# ASP.Net Program code

# Client Side State Management

## 1. Hiddenfield

**//Hidden Field page1.aspx**

<body>  
<form id="form1" runat="server">  
<!-- Inside Page1.aspx (create a design part) -->  
<div>  
 <asp:Label ID="LabelCount" runat="server" Text="Display total count on click of ButtonClick" >  
 </asp:Label>  
 <br/>  
 <asp:HiddenField ID="HF1" runat="server" Value="0" />  
 <asp:Button ID="ButtonClick" runat="server" Text="Click" onclick="ButtonClick\_Click" />  
 <br/>  
 <asp:Button ID="ButtonNext" runat="server" Text="Next Page" PostBackUrl="~/Page2.aspx" />  
</div>  
</form>  
</body>

**//Hidden Field page1.aspx.cs**

//Inside Page1.aspx.cs (ButtonClick click event)  
 protected void ButtonClick\_Click(Object Sender, EventArgs e)  
 {  
 HF1.Value = (Convert.ToInt16(HF1.Value) + 1).ToString();  
 LabelCount.Text = HF1.Value;  
 }

**//Hidden Field page2.aspx.cs**

//Inside Page2.aspx.cs (On ButtonNext click, Page\_Load event)  
 protected void Page\_Load(Object sender, EventArgs e)  
 {  
 Response.Write("Total Count form Page1: " + Request.Form["HF1"]);  
 }

## 2. QueryString State Management

**//Query String page1.aspx**

<body>  
<form id="form1" runat="server">  
<!-- Inside Page1.aspx (Create a design part) -->  
<div>  
 <asp:Label ID="LabelUserName" runat="server" Text="UserName" > </asp:Label>  
 <asp:TextBox ID="TextBoxUserName" runat="server" > </asp:TextBox>  
  
 <br/><br/>  
 <asp:Label ID="LabelPassword" runat="server" Text="Address" > </asp:Label>  
 <asp:TextBox ID="TextBoxPassword" runat="server" TextMode="Password" > </asp:TextBox>  
  
 <br/> <br/>  
 <asp:Button ID="ButtonSubmit" runat="server" Text="Submit" onclick="ButtonSubmit\_Click" />  
</div>  
</form>  
</body>

**// Query String page1.aspx.cs**

//Inside Page1.aspx.cs (On ButtonSubmit click event)  
 protected void ButtonSubmit\_Click(Object sender, EventArgs e)  
 {  
 if (TextBoxUserName.Text == "Admin" && TextBoxPassword.Text == "Admin")  
 {  
 Response.Redirect("Page2.aspx?Name=" + TextBoxUserName.Text);  
 }  
 else  
 {  
 Response.Write("Invalid Credentails");  
 }  
 }

**// Query String page2.aspx.cs**

//Inside Page2.aspx.cs (On Page\_Load Event)  
 protected void Page\_Load(Object sender, EventArgs e)  
 {  
 Response.Write("WELCOME " + Request.QueryString["Name"]);  
 }

## 3. View State Client side state management

**//View State page1.aspx**

<body>  
<form id="form1" runat="server">  
<!-- Inside Page1.aspx (Design part) -->  
<div>  
 <asp:Button ID="ButtonCount" runat="server" Text="Click" onclick="ButtonCount\_Click" />  
</div>  
</form>  
</body>

**//View State page1.aspx.cs**

//Inside Page1.aspx.cs (On ButtonCount click event)  
 protected void ButtonCount\_Click(Object sender, EventArgs e)  
 {  
 int countt;  
  
 if (ViewState["countt"] == null)  
 {  
 countt = Convert.ToInt16(ViewState["countt"]) + 1;  
 }  
 else  
 {  
 countt = Convert.ToInt16(ViewState["countt"]) + 1;  
 }  
  
 ViewState["countt"] = countt;  
 Response.Write("Total count: " + countt);  
 }

## 4. Cookies Non-Persistent

**//Cookies Non-Persistent Page1.aspx**

<body>  
<form id="form1" runat="server">  
<!-- Inside Page1.apx -->  
<div>  
 <asp:Label ID="LabelUserName" runat="server" Text="UserName" > </asp:Label>  
 <asp:TextBox ID="TextBoxUserName" runat="server" > </asp:TextBox>

<br/><br/>  
  
 <asp:Label ID="LabelAddress" runat="server" Text="Address" > </asp:Label>  
 <asp:TextBox ID="TextBoxAddress" runat="server" > </asp:TextBox>  
  
 <br/><br/>  
 <asp:Button ID="ButtonSubmit" runat="server" Text="Submit" onclick="ButtonSubmit\_Click" />  
</div>  
</form>  
</body>

**//Cookies Non-Persistent page1.aspx.cs**

//Inside Page1.aspx.cs  
 //On ButtonSubmit Click event  
 protected void ButtonSubmit\_Click(Object sender, EventArgs e)  
 {  
 HttpCookie cookie = new HttpCookie("c");  
 cookie["Name"] = TextBoxUserName.Text;  
 cookie["Address"] = TextBoxAddress.Text;  
  
 Response.Cookies.Add(cookie);  
 Response.Redirect("Page2.aspx");  
 }

**//Cookies Non-Persistent page2.aspx.cs**

//Inside Page2.aspx.cs  
 //On PageLoad event  
 protected void Page\_Load(Object Sender, EventArgs e)  
 {  
 HttpCookie cookie = Request.Cookies["c"];  
  
 if (cookie != null)  
 {  
 Response.Write("Person Details: <br/>");  
 Response.Write("NAME: " + cookie["Name"]);  
 Response.Write("<br/>");  
 Response.Write("Address: " + cookie["Address"]);  
 }  
 }

