

Ex. No. 10	Advanced Web Design		
Date of Exercise	02.11.2016	Date of Upload	06.11.2016

Aim

To develop **Address Book Maintenance System** using C# by integrating Database with proper authentication

Description

Two different kinds of controls:

- User controls
- Custom controls

To make use of the controls you have created, you simply copy the assemblies containing those controls along with the rest of the code. You can even place frequently used controls in an assembly located in the **global assembly cache (GAC)** on the Web server, so that all Web applications on the server have access to them

User Controls

- Create using ASP.NET code
- After you have created a user control you can reuse it in multiple ASP.NET pages.
- Then define properties and methods for user controls.

```
<%@ Control Language="C#" AutoEventWireup="true" CodeFile="WebUserControl.ascx.cs"
Inherits="WebUserControl" %>
```

- There is no HTML code present, and in particular no < form > element. This is because user controls are inserted inside ASP.NET forms in other files and so don't need a < form > tag of their own. Place the code in `<% @ Control %>` directive generated in .ascx.
- The CodeFile attribute specifies the code -behind file and Inherits specifies the class defined in the code -behind file from which the page inherits. To do this, you use the `<% @ Register %>` directive at the top of the code in Default.aspx, as follows:

```
<%@ Register TagPrefix="pcs" TagName="UserC1" Src="WebUserControl.ascx" %>
```

- The TagPrefix and TagName attributes specify the tag name to use (in the form < TagPrefix:TagName >), and you use the Src attribute to point to the file containing your user control.

- Now use the control by adding the following element in Default.aspx :

```
<pcs:UserC1 Runat="server" ID="myUserControl"/>
```

Custom Controls

Entirely self-contained in C# assemblies, don't need to go through the process of assembling a user interface (UI) in an .aspx file.

To get the most customizable behavior for your custom controls,

- Derive a class from System.Web.UI.WebControls.WebControl
- Extend the functionality of an existing control, creating a derived custom control.
- Group existing controls together, create a composite custom control.

Master Pages

Provides an excellent way to make your Web sites easier to design. Master pages are created in files with the extension .master , and can be added via the Web site -> Add New Item

The differences are:

- A `<% @ Master % >` directive is used instead of a `<% @ Page % >` directive, although the attributes are the same.
- A ContentPlaceHoldercontrol with an ID of head is placed in the page header.
- A ContentPlaceHoldercontrol with an ID of ContentPlaceHolder1 is placed in the page body.

For an .aspx page to use a master page, you need to modify the `< % @ Page % >` directive as follows:

```
< % @ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs" Inherits="_Default" MasterPageFile="~/MasterPage.master" Title="Page Title" % >
```

MasterPage used to create a consistent layout for the pages in your application:

- A single master page defines the look and feel and standard behavior that you want for all of the pages
- Then create individual content pages that contain the content you want to display.
- When users request the content pages, they merge with the master page to produce output that combines the layout of the master page with the content from the content page.

Accessing Master Page Content from Web Pages

To access the master page from code in your Web page

- Use the Page.Master property, which will return a reference to the master page in the form of a MasterPage object.
- Use the MasterPage.FindControl() method to locate controls on the master page by their identifier.
- This enables you to manipulate content on the master page that is outside of content placeholders

VALIDATION CONTROLS

To check the **required field**

```
<asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server" ErrorMessage="Not to be empty" ControlToValidate="TextBox1"> </asp:RequiredFieldValidator>
```

To check the **comparison**

```
<asp:CompareValidator ID="CompareValidator1" runat="server" ErrorMessage="Password and re-type password must be same" ControlToCompare="TextBox2" ControlToValidate="TextBox3"> </asp:CompareValidator>
```

To check the **range**

```
<asp:RangeValidator ID="RangeValidator1" runat="server" ErrorMessage="Between 25 to 50" ControlToValidate="TextBox4" MaximumValue="50" MinimumValue="25"> </asp:RangeValidator>
```

To check the **regular expression**

```
<asp:RegularExpressionValidator runat="server" ErrorMessage="10-digit" ControlToValidate="TextBox5" ValidationExpression="[0-9]{10}"> </asp:RegularExpressionValidator>
```

