

## PRACTICAL NO.05

**Write the program for the following:**

a. Create Web Form to demonstrate use of Website Navigation controls.

Code:

**Master Page Code:**

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

<!DOCTYPE html>

<html>
<head runat="server">
    <title>Navigation Demo</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 0;
            padding: 0;
            background-color: #f4f4f4;
        }
        #header {
            background-color: #333;
            color: white;
            padding: 15px 0;
            text-align: center;
        }
        #header h1 {
            margin: 0;
        }
        #content {
            margin: 20px;
        }
        #footer {
            background-color: #333;
            color: white;
            text-align: center;
            padding: 10px 0;
            position: fixed;
            width: 100%;
        }
        .treeview {
            margin-top: 20px;
        }
        #box {
            background-color: aquamarine;
            color: black;
            text-align: center;
            padding: 10px;
        }
    </style>
    <asp:ContentPlaceHolder ID="head" runat="server">
        </asp:ContentPlaceHolder>
    </head>
    <body>
        <form id="form1" runat="server">
            <!-- Header Section -->
            <div id="header">
                <h1>My Website</h1>
            </div>
            <div id="content">
                <div>
                    <strong>SiteMapPath:</strong><br />
                </div>
            </div>
        </form>
    </body>
</html>
```

```

<asp:SiteMapPath ID="SiteMapPath1" runat="server" />
<br />
<br />
<strong>Menu:<br /></strong>
<asp:Menu ID="Menu1" runat="server" DataSourceID="SiteMapDataSource1" >
</asp:Menu>
<br />
<br />
<strong>TreeView:</strong><asp:TreeView ID="TreeView1" runat="server" 
DataSourceID="SiteMapDataSource1" ShowLines="True" CssClass="treeview">
</asp:TreeView>
</div>
<asp:ContentPlaceHolder ID="ContentPlaceHolder1" runat="server">
</asp:ContentPlaceHolder>
</div>

<!-- Footer Section -->
<div id="footer">
    <p>&copy; 2024 My Website. All rights reserved.</p>
</div>

<asp:SiteMapDataSource ID="SiteMapDataSource1" runat="server" />
</form>
</body>
</html>

```

**Sitemap Code:**

```

<?xml version="1.0" encoding="utf-8" ?>
<siteMap xmlns="http://schemas.microsoft.com/AspNet/SiteMap-File-1.0">
    <siteMapNode url="WebForm1.aspx" title="First Page" description="This is the first
page">
        <siteMapNode url="WebForm2.aspx" title="Second Page" description="This is
the second page" />
        <siteMapNode url="WebForm3.aspx" title="Third Page" description="This is
the third page" />
    </siteMapNode>
</siteMap>

```

**WebForm1.aspx , WebForm2.aspx , WebForm3.aspx Code:**

```

<%@ Page Title="First Page" Language="C#" MasterPageFile="~/MasterPage.Master"
AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="Navigation.WebForm1" %>
<asp:Content ID="Content1" ContentPlaceholderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceholderID="ContentPlaceHolder1" runat="server">
<div id="box">
    <h1>This is the first page</h1>
    <p>Welcome to the first page of this demo!</p>
    </div>
</asp:Content>

```

```

<%@ Page Title="" Language="C#" MasterPageFile="~/MasterPage.Master"
AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
Inherits="Navigation.WebForm2" %>
<asp:Content ID="Content1" ContentPlaceholderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceholderID="ContentPlaceHolder1" runat="server">
<div id="box">
    <h1>This is the second page</h1>
    <p>Welcome to the second page of this demo!</p>
    </div>

```

```
</asp:Content>
```

```
<%@ Page Title="" Language="C#" MasterPageFile="~/MasterPage.Master"
AutoEventWireup="true" CodeBehind="WebForm3.aspx.cs"
Inherits="Navigation.WebForm3" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
<div id="box">
<h1>This is the third page</h1>
<p>Welcome to the third page of this demo!</p>
</div>
</asp:Content>
```

Output:

The figure consists of three separate screenshots of a web application interface, each representing a different page of a website named "My Website".

- Screenshot 1 (First Page):** Shows the header with "SiteMapPath: First Page", "Menu: First Page", and "TreeView" showing a tree structure with "First Page" expanded, "Second Page" and "Third Page" under it. The main content area displays "This is the first page" and "Welcome to the first page of this demo!". The footer shows "© 2024 My Website. All rights reserved."
- Screenshot 2 (Second Page):** Shows the header with "SiteMapPath: First Page > Second Page", "Menu: First Page", and "TreeView" showing a tree structure with "First Page" expanded, "Second Page" and "Third Page" under it. The main content area displays "This is the second page" and "Welcome to the second page of this demo!". The footer shows "© 2024 My Website. All rights reserved."
- Screenshot 3 (Third Page):** Shows the header with "SiteMapPath: First Page > Third Page", "Menu: First Page ▶ Second Page ▶ Third Page", and "TreeView" showing a tree structure with "First Page" expanded, "Second Page" and "Third Page" under it. The main content area displays "This is the third page" and "Welcome to the third page of this demo!". The footer shows "© 2024 My Website. All rights reserved."

b. Create a web application to demonstrate use of Master Page and content page.

Code:

**Master Page Code:**

