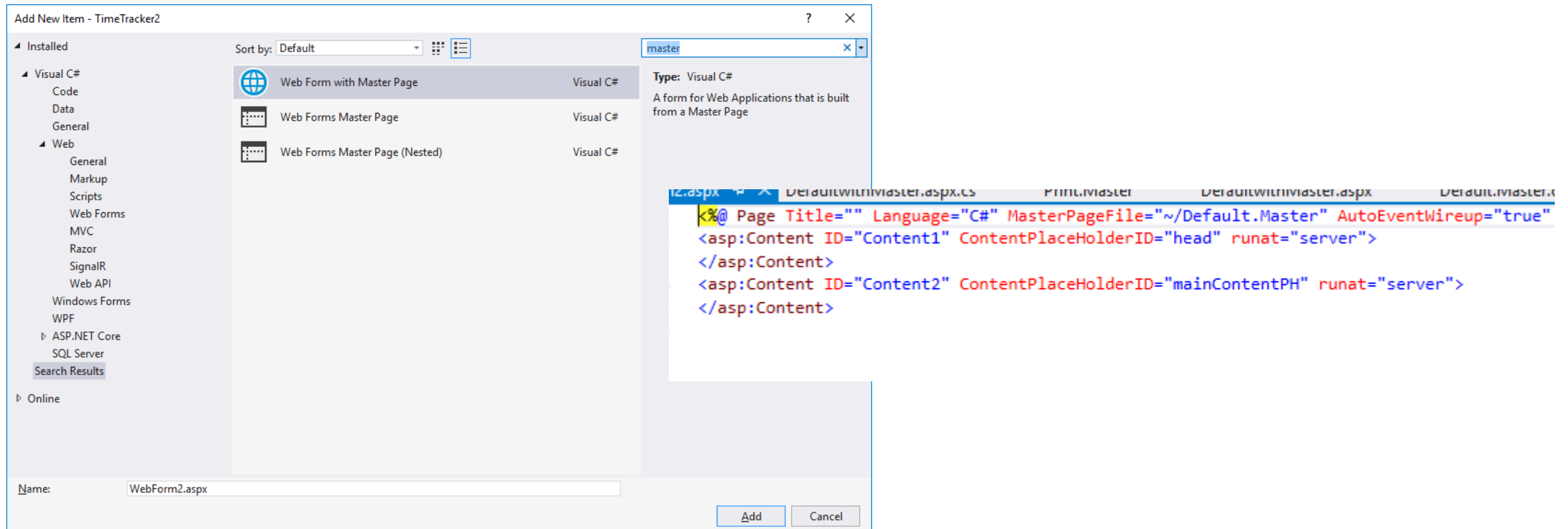
- Content Pages reference a Master Page and contain one or more Content Controls:

```
<%@ Page MasterPageFile="Mysite.master"%>  
  
<asp:content id="bodyContent"  
  contentPlaceholder id="ph1" runat="server"/>  
  
    Page Content Goes Here  
  
</asp:content>
```

Page.aspx

Demo: Master Pages

- Add content pages to the master page you have created.



Dynamically Changing Master Pages

- Master Pages can dynamically be changed using the Page PreInit event handler in the code behind

```
void Page_PreInit (object src, EventArgs e)
{
    MasterPageFile = "~/CustomMasterPage.master";
}
```

Demo: Changing a Master Page

- Create a second master page without the header or footer for printing propose.

- Add a hyper link to the same page with string query

```
<a href="default.aspx?Print=true">
```

```
    PRINTABLE VERSION
```

```
</a>
```

Demo: Changing a Master Page

```

</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="mainContentPH" runat="server">
<div>
  <a href ="DefaultwithMaster.aspx?Print=true">PRINTABLE VERSION</a>
  <br />
  <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False" Cel
    <AlternatingRowStyle BackColor="White" />
    <Columns>
      <asp:CommandField ShowSelectButton="True" />

```

Main page source

```

namespace TimeTracker2
{
  public partial class DefaultwithMaster : System.Web.UI.Page
  {
    void Page_PreInit(object sender, EventArgs e)
    {
      if (Request.QueryString["Print"] != null)
      {
        MasterPageFile = "~/Print.Master";
      }
    }
    protected void Page_Load(object sender, EventArgs e)
    {

```

Code behind

Summary

- Master Pages provide a simple way to provide a Website with a common page layout.
- Master Pages contain a Master directive along with a ContentPlaceHolder server control.
- Content Pages contain a MasterPageFile attribute and one or more Content server controls.
- Master Pages can be changed dynamically

Q & A

