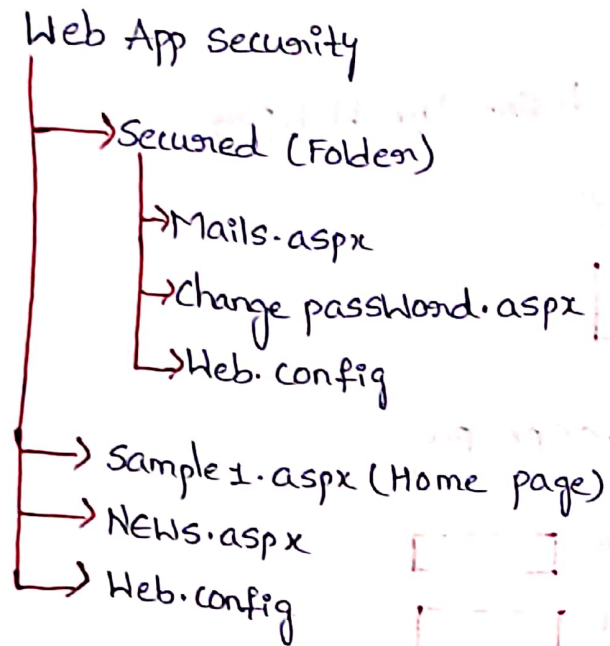


* Example To Implement security in Asp.net:-



- Create the Website.
- Create the folder with the name secured.
- Create all the web pages as given in the above structure.

Welcome to this Website

[NEWS](#) [Mails](#) [change password](#)

Write the following code for Sample1.aspx.cs

```
protected void btnNews_Click ( object sender, EventArgs e )  
{  
    Response.Redirect ("NEWS.aspx");  
}  
  
protected void btnMails_Click ( object sender, EventArgs e )  
{  
    Response.Redirect ("/Secured/Mails.aspx");  
}  
  
protected void btnChangePwd_Click ( object sender, EventArgs e )  
{
```

```
Response.Redirect("/secured/changePwd.aspx");  
}
```

Go to NEWS.aspx design the Web page

This is NEWS page

Today NEWS are

→ design the login.aspx page

Enter userName

Enter password

[lbl display]

☐ Keep me
Sign in

Login

→ Write the following code for login.aspx.cs

```
using System.Data;
```

```
using System.Data.SqlClient;
```

```
using System.Web.Security;
```

```
protected void btnSubmit_Click (
```

```
{
```

```
String sqlConnectionString = "Server = ; User Id = ;
```

```
sql connection con = new sql connection (sqlConnectionString);
```

```
String query = "select count (*) From users Where  
UserName = @P1 and password = @P2";
```

```
sql command cmd = new sql command (query, con);
```

```
cmd.Command Type = Command Type.Text;
```

```
cmd.Parameters.AddWithValue Value ("@P1", txtUserName.Text);
```

cmd.Parameters.AddWithValue("@P1", txtPassword.Text);

con.Open();

int i = Convert.ToInt32(cmd.ExecuteScalar());

con.Close();

if(i == 1)

{

if(chkRemember.Checked)

Forms.Authentication.RedirectFromLoginPage(txt-

UserName.Text, true)

else

{

Forms.Authentication.RedirectFromLoginPage

(txtUserName.Text, false)

}

}

else

lblDisplay.Text = "Invalid username/Password";

}

→ Go to Web.config file of Root folder Write the following code to Implement the Authentication.

<authentication mode="Forms">

</authentication>

→ design the page of mails.aspx

Logout

This is Mails/Inbox page

→ Go to changepassword.aspx and design the page.

Logout

This is change password page

You can change your password here

[`lbldisplay`]

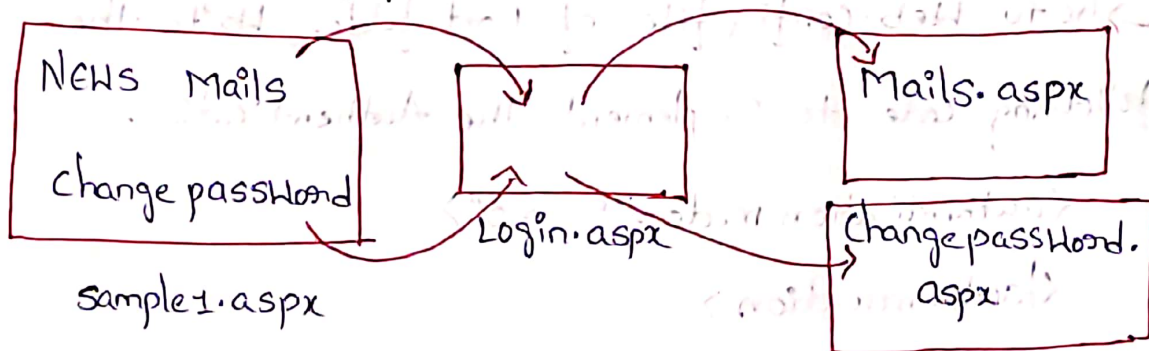
→ Go to Web.config file of secured folder Write the following code To Implement Authorization

```
<authorization>
```

```
<deny users="*" />
```

```
</authorization>
```

