**Part 85 - Real time example of stack collection class in c#**

**Two common scenarios, where a stack can be used.**  
**1.** Implementing UNDO functionality   
**2.** Implementing browser back button  
  
In this video, let's implement **BACK**button using stack.

**Step 1:** Create an asp.net web application. Use "WebFormsDemo" as the project name.  
  
**Step 2:**Right click on the project name in solution explorer, and a class file with name = **"BasePage.cs"**. Copy and paste the following code.  
using System;  
using System.Collections.Generic;  
using System.Linq;  
using System.Web;  
  
namespace WebFormsDemo  
{  
    public class BasePage : System.Web.UI.Page  
    {  
        protected override void OnLoad(EventArgs e)  
        {  
            if (Session["URLStack"] == null)  
            {  
                Stack<string> urlStack = new Stack<string>();  
                Session["URLStack"] = urlStack;  
            }  
  
            if (Request.UrlReferrer != null && !this.Page.IsPostBack   
                && Session["BackButtonClicked"] == null)  
            {  
                Stack<string> urlStack = (Stack<string>)Session["URLStack"];  
                urlStack.Push(Request.UrlReferrer.AbsoluteUri);  
            }  
  
            if (Session["BackButtonClicked"] != null)  
            {  
                Session["BackButtonClicked"] = null;  
            }  
        }  
    }  
}  
  
**Step 3:** Right click on the project name in solution explorer, and a master page with name = **Site.Master**. Copy and paste the following code.  
<table style="width: 500px; border: 1px solid black">  
    <tr>  
        <td colspan="2">  
            <asp:Label ID="lblMessage" runat="server" ForeColor="Red">  
            </asp:Label>  
        </td>  
    </tr>  
    <tr>  
        <td style="width: 100px">  
            <table style="border: 1px solid black; font-family: Arial">  
                <tr>  
                    <td>  
                        <b>Links</b>  
                    </td>  
                </tr>  
                <tr>  
                    <td>  
                        <a href="http://localhost/WebFormsDemo/WebForm1.aspx">WebForm1 </a>  
                    </td>  
                </tr>  
                <tr>  
                    <td>  
                        <a href="http://localhost/WebFormsDemo/WebForm2.aspx">WebForm2 </a>  
                    </td>  
                </tr>  
                <tr>  
                    <td>  
                        <a href="http://localhost/WebFormsDemo/WebForm3.aspx">WebForm3 </a>  
                    </td>  
                </tr>  
                <tr>  
                    <td>  
                        <a href="http://localhost/WebFormsDemo/WebForm4.aspx">WebForm4 </a>  
                    </td>  
                </tr>  
            </table>  
        </td>  
        <td style="width: 400px">  
            <asp:Button ID="btnBack" runat="server" Text="Back" OnClick="btnBack\_Click" />  
            <asp:ContentPlaceHolder ID="ContentPlaceHolder1" runat="server">  
            </asp:ContentPlaceHolder>  
        </td>  
    </tr>  
</table>  
  
**Step 4:** Copy and paste the following code in **Site.Master.cs**  
public partial class Site : System.Web.UI.MasterPage  
{  
    protected void Page\_Load(object sender, EventArgs e)  
    {  
    }  
  
    protected void btnBack\_Click(object sender, EventArgs e)  
    {  
        Session["BackButtonClicked"] = "YES";  
        if (Session["URLStack"] != null)  
        {  
            Stack<string> urlStack = (Stack<string>)Session["URLStack"];  
            if (urlStack.Count > 0)  
            {  
                string url = urlStack.Pop();  
                Response.Redirect(url);  
            }  
            else  
            {  
                lblMessage.Text = "There are no pages in the history";  
            }  
        }  
    }  
}  
  
**Step 5:** Right click on**"site.master"** page in solution explorer and select **"Add Content Page"**. This step should add WebForm1.aspx.   
  
In the code-behind file change the following line  
public partial class WebForm1 : System.Web.UI.Page  
  
**TO**  
public partial class WebForm1 : BasePage  
  
Repeat Step 5, until you add 4 WebForms.  
  
That's it, navigate to http://localhost/WebFormsDemo/WebForm1.aspx and click on the links to navigate to WebForm2.aspx, WebForm3.aspx & WebForm4.aspx



Now click on the back button, on the page(Not the browser back  button), and notice that we are able to navigate back.