PROGRAM**SIGNUP PAGE VALIDATION CONTROLS AND USER CONTROLS**

```

<%@ Page Title="Login" Language="C#" MasterPageFile="~/MasterPage2.master"
AutoEventWireup="true" CodeFile="SignUpPage.aspx.cs" Inherits="LoginPage" %>
<%@ Register TagPrefix="pcs" TagName="UserC1" Src="~/WebUserControl.ascx"%>

<asp:Content ID="Content1" ContentPlaceHolderID="head" Runat="Server">
    <title>Login</title>
</asp:Content>

<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" Runat="Server">
    <br /><br />
    <div class="row ">
        <div class="col-lg-6 text-center">
            <pcs:UserC1 runat="server" ID="myusercontrol"/>
        </div>
        <div class="col-lg-5 pull-left">
            <div class="login-panel panel panel-primary">
                <div class="panel-heading text-center">Sign Up</div>
                <div class="panel-body">
                    <fieldset >
                        <div class="form-group">
                            <i class="fa fa-user fa-lg"></i>
                            <asp:TextBox ID="TextBoxFname" runat="server"
Required="true" placeholder="First Name" ></asp:TextBox>
                            <asp:TextBox ID="TextBoxLname" runat="server"
Required="true" placeholder="Last Name" ></asp:TextBox>

                            <asp:RequiredFieldValidator ID="RequiredValidator1"
runat="server" ErrorMessage="Please Fill the fields" ControlToValidate="TextBoxLname">
</asp:RequiredFieldValidator>

                        </div>

                        <div class="form-group">
                            <i class="fa fa-lock fa-lg"></i>
                            <asp:TextBox ID="TextBoxPwd" runat="server"
Required="true" placeholder="Password" ></asp:TextBox>
                            <asp:TextBox ID="TextBoxRePwd" runat="server"
Required="true" placeholder="Re-Enter Password" ></asp:TextBox>
                            <asp:CompareValidator ID="CompareValidator1"
runat="server" ErrorMessage="Password and re-type password must be same"
ControlToCompare="TextBoxPwd" ControlToValidate="TextBoxRePwd"> </asp:CompareValidator>

                        <hr />
                    </div>

                    <div class="form-group">
                        <i class="fa fa-newspaper-o fa-lg"></i>
                        <label>Profession</label>

```

```

        <asp:DropDownList ID="DropDownListProfession"
runat="server">
        <asp:ListItem>Computer Science</asp:ListItem>
        <asp:ListItem>Electronics
Communication</asp:ListItem>
        <asp:ListItem>Electrical Engineering</asp:ListItem>
        <asp:ListItem>Biotechnology</asp:ListItem>
        <asp:ListItem>Media Technology</asp:ListItem>
    </asp:DropDownList>
</div>
<div class="form-group">
    <i class="fa fa-inbox"></i>
    <asp:TextBox ID="TextBoxMail" runat="server"
Required="true" placeholder="xyz@gmail.com" ></asp:TextBox>
    <i class="fa fa-phone"></i>
    <asp:TextBox ID="TextBoxPhone" runat="server"
Required="true" placeholder="9004864876" ></asp:TextBox>
    <asp:RegularExpressionValidator runat="server"
ErrorMessage="10-digit" ControlToValidate="TextBoxPhone" ValidationExpression="[0-
9]{10}"> </asp:RegularExpressionValidator>

</div>
<div class="form-group">
    <i class="fa fa-calendar"></i>
    <asp:TextBox ID="TextBoxDob" runat="server"
Required="true" placeholder="dd/mm/yyyy" ></asp:TextBox>
    <asp:RequiredFieldValidator ID="RequiredFieldValidator1"
runat="server" ErrorMessage="Not to be empty" ControlToValidate="TextBoxDob">
</asp:RequiredFieldValidator>
</div>
<div class="form-group col-lg-offset-1">
    <asp:RadioButtonList ID="RadioButtonListGender"
runat="server">
        <asp:ListItem Value="M">&nbsp;<i class="fa fa-male fa-
lg"></i>&nbsp;</asp:ListItem>
        <asp:ListItem Value="F">&nbsp;<i class="fa fa-female
fa-lg"></i>&nbsp;</asp:ListItem>
    </asp:RadioButtonList>
</div>
<div class="row text-center">
    <asp:Button ID="ButtonEnterDetails" CssClass="btn btn-
primary" runat="server" Text="SignUp" OnClick="ButtonEnterDetails_Click" />
    <asp:Button ID="Button1" CssClass="btn btn-success"
runat="server" Text="Login" OnClick="Button1_Click" />
</div>
</fieldset>

</div>
</div>
</div><!-- /.col-->

</div><!-- /.row -->

<p></p>
<div class="well text-center">

