

## PRACTICAL NO. 2: Creating a User Interface

Aim: To develop simple ASP.NET web pages demonstrating advanced web server controls and Master Page.

### 1. Advanced Web server controls in ASP.NET:

#### a. Validation Controls:

Validation Control	Description	Example Usage
RequiredFieldValidator	Ensures a field is not left empty.	Ensures the user enters a name before submitting a form.
CompareValidator	Compares values of two controls or against a fixed value.	Confirms that password and confirm password fields match.
RangeValidator	Ensures input falls within a specified range.	Validates age is between 18 and 60.
RegularExpressionValidator	Validates input using a regex pattern.	Ensures an email is in the correct format.
CustomValidator	Allows custom validation logic via server-side or client-side code.	Validates a username is unique in the database.
ValidationSummary	Displays a summary of all validation errors.	Shows all form errors at the top of the page.

#### b. Calendar:

The Calendar Control in ASP.NET is a server-side control used for selecting dates. It provides built-in navigation, date selection, and customization options.

Example of Calendar Control in ASP.NET Web Forms:

```
<asp:Calendar ID="Calendar1" runat="server" OnSelectionChanged="Calendar1_SelectionChanged">
</asp:Calendar>

<asp:Label ID="lblDate" runat="server" Text="Selected Date will appear
here"></asp:Label> Code-Behind (C#) protected void Calendar1_SelectionChanged(object
sender, EventArgs e)
{
    lblDate.Text = "Selected Date: " + Calendar1.SelectedDate.ToShortDateString();
}
```

Key Features:

- Date Selection: Users can select a date by clicking on it.
- Navigation: Move between months and years.
- Styling: Can be customized using CSS.
- Events: SelectionChanged, VisibleMonthChanged, DayRender, etc.

#### c. AdRotator:

The AdRotator Control in ASP.NET is used to display advertisements dynamically by rotating through a list of images and corresponding links. You can define the ads in an XML file, which the control reads to show different ads each time the page is loaded.

Example of AdRotator Control in the ASPX Page:

```
<asp:AdRotator ID="AdRotator1" runat="server" AdvertisementFile="ads.xml"></asp:AdRotator>
```

XML File (ads.xml):

```
<ads>
  <ad imageUrl="ad1.jpg" navigateurl="http://www.example1.com" alternateText="Ad 1" />
  <ad imageUrl="ad2.jpg" navigateurl="http://www.example2.com" alternateText="Ad 2" />
  <ad imageUrl="ad3.jpg" navigateurl="http://www.example3.com" alternateText="Ad 3" />
</ads>
```

Key Features:

- Dynamic Ad Rotation: Displays different ads on each page load.
- XML Configuration: Ads and their properties (e.g., ImageUrl, NavigateUrl, AlternateText) are defined in an XML file.
- Customizable: You can control the ad duration, transition effects, and more.

d. Navigation:

Navigation in ASP.NET refers to the methods and controls used to move between different pages within an application. It can be done using various controls and techniques like hyperlinks, buttons, or programmatic navigation.

Key Navigation Methods in ASP.NET:

1. HyperLink Control: Used to create a hyperlink to another page or URL.

```
<asp:HyperLink ID="HyperLink1" runat="server" NavigateUrl="NextPage.aspx">Go to Next Page</asp:HyperLink>
```

2. LinkButton Control: A button that acts like a hyperlink. It is commonly used for server-side processing before navigating.

```
<asp:LinkButton ID="LinkButton1" runat="server" OnClick="LinkButton1_Click">Go to Next Page</asp:LinkButton> Code-Behind: protected void LinkButton1_Click(object sender, EventArgs e)
{ Response.Redirect("NextPage.aspx"); }
```

3. Response.Redirect: Redirects the user to another page programmatically.

```
Response.Redirect("NextPage.aspx");
```

4. Server.Transfer: Transfers the request to another page on the server without making a round trip to the client.

```
Server.Transfer("NextPage.aspx");
```

5. Master Pages Navigation: Use a Master Page to create a consistent navigation structure across multiple pages.

```
<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
  <h2>Content on the Page</h2>
</asp:Content>
```

6. SiteMapPath Control: Displays the navigation path (breadcrumb) of the current page.

```
<asp:SiteMapPath ID="SiteMapPath1" runat="server" />
```

7. Menu and TreeView Controls: Used to display hierarchical navigation menus.

```
<asp:Menu ID="Menu1" runat="server" IncludeStyleBlock="false">
  <Items>
    <asp:MenuItem Text="Home" NavigateUrl="~/Home.aspx" />
    <asp:MenuItem Text="About" NavigateUrl="~/About.aspx" />
  </Items>
```

```
</asp:Menu>
```

#### e. File Upload:

The File Upload control in ASP.NET allows users to upload files to the server from a web page. It is commonly used for uploading images, documents, or other file types.