```
<%@ Master Language="C#" AutoEventWireup="true" CodeBehind="Site1.master.cs"
Inherits="pract5B.Site1" %>
```

```
<!DOCTYPE html>
```

```
<html>
<head runat="server">
<title></title>
<asp:ContentPlaceHolder ID="head" runat="server">
</asp:ContentPlaceHolder>
</head>
<body>
<form id="form1" runat="server">
<div>
<header>
<h1>Welcome to My Website</h1>
<nav>
<a href="Default.aspx">Home</a> | 
<a href="About.aspx">About</a> | 
<a href="Contact.aspx">Contact</a>
```

```

</nav>
<hr />
</header>
<main>
    <asp:ContentPlaceHolder ID="MainContent" runat="server">
        </asp:ContentPlaceHolder>
    </main>
    <footer>
        <hr />
        <p>SRM College Kudal</p>
        <p>&copy; 2024 My Website</p>
    </footer>
</div>
</form>
</body>
</html>

```

**Default.aspx:**

```

<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master"
AutoEventWireup="true" CodeBehind="Default.aspx.cs" Inherits="pract5B.Default" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="MainContent" runat="server">
    <h2>Home Page</h2>
    <p>Welcome to the home page of this simple website.</p>
</asp:Content>

```

**About.aspx:**

```

<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master"
AutoEventWireup="true" CodeBehind="About.aspx.cs" Inherits="pract5B.About" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="MainContent" runat="server">
    <h2>About Us</h2>
    <p>This is the about page of this simple website.</p>
</asp:Content>

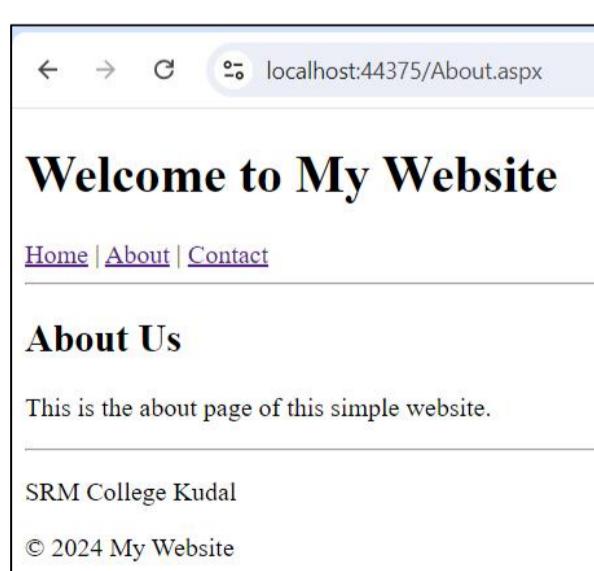
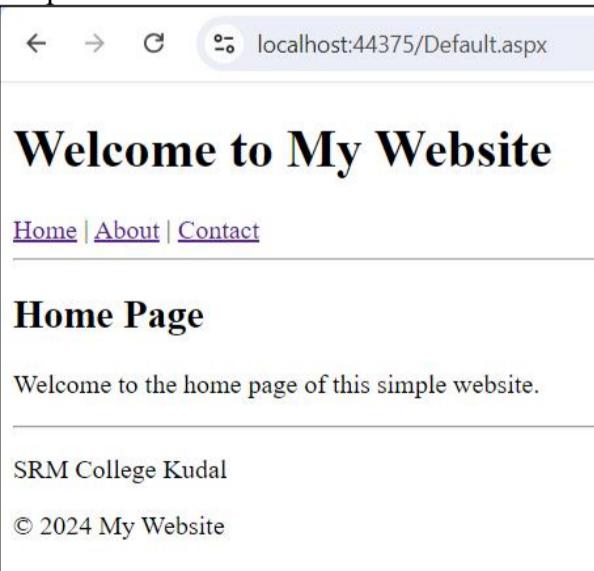
```

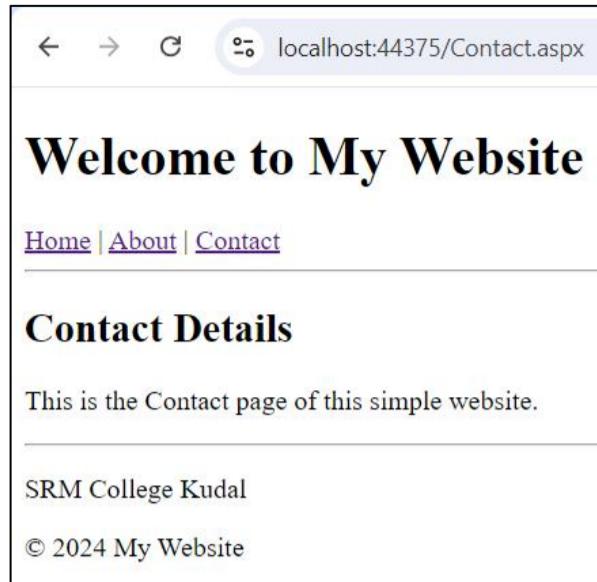
**Contact.aspx:**