```

```

        <asp:Label ID="Label1" runat="server" Text="Operation Status"></asp:Label>
    </div>
    <p>&nbsp;</p>
    <p>&nbsp;</p>
</asp:Content>

```

WEB USER CONTROL.ASCX

```

<%@ Control Language="C#" AutoEventWireup="true" CodeFile="WebUserControl.ascx.cs"
Inherits="WebUserControl" %>
<asp:Image ID="Image1" runat="server" ImageUrl="~/Images/Caption.png" />
<br />

```

MASTER PAGE .MASTER

```

<%@ Master Language="C#" AutoEventWireup="true" CodeFile="MasterPage.master.cs"
Inherits="MasterPage" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">

    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>Lumino - Dashboard</title>

    <link href="css/bootstrap.min.css" rel="stylesheet">
    <link href="css/daterangepicker3.css" rel="stylesheet">
    <link href="css/styles.css" rel="stylesheet">
    <link href="font-awesome-4.7.0/font-awesome-4.7.0/css/font-awesome.min.css"
rel="stylesheet" />

    <!--Icons-->
    <script src="js/lumino.glyphs.js"></script>

    <!--[if lt IE 9]>
    <script src="js/html5shiv.js"></script>
    <script src="js/respond.min.js"></script>
    <![endif]-->

    <asp:ContentPlaceHolder id="head" runat="server">
    </asp:ContentPlaceHolder>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <nav class="navbar navbar-inverse navbar-fixed-top" role="navigation">
                <div class="container-fluid">
                    <div class="navbar-header">
                        <button type="button" class="navbar-toggle collapsed" data-
toggle="collapse" data-target="#sidebar-collapse">
                            <span class="sr-only">Toggle navigation</span>
                            <span class="icon-bar"></span>

```

```

        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
    </button>
    <a class="navbar-brand" href="#"><span>JoB</span>PORTal</a>
    <ul class="user-menu">
        <li class="dropdown pull-right">
            <a href="#" class="dropdown-toggle" data-
toggle="dropdown"><svg class="glyph stroked male-user"><use xlink:href="#stroked-male-
user"></use></svg> User <span class="caret"></span></a>
            <ul class="dropdown-menu" role="menu">
                <li><a href="#"><svg class="glyph stroked
male-user"><use xlink:href="#stroked-male-user"></use></svg> Profile</a></li>
                <li><a href="#"><svg class="glyph stroked
gear"><use xlink:href="#stroked-gear"></use></svg> Settings</a></li>
                <li><a href="#"><svg class="glyph stroked
cancel"><use xlink:href="#stroked-cancel"></use></svg> Logout</a></li>
            </ul>
        </li>
    </ul>
</div>
</div><!-- /.container-fluid -->
</nav>

<div id="sidebar-collapse" class="col-sm-3 col-lg-2 sidebar">
    <div class="form-group">
        <input type="text" class="form-control" placeholder="Search">
    </div>
    <ul class="nav menu">
        <li class="active"><a href="ViewJobs.aspx"><svg class="glyph stroked
dashboard-dial"><use xlink:href="#stroked-dashboard-dial"></use></svg> Dashboard</a></li>
        <li class="parent ">
            <a href="#">
                <span data-toggle="collapse" href="#sub-item-1"><svg
class="glyph stroked chevron-down"><use xlink:href="#stroked-chevron-
down"></use></svg></span> Job panel
            </a>
            <ul class="children collapse" id="sub-item-1">
                <li>
                    <a class="" href="#">
                        <svg class="glyph stroked chevron-
right"><use xlink:href="#stroked-chevron-right"></use></svg> Apply
                    </a>
                </li>
                <li>
                    <a class="" href="#">
                        <svg class="glyph stroked chevron-
right"><use xlink:href="#stroked-chevron-right"></use></svg> Status
                    </a>
                </li>
                <li>
                    <a class="" href="#">
                        <svg class="glyph stroked chevron-
right"><use xlink:href="#stroked-chevron-right"></use></svg> Profile
                    </a>
                </li>
            </ul>
        </li>
    </ul>