Example of ASPX Page (FileUpload Control):

```
<asp:FileUpload ID="FileUpload1" runat="server" />
<br /> <asp:Button ID="btnUpload" runat="server" Text="Upload File"
OnClick="btnUpload_Click" /> <br /> <asp:Label ID="lblMessage" runat="server"
Text=""></asp:Label>
```

Code-Behind (C#):

```
protected void btnUpload_Click(object sender, EventArgs e)
{
    if (FileUpload1.HasFile)
    {
        try
        {
            string fileName = Path.GetFileName(FileUpload1.PostedFile.FileName);
            FileUpload1.SaveAs(Server.MapPath("~/Uploads/") + fileName);
            lblMessage.Text = "File uploaded successfully!";
        }
        catch (Exception ex)
        {
            lblMessage.Text = "File upload failed: " + ex.Message;
        }
    }
    else
    {
        lblMessage.Text = "Please select a file to upload.";
    }
}
```

Key Points:

- SaveAs Method: Saves the uploaded file to a specified location on the server.
- HasFile Property: Checks if a file has been selected.
- Error Handling: Displays messages if the file is not uploaded successfully.

Make sure that your server's directory (e.g., "Uploads") has write permissions, and ensure that the file type and size are validated for security purposes.

## 2. Master Pages in ASP.net:

Steps to use Master Pages in ASP.NET:

### 1. Create a Master Page

1. In Visual Studio, right-click the project and select Add → New Item.
2. Choose Master Page and give it a name (e.g., Site.master).
3. Click Add to create the Master Page.

### 2. Design the Master Page Layout

In the Master Page (Site.master), define common elements like the header, footer, and navigation menu.

```
<%@ Master Language="C#" AutoEventWireup="true" CodeBehind="Site.master.cs"
Inherits="WebApp.SiteMaster" %>
<!DOCTYPE html> <html> <head runat="server"> <title>Master Page</title> </head> <body>
<div class="header">
    <h1>My Website</h1>
    <asp:Menu ID="Menu1" runat="server">
```

```

<Items>
  <asp:MenuItem Text="Home" NavigateUrl="~/Home.aspx" />
  <asp:MenuItem Text="About" NavigateUrl="~/About.aspx" />
</Items>
</asp:Menu> </div>
<div class="content">
  <asp:ContentPlaceHolder ID="MainContent" runat="server" /> </div>
<div class="footer">
  <p>&copy; 2025 My Website</p>
</div> </body> </html>

```

Use <asp:ContentPlaceHolder> where dynamic content will be injected.

### 3. Create a Content Page

1. Right-click on your project → Add → New Item → Web Form.
2. Name the page (e.g., Home.aspx).
3. In the Content page, specify the Master Page using the MasterPageFile attribute.
 

```

<%@ Page Language="C#" MasterPageFile="~/Site.master" AutoEventWireup="true"
CodeBehind="Home.aspx.cs" Inherits="WebApp.Home" %>
<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
  <h2>Welcome to the Home Page</h2>
  <p>This page uses the master layout.</p>
</asp:Content>

```

The Content tag links the content of the page to the corresponding <asp:ContentPlaceHolder> from the Master Page.

### 4. Run the Application

When the application runs, the content from Home.aspx will be displayed inside the layout defined in Site.master.

### 5. Customize the Master Page

You can add additional controls to the Master Page, such as headers, footers, or sidebars, and they will be present across all pages that use the Master Page.

### 6. Add More Content Pages

- Repeat the process for other pages (e.g., About.aspx), which will automatically adopt the layout and style defined in the Master Page.

These steps help create a consistent, manageable layout across your ASP.NET Web Forms application using Master Pages.

## Exercise:

### 1. Design asp.net web application to demonstrate Calendar control which shows months holidays with image and caption on specific day.

