Lab 17 – Membership

Objective

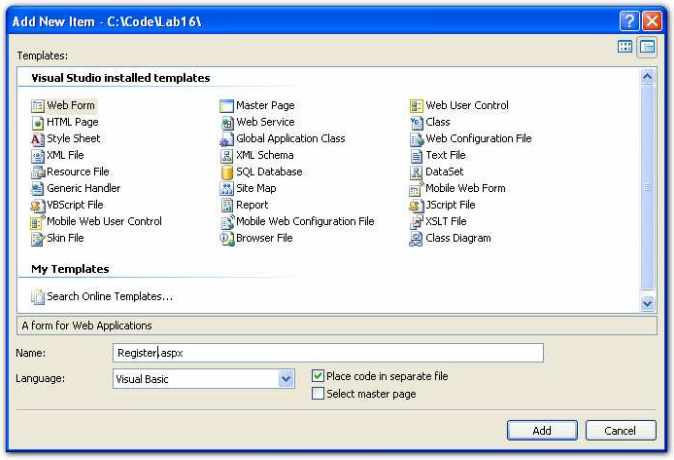
You will recreate the application from Lab 16. This time, however, you will create the application with the ASP.NET membership web controls. This application will use a SQL Server Express database to store the user accounts. Also, the ASP.NET membership controls will automatically use this database for registration and login.

Step-by-Step Instructions

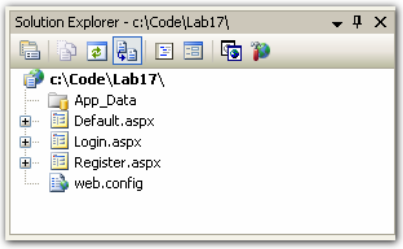
1. Start Visual Studio 2005
2. Create a new web site. **File → New → Web Site** (Or, **File → New Web Site…**)
3. Select the following options:

Setting	Value
Visual Studio installed templates	ASP.NET Web Site
Location	File System – C:\Code\Lab17
Language	Visual Basic

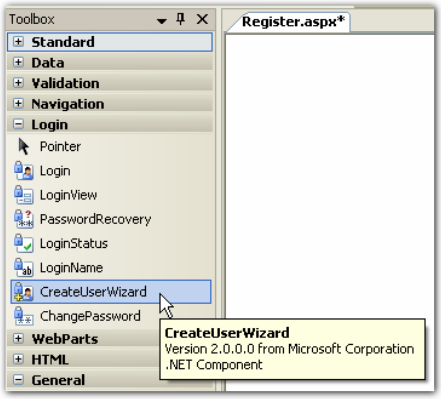
4. From the **WebSite** menu choose **Add New Item…**
5. Create a new Web Form named *Register.aspx* as shown below:



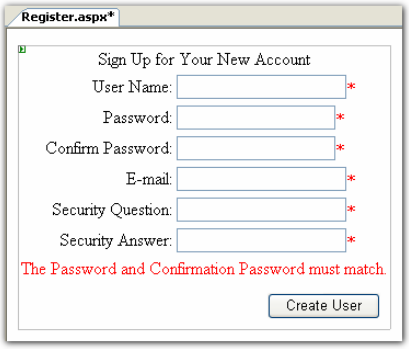
6. Repeat steps 4 and 5 above to create a form named *Login.aspx*. The project should now look similar to the one below:



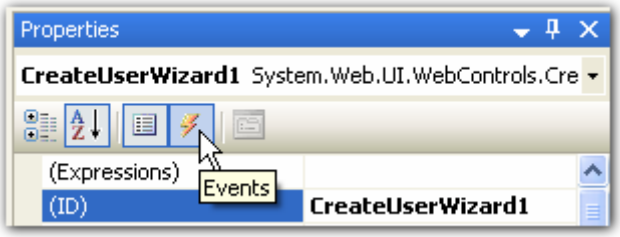
7. Open *Register.aspx* in **Design** view.
8. Drag a **CreateUserWizard** control from the **Login** group onto the form.