```

```

        </li>
    </ul>
</li>
<li role="presentation" class="divider"></li>
<li><a href="LoginPage.aspx"><svg class="glyph stroked male-
user"><use xlink:href="#stroked-male-user"></use></svg> Login Page</a></li>
</ul>

</div><!--/.sidebar-->

</div>

<asp:ContentPlaceHolder id="ContentPlaceHolder1" runat="server">

    </asp:ContentPlaceHolder>
</form>
<script src="js/jquery-1.11.1.min.js"></script>
<script src="js/bootstrap.min.js"></script>
<script src="js/chart.min.js"></script>
<script src="js/chart-data.js"></script>
<script src="js/easypiechart.js"></script>
<script src="js/easypiechart-data.js"></script>
<script src="js/bootstrap-datepicker.js"></script>
<script>
    $('#calendar').datepicker({
    });

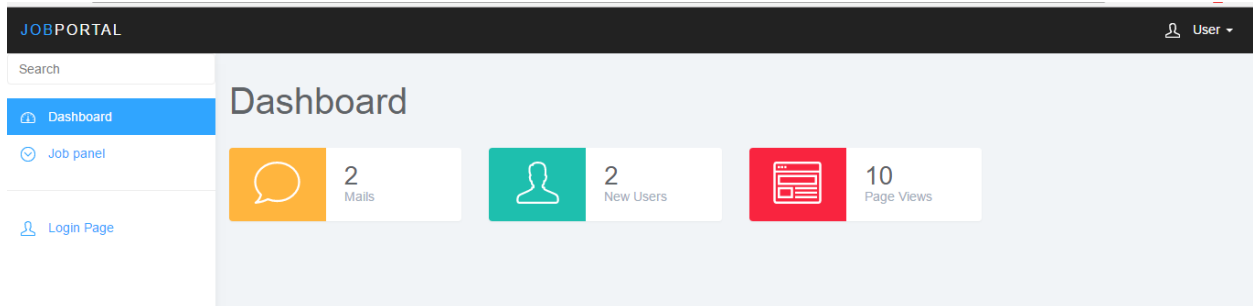
    !function ($) {
        $(document).on("click","ul.nav li.parent > a > span.icon", function(){
            $(this).find('em:first').toggleClass("glyphicon-minus");
        });
        $(".sidebar span.icon").find('em:first').addClass("glyphicon-plus");
    }(window.jQuery);

    $(window).on('resize', function () {
        if ($(window).width() > 768) $('#sidebar-collapse').collapse('show')
    })
    $(window).on('resize', function () {
        if ($(window).width() <= 767) $('#sidebar-collapse').collapse('hide')
    })
</script>
</body>
</html>