#### Code:

#### CalendarControl.aspx

```
<%@ Page Language="C#" AutoEventWireup="true"
CodeBehind="CalendarControl.aspx.cs"
Inherits="Practical2AWTKunal.CalendarControl" %>

<!DOCTYPE html>
<html>
<head>
  <title>Holiday Calendar</title>
  <style>
    .holiday {
      background-color: #ffcccb;
      text-align: center;
    }
    .holiday img {
      width: 30px;
      height: 30px;
      display: block;
      margin: auto;
    }
  </style>
</head>
<body>
  <form id="form1" runat="server">
    <asp:Calendar ID="Calendar1" runat="server"
OnDayRender="Calendar1_DayRender"></asp:Calendar>
  </form>
</body>
</html>
```

**CalendarControl.aspx.cs**

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace Practical2AWT
{
    public partial class CalendarControl : System.Web.UI.Page
    {
        private Dictionary<DateTime, (string ImageUrl, string Caption)> holidays = new
        Dictionary<DateTime, (string, string)>
        {
            { new DateTime(2025, 3, 30), ("~/images/gudhipadwa.png", "Gudi Padwa") },
            { new DateTime(2025, 4, 6), ("~/images/ramnavmi.png", "Rama Navami") }
        };

        protected void Page_Load(object sender, EventArgs e) { }

        protected void Calendar1_DayRender(object sender, DayRenderEventArgs e)
        {
            if (holidays.TryGetValue(e.Day.Date, out var holiday))
            {
                e.Cell.Controls.Clear();

                Image img = new Image
                {
                    ImageUrl = holiday.ImageUrl,
                    AlternateText = holiday.Caption,
                    Width = Unit.Pixel(50),
                    Height = Unit.Pixel(50)
                };
                e.Cell.Controls.Add(img);

                e.Cell.Controls.Add(new Literal { Text = "<br />" });
            }
        }
    }
}
```

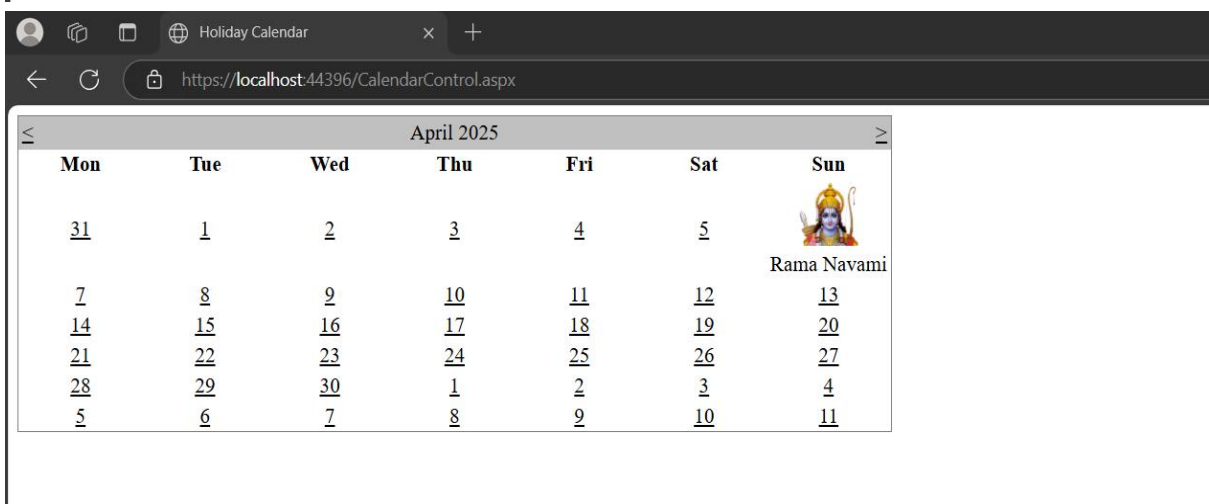
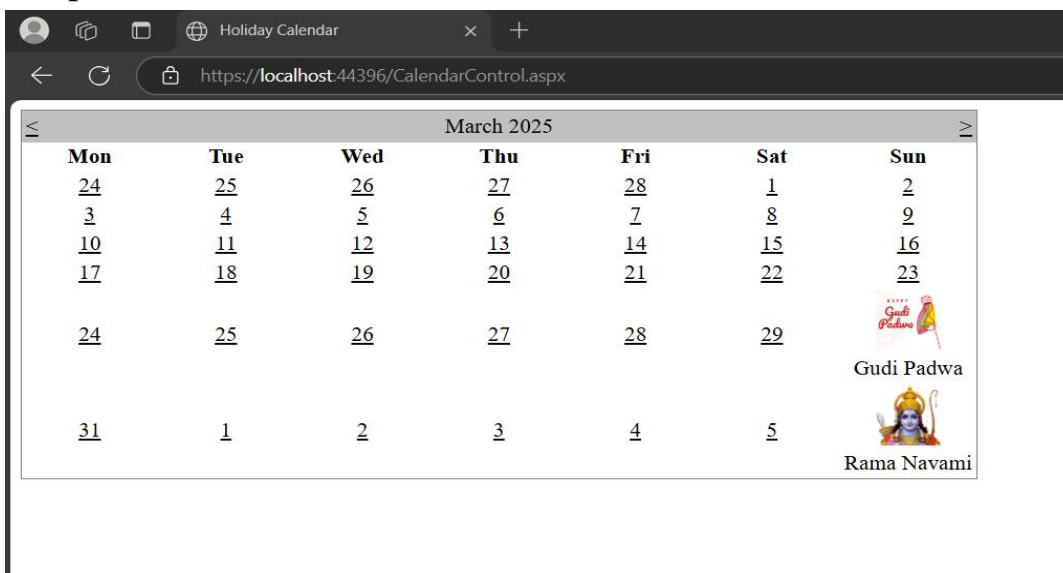
```