→ In the above example When user clicked on Mails button on change password button in sample1.aspx The request is coming to login page And from login Page, The request is redirected to the requested page accordingly like.



* What is Return URL?

A) In the above example, When user clicks on Mails button in sample1.aspx, Request is redirected to login page And a Query string variable is created with the Name ReturnURL Which will store

address of the Requested page.

→ `https://localhost:44365/login.aspx?ReturnUrl=/Secured/Mails.aspx`

→ When user clicks on change password button in `Sample1.aspx` Then Request is Redirected to Login Page With Return url Query string Variable Like

→ `https://localhost:44365/login.aspx?ReturnUrl=/Secured/ChangePassword.aspx`

→ Return url is a Query string Variable Which stores the user Requested url Address.

→ In the above example in `login.aspx` page We have return Forms Authentication. Redirect from Login page : Method, Instead of that We can also use following code.

```
if (i == 1)
{
    string URL = FormsAuthentication.GetRedirectURL(
        txtUserName.Text, chkRemember.checked);
    FormsAuthentication.SetAuthCookie(txtUserName.Text,
        chkRemember.checked);
    Response.Redirect(URL);
}
else
{
    lblDisplay.Text = "Invalid username/ password";
}
```

→ We can also use GetAuthCookie Method and

We can write the code like

```
if(i==1)
```

```
{
```

```
String URL = Forms Authentication . Get RedirectUrl  
(txtUserName.Text, chkRemember.Checked);
```

```
HttpCookie obj1 = Forms Authentication . Get Auth-  
Cookie (txtUserName.Text, chkRemember.Checked);
```

```
Response.Cookies.Add(obj1);
```

```
Response.Redirect(URL);
```

```
}
```

```
else
```

```
{
```

```
lbl display.Text = "Invalid username | password";
```

```
}
```

* Code for Logout button:-

```
using System.Web.Security;
```

```
namespace WebAppSecurity.Secured
```

```
{
```

```
protected void page btnLogout_Click ( " )
```

```
{
```

```
Forms Authentication . Signout ();
```

```
Forms Authentication . Redirect To Login page ();
```

```
}
```

→ When Implementing forms Authentication in Asp.net

The login page Name should be login.aspx only.

→ if we change login page Name it will give Error
By default.

→ To overcome this we will write the code in Web.Config file of root folder.

→ Change the login page Name to Asp login.aspx

Go to Web.Config file of root folder write the following code.

```
<authentication mode="Forms">
```

```
<Forms loginUrl="Asplogin.aspx">
```

```
</Forms>
```

```
</authentication>
```

* Working With Web user Controls in Asp.net :-

→ A Web user control is used for reusability of common designs that can be used in more than one web pages.

→ A Web user control will have a default extension of .ascx (active server control - x processors)

→ A Web user control doesn't have any html head body tags.

→ Any Web user control that we create is a class which is inherited from User Control class of System.Web.UI Namespace.

* Example With Webuser Control :-

WebApp-userControl

- Home.aspx
- NEWS.aspx
- aboutus.aspx
- contactus.aspx

→ UserControlNavigate.aspx

- Create the Website Create all the Webpages
- design the pages
- Creating user control
- Go to Solution explorer Select the Solution click With Right Mouse button, click on Add; click on New Item, Select Web forms user control template Type the user control Name as User control Navigate .ascx Then click on OK. design the User control.
- Creating link button
- Change the text property to Home
- Go to postback url property click on ellipses button
- Select Home .aspx click on OK. Similarly create other three link buttons.
- Including user control in Home.aspx page
- Go to Home.aspx, Go to Source Write the following Code.


```

<%@ Register Src = "~/User control Navigate .ascx"
    Tag prefix = "Ucontrol" TagName = "Navigate"%>
<div>
    <Ucontrol:Navigate ID = "UC1" runat = "Server"%>
    <br/>
</div>

```
- repeat the above two steps in all the other Webpages.