```

<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master"
AutoEventWireup="true" CodeBehind="Contact.aspx.cs" Inherits="pract5B.Contact" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="MainContent" runat="server">
    <h2>Contact Details</h2>
    <p>This is the Contact page of this simple website.</p>
</asp:Content>

```

**Output:**



c. Create a web application to demonstrate various states of ASP.NET Pages.

Code:

**Aspx Code:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="ShoppingCartDemo.WebForm1" %>

<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Shopping Cart Demo</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h2>Shopping Cart Demo</h2>

            <h3>ViewState</h3>
            <p>Items added in this session: <asp:Label ID="lblViewState" runat="server" Text="0" /></p>
            <asp:Button ID="btnAddToCartViewState" runat="server" Text="Add to Cart (ViewState)" OnClick="btnAddToCartViewState_Click" />

            <h3>SessionState</h3>
            <p>Items in your cart: <asp:Label ID="lblSessionState" runat="server" Text="0" /></p>
            <asp:Button ID="btnAddToCartSessionState" runat="server" Text="Add to Cart (SessionState)" OnClick="btnAddToCartSessionState_Click" />

            <h3>ApplicationState</h3>
            <p>Total items added by all users: <asp:Label ID="lblApplicationState" runat="server" Text="0" /></p>
            <asp:Button ID="btnAddToCartApplicationState" runat="server" Text="Add to Cart (ApplicationState)" OnClick="btnAddToCartApplicationState_Click" />

            <br />
            <asp:Label ID="lblResult" runat="server" Text="" />
        </div>
    </form>
</body>
</html>
```

**C# Code:**

```
using System;
using System.Web.UI;
namespace ShoppingCartDemo
{
    public partial class WebForm1 : Page
```

```

{
    protected void Page_Load(object sender, EventArgs e)
    {
        if (!IsPostBack)
        {
            // Initialize ViewState
            ViewState["ItemsInSession"] = 0;

            // Initialize SessionState
            if (Session["ItemsInCart"] == null)
            {
                Session["ItemsInCart"] = 0;
            }

            // Initialize ApplicationState
            if (Application["TotalItems"] == null)
            {
                Application["TotalItems"] = 0;
            }

            lblViewState.Text = ViewState["ItemsInSession"].ToString();
            lblSessionState.Text = Session["ItemsInCart"].ToString();
            lblApplicationState.Text = Application["TotalItems"].ToString();
        }
    }

    protected void btnAddToCartViewState_Click(object sender, EventArgs e)
    {
        // Increment items in ViewState
        int itemsInSession = (int)ViewState["ItemsInSession"] + 1;
        ViewState["ItemsInSession"] = itemsInSession;
        lblViewState.Text = itemsInSession.ToString();
        lblResult.Text = "Item added to cart (ViewState).";
    }

    protected void btnAddToCartSessionState_Click(object sender, EventArgs e)
    {
        // Increment items in SessionState
        int itemsInCart = (int)Session["ItemsInCart"] + 1;
        Session["ItemsInCart"] = itemsInCart;
        lblSessionState.Text = itemsInCart.ToString();
        lblResult.Text = "Item added to cart (SessionState).";
    }

    protected void btnAddToCartApplicationState_Click(object sender, EventArgs e)
    {
        // Increment items in ApplicationState
        int totalItems = (int)Application["TotalItems"] + 1;
        Application["TotalItems"] = totalItems;
        lblApplicationState.Text = totalItems.ToString();
        lblResult.Text = "Item added to cart (ApplicationState).";
    }
}

```

Output:

Shopping Cart Demo

**ViewState**

Items added in this session: 4

[Add to Cart \(ViewState\)](#)

**SessionState**

Items in your cart: 3

[Add to Cart \(SessionState\)](#)

**ApplicationState**

Total items added by all users: 5

[Add to Cart \(ApplicationState\)](#)

Item added to cart (ViewState).

Shopping Cart Demo

**ViewState**

Items added in this session: 0

[Add to Cart \(ViewState\)](#)

**SessionState**

Items in your cart: 3

[Add to Cart \(SessionState\)](#)

**ApplicationState**

Total items added by all users: 5

[Add to Cart \(ApplicationState\)](#)

Shopping Cart Demo

**ViewState**

Items added in this session: 0

[Add to Cart \(ViewState\)](#)

**SessionState**

Items in your cart: 0

[Add to Cart \(SessionState\)](#)

**ApplicationState**

Total items added by all users: 5

[Add to Cart \(ApplicationState\)](#)