        Label lbl = new Label
        {
            Text = holiday.Caption,
            CssClass = "holiday-caption"
        };
        e.Cell.Controls.Add(lbl);

        e.Cell.CssClass = "holiday-cell";
    }
}
}
}
}

```

### Output:



**2. Design asp.net web application to generate hotel bill. Accept Customer Id, Customer name, address, menu items, quantity, and price per item. Apply**

**5% GST on total. Display bill on another web form. Use appropriate validation controls.**

**Code:**

### **Order.aspx**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Order.aspx.cs"
Inherits="Practical2AWTKunal.Order" %>
```

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
    <title>Hotel Order</title>
```

```
    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
```

```
</head>
```

```
<body>
```

```
    <form id="form1" runat="server">
```

```
        <h2>Hotel Order Form</h2>
```

```
        Customer ID: <asp:TextBox ID="txtCustomerId" runat="server" />
```

```
        <asp:RequiredFieldValidator ControlToValidate="txtCustomerId"
```

```
ErrorMessage="Required" runat="server" ForeColor="Red" /><br/>
```

```
        Customer Name: <asp:TextBox ID="txtCustomerName" runat="server" />
```

```
        <asp:RequiredFieldValidator ControlToValidate="txtCustomerName"
```

```
ErrorMessage="Required" runat="server" ForeColor="Red" /><br/>
```

```
        Address: <asp:TextBox ID="txtAddress" runat="server" TextMode="MultiLine" /><br/>
```

```
        Menu Item: <asp:TextBox ID="txtMenuItem" runat="server" /><br/>
```

```
        Quantity: <asp:TextBox ID="txtQuantity" runat="server" />
```

```
        <asp:RequiredFieldValidator ControlToValidate="txtQuantity"
```

```
ErrorMessage="Required" runat="server" ForeColor="Red" />
```

```
        <asp:RegularExpressionValidator ControlToValidate="txtQuantity"
```

```
ValidationExpression="\d+" ErrorMessage="Enter a valid number" runat="server"
```

```
ForeColor="Red" /><br/>
```

```
        Price per Item: <asp:TextBox ID="txtPrice" runat="server" />
```

```
        <asp:RequiredFieldValidator ControlToValidate="txtPrice" ErrorMessage="Required"
runat="server" ForeColor="Red" />
```



```

    <asp:RegularExpressionValidator ControlToValidate="txtPrice"
ValidationExpression="\d+(\.\d{1,2})?" ErrorMessage="Enter a valid price" runat="server"
ForeColor="Red" /><br/>

```

```

    <asp:Button ID="btnGenerateBill" runat="server" Text="Generate Bill"
OnClick="btnGenerateBill_Click" />
</form>
</body>
</html>

```

### Order.aspx.cs

```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
namespace Practical2AWT
{
    public partial class Order : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            UnobtrusiveValidationMode = System.Web.UI.UnobtrusiveValidationMode.None;
        }

        protected void btnGenerateBill_Click(object sender, EventArgs e)
        {
            Session["CustomerId"] = txtCustomerId.Text;
            Session["CustomerName"] = txtCustomerName.Text;
            Session["Address"] = txtAddress.Text;
            Session["MenuItem"] = txtMenuItem.Text;
            Session["Quantity"] = int.Parse(txtQuantity.Text);
            Session["Price"] = decimal.Parse(txtPrice.Text);
            Response.Redirect("Bill.aspx");
        }
    }
}

```

**Bill.aspx**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Bill.aspx.cs"
Inherits="Practical2AWT.Bill" %>
<!DOCTYPE html>
<html>
<head>
  <title>Bill</title>
</head>
<body>
  <form id="form1" runat="server">
    <h2>Bill Receipt</h2>
    <asp:Label ID="lblBillDetails" runat="server" />
  </form>
</body>
</html>
```