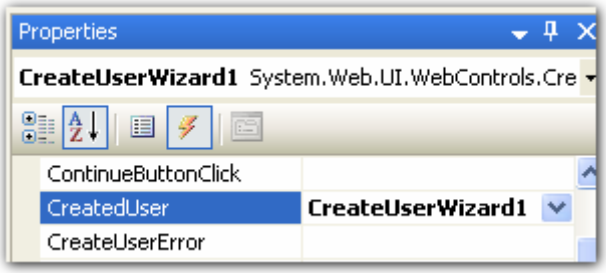
The form should now look similar to the one below:



9. Click on the control.
10. From the **Properties** window click on the **Events**



11. Double-click on the **CreatedUser** event to create the event and switch to the *Register.aspx.vb* file.



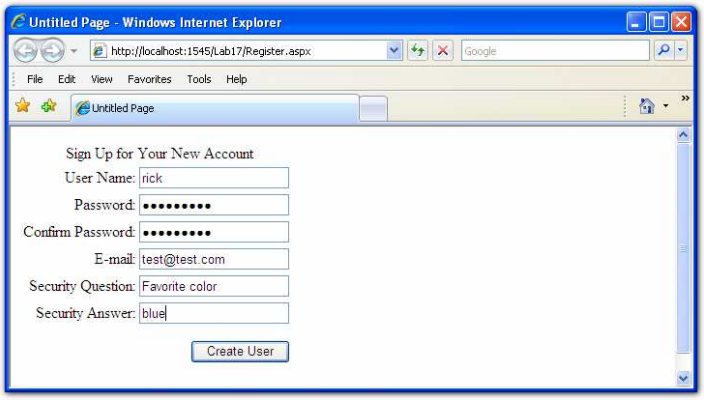
12. Enter the following code into the *CreatedUser* event. This line of code will redirect to the *login.aspx* page when the user registration is complete.

```
Partial Class Register
    Inherits System.Web.UI.Page

    Protected Sub CreateUserWizard1_CreatedUser(ByVal sender As Object, _
        ByVal e As System.EventArgs) Handles CreateUserWizard1.CreatedUser

        Response.Redirect("login.aspx")
    End Sub
End Class
```

13. Save and close *Register.aspx.vb* and *Register.aspx*.
14. Make *Register.aspx* the startup page for the web site by right-clicking it in the Solution Explorer and choosing **Set As Start Page**.
15. Run the application.
16. Fill out the registration form with your own information.

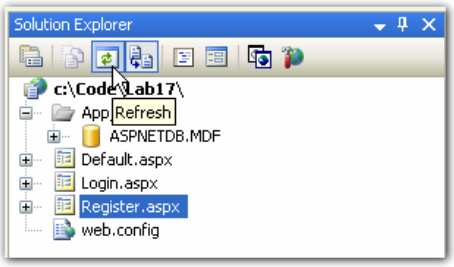


17. Click **Create User**. This will now create the local SQL Server Express database for the web site and create a record for your user.

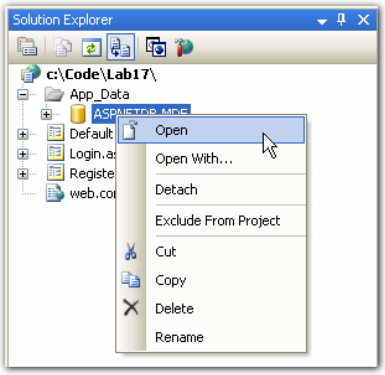
    Note: This process may take 30 seconds since ASP.NET has to create the database. Make sure you do not proceed to the next step until you have been redirected to the *Login.aspx* page. Also, to avoid timeouts, do not do anything else on the computer during this time.