## 5. Cookies Persistent

**//Cookies Persistent page1.aspx**

<body>  
<form id="form1" runat="server">  
<!-- Inside Page1.aspx -->  
<div>  
 <asp:Label ID="LabelUserName" runat="server" Text="Name" > </asp:Label>  
 <asp:TextBox ID="TextBoxUserName" runat="server" > </asp:TextBox>  
  
 <br/><br/>  
   
 <asp:Label ID="LabelAddress" runat="server" Text="Address"> </asp:Label>  
 <asp:TextBox ID="TextBoxAddress" runat="server" > </asp:TextBox>  
  
 <br/><br/>  
   
 <asp:Button ID="ButtonSubmit" runat="server" Text="Submit" onclick="ButtonSubmit\_Click" />  
</div>  
</form>  
</body>

**//Cookies Persistent page1.aspx.cs**

//Inside Page1.aspx.cs  
 //on Submit button click event  
 protected void ButtonSubmit\_Click(Object Sender, EventArgs e)  
 {  
 HttpCookie cookieobj = new HttpCookie("c");  
  
 cookieobj["Name"] = TextBoxUserName.Text;  
 cookieobj["Address"] = TextBoxAddress.Text;  
  
 cookieobj.Expires = DateTime.Now.AddDays(2);  
  
 Response.Cookies.Add(cookieobj);  
 Response.Redirect("Page2.aspx");  
 }

**//Cookies Persistent page2.aspx.cs**

//Inside Page2.aspx.cs  
 //on Page Load event  
 protected void Page\_Load(Object sender, EventArgs e)  
 {  
 HttpCookie cookieobj2 = Request.Cookies["c"];  
  
 Response.Write("Person Details <br/>");  
 Response.Write("Name: " + cookieobj2["Name"]);  
 Response.Write("<br/>");  
 Response.Write("Address: " + cookieobj2["Address"]);  
 }

# Server Side State Management

## 6. Application State

**//Global.asax**

//Inside Global.asax  
 //on Application start event  
 protected void Application\_Start(Object sender, EventArgs e)  
 {  
 //this code runs on applcation startup  
 Application["App1"] = 0;  
 }

**//Application State page1.aspx**

<body>  
<form id="form1" runat="server">  
<!-- Inside Page1.aspx -->  
<div>  
 <asp:Label ID="LabelCount" runat="server" Text="Display count on button click"> </asp:Label>  
 <br/><br/>  
 <asp:Button ID="ButtonClick" runat="server" Text="Click" onclick="ButtonClick\_Click" />  
</div>  
</form>  
</body>

**//Application Sate page1.aspx.cs**

//Inside Page1.aspx.cs  
 //on click button click event  
 protected void ButtonClick\_Click(Object Sender, EventArgs e)  
 {  
 Application["App1"] = Convert.ToInt16(Application["App1"]) + 1;  
 LabelCount.Text = Application["App1"].ToString();  
 }

## 7. Session State

**//Session State page1.aspx**

<body>  
<form id="form1" runat="server">  
<!-- Inside Page1.aspx -->  
<div>  
 <asp:Label ID="LabelUserName" runat="server" Text="UserName" > </asp:Label>  
 <asp:TextBox ID="TextBoxUserName" runat="server" > </asp:TextBox>  
  
 <br/><br/>  
  
 <asp:Label ID="LabelPassword" runat="server" Text="Password" > </asp:Label>  
 <asp:TextBox ID="TextBoxPassword" runat="server" TextMode="Password"> </asp:TextBox>  
  
 <br/><br/>  
 <asp:Button ID="ButtonLogin" runat="server" Text="Log in" onclick="ButtonLogin\_Click" />  
</div>  
</form>  
</body>

**//Session State page1.aspx.cs**

//Inside Page1.aspx.cs  
 //On ButtonLogin Click event  
 protected void ButtonLogin\_Click(Object Sender, EventArgs e)  
 {  
 if (TextBoxUserName.Text == "Admin" && TextBoxPassword.Text == "Admin")  
 {  
 Session["UserName"] = TextBoxUserName.Text;  
 Session.Timeout = 1;  
 Response.Redirect("Page2.aspx");  
 }  
 else  
 {  
 Response.Write("Invalid Credentials");  
 }  
 }

**//Session State page2.aspx**

<body>  
<form id="form1" runat="server">  
<!-- Inside Page2.aspx (Logout) -->  
<div>  
 <asp:Button ID="ButtonLogout" runat="server" Text="Log-out" onclick="ButtonLogout\_Click" />  
<div>   
</form>  
</body>

**//Session State page2.aspx.cs**

//Inside Page2.aspx.cs  
 //On page Load event  
 protected void Page\_Load(Object Sender, EventArgs e)  
 {  
 if (Session["UserName"] != null)  
 {  
 Response.Write("WELCOME " + Session["UserName"]);  
 }  
 else  
 {  
 Response.Redirect("Page1.aspx");  
 }  
 }  
  
 //On Button Logout click event  
 protected void ButtonLogout\_Click(Object Sender, EventArgs e)  
 {  
 Session.Remove("UserName");  
 Response.Redirect("Page1.aspx");  
 }