**Bill.aspx.cs**

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
namespace Practical2AWTKunal
{
    public partial class Bill : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!IsPostBack)
            {
                string customerId = Session["CustomerId"].ToString();
                string customerName = Session["CustomerName"].ToString();
                string address = Session["Address"].ToString();
                string menuItem = Session["MenuItem"].ToString();
                int quantity = (int)Session["Quantity"];
                decimal price = (decimal)Session["Price"];
                decimal total = quantity * price;
                decimal gst = total * 0.05m;
            }
        }
    }
}
```

```

decimal grandTotal = total + gst;
lblBillDetails.Text = $"Customer: {customerName} (ID: {customerId})<br/>" +
    $"Address: {address}<br/>" +
    $"Item: {menuItem}<br/>" +
    $"Quantity: {quantity}<br/>" +
    $"Total: {total:C}<br/>" +
    $"GST (5%): {gst:C}<br/>" +
    $"Grand Total: {grandTotal:C}";
    }
}
}
}
}

```

## Output:

The screenshot shows a web browser window with the title "Hotel Order". The address bar displays "https://localhost:44396/Order.aspx". The page content is titled "Hotel Order Form". It contains several input fields: "Customer ID" with the value "100", "Customer Name" with the value "Nick", "Address" with the value "Kolisare,Ratnagiri", "Menu Item" with the value "Chicken Biryani", "Quantity" with the value "2", and "Price per Item" with the value "120". There is a "Generate Bill" button at the bottom of the form.

The screenshot shows a web browser window with the title "Bill". The address bar displays "https://localhost:44396/Bill.aspx". The page content is titled "Bill Receipt". It displays the following information: "Customer: Nick (ID: 100)", "Address: Kolisare,Ratnagiri", "Item: Chicken Biryani", "Quantity: 2", "Total: ₹ 240.00", "GST (5%): ₹ 12.00", and "Grand Total: ₹ 252.00".

**3. Design asp.net web application to accept students roll number, name, address and mark of five subjects. And display mark-sheets which include total marks, percentage and grade along-with student's details on another web form. Use appropriate validation controls.**

**Code:**

**StudentEntry.aspx**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="StudentDetails.aspx.cs"
Inherits="Practical2AWTKunal.StudentDetails" %>
```

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
    <title>Student Marks Entry</title>
```

```
    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
```

```
    <link rel="stylesheet" type="text/css" href="stylesheet/styles.css" />
```

```
</head>
```

```
<body>
```

```
    <form id="form1" runat="server">
```

```
        <h2>Enter Student Details</h2>
```

```
        Roll No: <asp:TextBox ID="txtRollNo" runat="server" /><br/>
```

```
        <asp:RequiredFieldValidator ControlToValidate="txtRollNo" ErrorMessage="Required"
runat="server" ForeColor="Red"/><br/>
```

```
        Name: <asp:TextBox ID="txtName" runat="server" /><br/>
```

```
        <asp:RequiredFieldValidator ControlToValidate="txtName" ErrorMessage="Required"
runat="server" ForeColor="Red"/><br/>
```

```
        Address: <asp:TextBox ID="txtAddress" runat="server" TextMode="MultiLine" /><br/>
```

```
        Subject 1: <asp:TextBox ID="txtSub1" runat="server" /><br/>
```

```
        <asp:RequiredFieldValidator ControlToValidate="txtSub1" ErrorMessage="Required"
runat="server" ForeColor="Red"/>
```

```
        <asp:RegularExpressionValidator ControlToValidate="txtSub1"
ValidationExpression="\d+" ErrorMessage="Enter valid marks" runat="server"
ForeColor="Red"/><br/>
```

```
        Subject 2: <asp:TextBox ID="txtSub2" runat="server" /><br/>
```

```
<asp:RequiredFieldValidator ControlToValidate="txtSub2" ErrorMessage="Required"
runat="server" ForeColor="Red"/>
```

```
<asp:RegularExpressionValidator ControlToValidate="txtSub2"
ValidationExpression="\d+" ErrorMessage="Enter valid marks" runat="server"
ForeColor="Red"/><br/>
```

```
Subject 3: <asp:TextBox ID="txtSub3" runat="server" /><br/>
<asp:RequiredFieldValidator ControlToValidate="txtSub3" ErrorMessage="Required"
runat="server" ForeColor="Red"/><br/>
```

```
Subject 4: <asp:TextBox ID="txtSub4" runat="server" /><br/>
<asp:RequiredFieldValidator ControlToValidate="txtSub4" ErrorMessage="Required"
runat="server" ForeColor="Red"/><br/>
```