```


OUTPUT

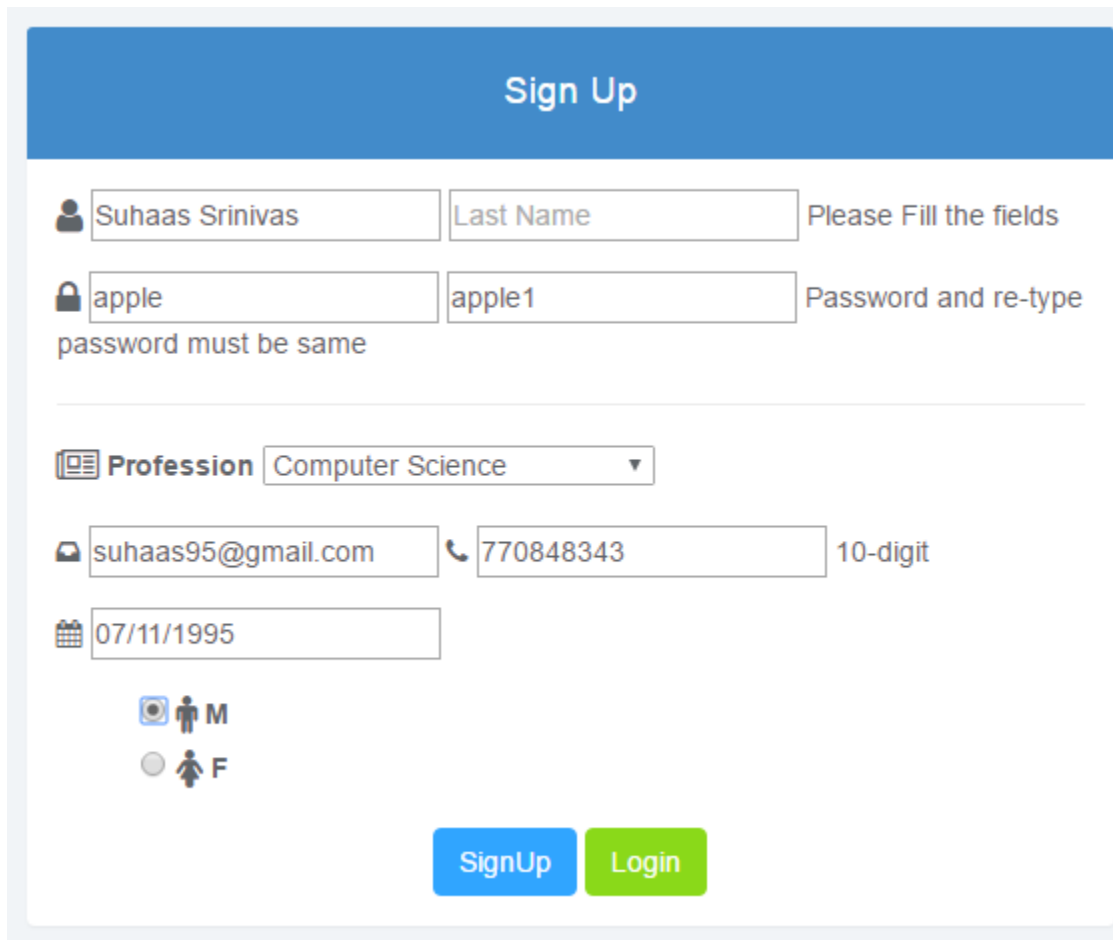
MASTER PAGE WITH TREE VIEW



CUSTOM CONTROLS -IMAGE

```
<%@ Control Language="C#" AutoEventWireup="true" CodeFile="WebUserControl.ascx.cs" Inherits="WebUserControl" %>
<asp:Image ID="Image1" runat="server" ImageUrl="~/Images/Caption.png" />
<br />
```



SIGN UP PAGE -VALIDATION CONTROLS

The screenshot shows a web form titled "Sign Up". It contains several input fields with validation messages:

- First Name:** A text box containing "Suhaas Srinivas".
- Last Name:** A text box containing "Last Name". A message "Please Fill the fields" is displayed to the right.
- Password:** A text box containing "apple".
- Re-type Password:** A text box containing "apple1". A message "Password and re-type password must be same" is displayed below the fields.
- Profession:** A dropdown menu with "Computer Science" selected.
- Email:** A text box containing "suhaas95@gmail.com".
- Phone Number:** A text box containing "770848343". A message "10-digit" is displayed to the right.
- Date of Birth:** A date picker showing "07/11/1995".
- Gender:** Two radio buttons labeled "M" (Male) and "F" (Female). The "M" button is selected.

At the bottom of the form are two buttons: "SignUp" (blue) and "Login" (green).

Result

The above programmed is compiled successfully and the screenshots are well described with successful outputs and constraints.

[Dr J Anitha/Dr. S.P. Jeno Lovesum]