18. Close the browser to stop the application.
19. Click the **Refresh** button in the **Solution Explorer**.

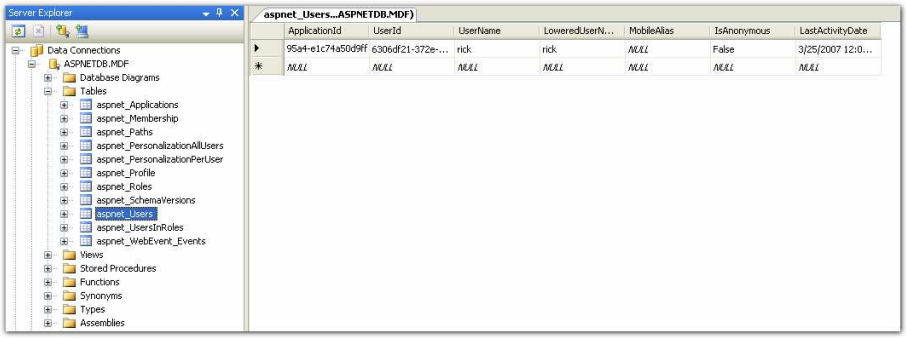
    The *App_Data* directory will now have the *ASPNETDB.MDF* database which will hold all the membership data for this web site.



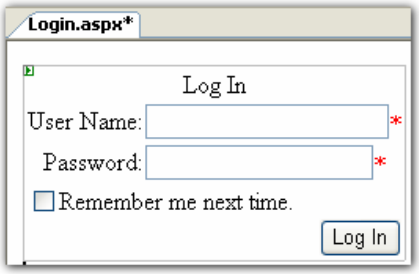
20. Right-click on the database file and choose **Open**.



21. You can now browse the database created by Visual Studio. This database will hold all user accounts, roles, etc. for the application.



22. Open *Login.aspx* in **Design** view.
23. Drag the **Login** control from the **Login** group onto *Login.aspx*.



24. Change the *CreateUserText* property to "*Register*" and the *CreateUserUrl* property to "*~/Register.aspx*" as shown below.

25. Save and close *Login.aspx*.

26. Open *Default.aspx* in **Design** view.
27. Place a **Label** control on the form.
28. Create the *Page_Load* event.
29. Add the following code to the *Page_Load* event. This code will place the user login name in the text once the user is logged in to the web site.

```
Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load
   Label1.Text = "Welcome: " & User.Identity.Name
End Sub
```

30. Save and close *Default.aspx*.
31. Make *Default.aspx* the startup page for the web site by right-clicking it in the Solution Explorer and choosing **Set As Start Page**.

32. Open the *web.config* file.
33. Edit the *web.config* as shown below. These changes should be placed at the end of the file before the closing *</configuration>* element.

    The authentication node setting is changed to *Forms* from *Windows*. This change is necessary because we do not want to use authentication based upon the Windows accounts on the web server. We want the authentication to come from the XML file created in the lab.

    Along with the Forms authentication, we will add the *loginUrl* attribute to the *forms* element to point to the *login.aspx* page. This pointer is important and will be used when users request a page before they are authenticated.

The <*authorization*> element will need to be added to deny all anonymous users from accessing the site. This element will make the web site require a successful login.

The <*location path=”register.aspx”*> section is added to make sure that anonymous users can get to the *register.aspx* page. This way, the user can navigate to the *register.aspx* to register to the web site. The <*allow users=”*”*> is used here to signify that any anonymous user can get to this page

Note: the text below is case sensitive.

```
    <authentication mode="Forms">
      <forms loginUrl="login.aspx"></forms>
    </authentication>
    <authorization>
      <deny users="?" />
    </authorization>
        </system.web>

  <location path="register.aspx">
    <system.web>
      <authorization>
        <allow users="*" />
      </authorization>
    </system.web>
  </location>
</configuration>
```

34. Save and close the *web.config* file.
35. Run the application.
36. Enter your user name and password and then click the **Login** button.