```
Subject 5: <asp:TextBox ID="txtSub5" runat="server" /><br/>
<asp:RequiredFieldValidator ControlToValidate="txtSub5" ErrorMessage="Required"
runat="server" ForeColor="Red"/><br/>
```

```
<asp:Button ID="btnGenerateMarksheet" runat="server" Text="Generate Marksheet"
OnClick="btnGenerateMarksheet_Click" />
</form>
</body>
</html>
```

## StudentEntry.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace Practical2AWT
{
    public partial class StudentDetails : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            this.UnobtrusiveValidationMode = System.Web.UI.UnobtrusiveValidationMode.None;
        }
    }
}
```

```
protected void btnGenerateMarksheet_Click(object sender, EventArgs e)
{
    Session["RollNo"] = txtRollNo.Text;
    Session["Name"] = txtName.Text;
    Session["Address"] = txtAddress.Text;
    Session["Sub1"] = int.Parse(txtSub1.Text);
    Session["Sub2"] = int.Parse(txtSub2.Text);
    Session["Sub3"] = int.Parse(txtSub3.Text);
    Session["Sub4"] = int.Parse(txtSub4.Text);
    Session["Sub5"] = int.Parse(txtSub5.Text);

    Response.Redirect("Marksheet.aspx");
}
}
```

### Marksheet.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Marksheet.aspx.cs"
Inherits="Practical2AWTKunal.Marksheet" %>
```

```
<!DOCTYPE html>
<html>
<head>
    <title>Marksheet</title>
    <link rel="stylesheet" type="text/css" href="stylesheet/styles.css" />
</head>
<body>
    <h2>Student Marksheet</h2>
    <div id="marksheet">
        <p><strong>Roll No:</strong> <asp:Label ID="lblRollNo" runat="server" /></p>
        <p><strong>Name:</strong> <asp:Label ID="lblName" runat="server" /></p>
        <p><strong>Address:</strong> <asp:Label ID="lblAddress" runat="server" /></p>
        <p><strong>Total Marks:</strong> <asp:Label ID="lblTotalMarks" runat="server" /></p>
        <p><strong>Percentage:</strong> <asp:Label ID="lblPercentage" runat="server" /></p>
        <p><strong>Grade:</strong> <asp:Label ID="lblGrade" runat="server" /></p>
    </div>
</body>
```

</html>

### **Marksheet.aspx.cs**

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace Practical2AWT
{
    public partial class Marksheet : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (Session["RollNo"] != null)
            {
                int sub1 = (int)Session["Sub1"];
                int sub2 = (int)Session["Sub2"];
                int sub3 = (int)Session["Sub3"];
                int sub4 = (int)Session["Sub4"];
                int sub5 = (int)Session["Sub5"];

                int totalMarks = sub1 + sub2 + sub3 + sub4 + sub5;
                double percentage = (totalMarks / 5.0);

                string grade = GetGrade(percentage);

                lblRollNo.Text = Session["RollNo"].ToString();
                lblName.Text = Session["Name"].ToString();
                lblAddress.Text = Session["Address"].ToString();
                lblTotalMarks.Text = totalMarks.ToString()+"/500";
                lblPercentage.Text = percentage.ToString("0.00") + "%";
                lblGrade.Text = grade;
            }
        }

        private string GetGrade(double percentage)
```

```
{
    if (percentage >= 90) return "A+";
    if (percentage >= 80) return "A";
    if (percentage >= 70) return "B";
    if (percentage >= 60) return "C";
    if (percentage >= 50) return "D";
    return "Fail";
}
}
```

### Styles.css

```
body {
    font-family: Arial, sans-serif;
    background-color: #f4f4f4;
    text-align: center;
    padding: 20px;
}

form, #marksheet {
    background: #fff;
    padding: 20px;
    border-radius: 8px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
    display: inline-block;
    text-align: left;
}

h2 {
    color: #333;
}

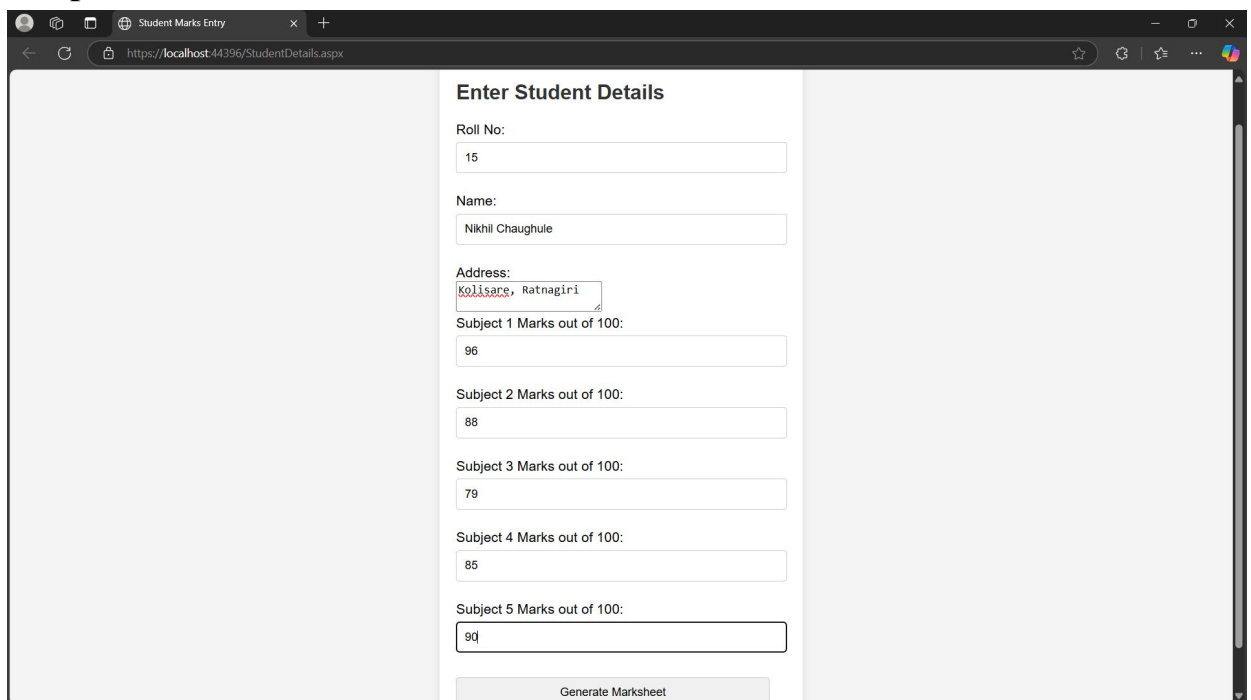
input, button {
    padding: 10px;
    margin: 5px 0;
    width: 95%;
    border: 1px solid #ccc;
    border-radius: 4px;
}
```



```
button {  
    background: #007bff;  
    color: white;  
    border: none;  
    cursor: pointer;  
}
```

```
button:hover {  
    background: #0056b3;  
}
```

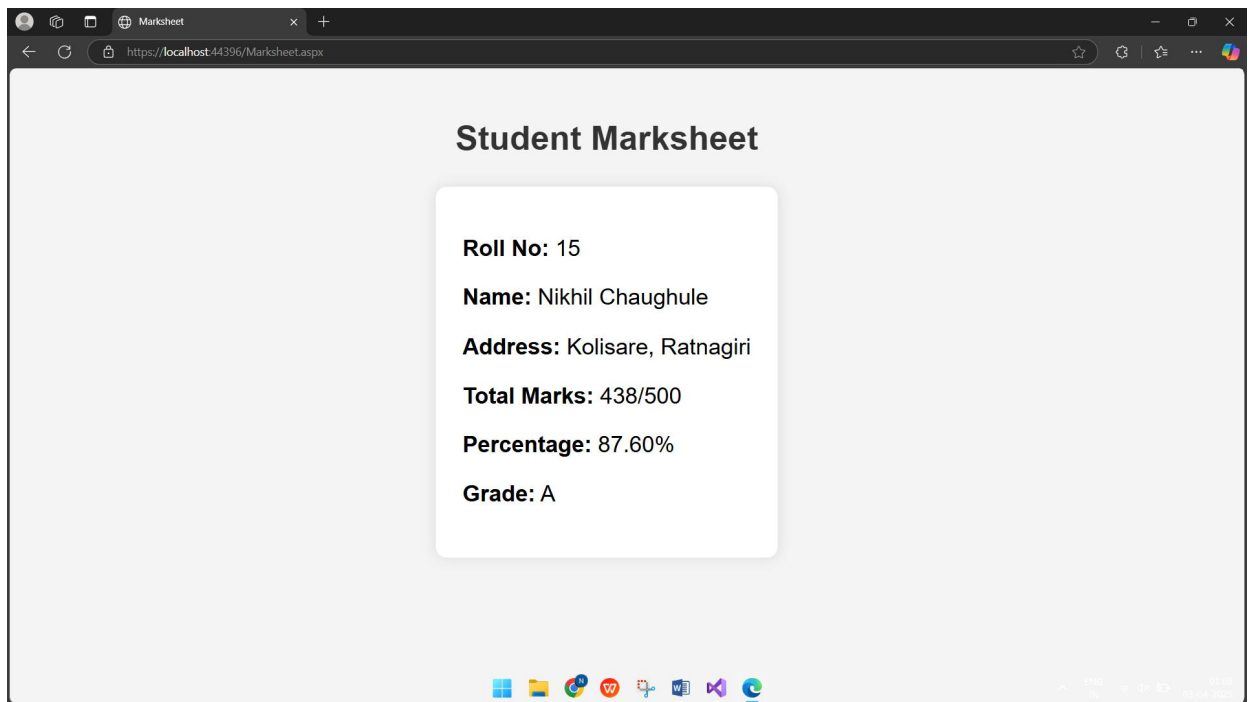
## Output:



The screenshot displays a web browser window with the title 'Student Marks Entry' and the URL 'https://localhost:44396/StudentDetails.aspx'. The form, titled 'Enter Student Details', contains the following fields and values:

- Roll No: 15
- Name: Nikhil Chaugule
- Address: Kollisars, Ratnagiri
- Subject 1 Marks out of 100: 96
- Subject 2 Marks out of 100: 88
- Subject 3 Marks out of 100: 79
- Subject 4 Marks out of 100: 85
- Subject 5 Marks out of 100: 90

At the bottom of the form is a button labeled 'Generate Marksheet'.



**4. Design asp.net web application for Job apply portal. Accept Candidate ID, Name, address, mobile number, email id and photo. Also provide facility to upload candidate resume. Show data on another web form.**

**Code:**

**JobApplication.aspx**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="JobApplication.aspx.cs"
Inherits="Practical2AWTKunal.JobApplication" %>
<!DOCTYPE html>
<html>
<head>
  <title>Job Application Form</title>
  <link rel="stylesheet" type="text/css" href="stylesheet/JobApplicationStyleSheet1.css" />
</head>
<body>
  <form id="form1" runat="server">
```

```

<div class="container">
    <h2>Job Application Form</h2>
    <label>Candidate ID:</label>
    <asp:TextBox ID="txtCandidateID" runat="server" CssClass="textbox"
ErrorMessage="Required" ></asp:TextBox>

    <label>Name:</label>
    <asp:TextBox ID="txtName" runat="server" CssClass="textbox"
ErrorMessage="Required"></asp:TextBox>

    <label>Address:</label>
    <asp:TextBox ID="txtAddress" runat="server" CssClass="textbox"
ErrorMessage="Required"></asp:TextBox>

    <label>Mobile Number:</label>
    <asp:TextBox ID="txtMobile" runat="server" CssClass="textbox"
ErrorMessage="Required" MaxLength="10"></asp:TextBox>

    <label>Email ID:</label>
    <asp:TextBox ID="txtEmail" runat="server" CssClass="textbox"
ErrorMessage="Required" TextMode="Email"></asp:TextBox>

    <label>Upload Photo:</label>
    <asp:FileUpload ID="fuPhoto" runat="server" CssClass="file-upload" />

    <label>Upload Resume:</label>
    <asp:FileUpload ID="fuResume" runat="server" CssClass="file-upload" />

    <asp:Button ID="btnSubmit" runat="server" Text="Submit Application"
CssClass="btn-submit" OnClick="btnSubmit_Click" />
</div>
</form>
</body>
</html>

```

### JobApplication.aspx.cs

```

using System;
using System.Collections.Generic;

```

```

using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace Practical2AWT
{
    public partial class JobApplication : System.Web.UI.Page
    {
        protected void btnSubmit_Click(object sender, EventArgs e)
        {
            if (fuPhoto.HasFile && fuResume.HasFile)
            {
                string photoPath = "~/Uploads/" + fuPhoto.FileName;
                string resumePath = "~/Uploads/" + fuResume.FileName;

                fuPhoto.SaveAs(Server.MapPath(photoPath));
                fuResume.SaveAs(Server.MapPath(resumePath));

                Session["CandidateID"] = txtCandidateID.Text;
                Session["Name"] = txtName.Text;
                Session["Address"] = txtAddress.Text;
                Session["Mobile"] = txtMobile.Text;
                Session["Email"] = txtEmail.Text;
                Session["Photo"] = photoPath;
                Session["Resume"] = resumePath;
                Response.Redirect("JobApplicationDetails.aspx");
            }
        }
    }
}

```

### **JobApplicationDetails.aspx**

```

<%@ Page Language="C#" AutoEventWireup="true"
CodeBehind="JobApplicationDetails.aspx.cs"
Inherits="Practical2AWT.JobApplicationDetails" %>
<!DOCTYPE html>
<html>

```

```

<head>
    <title>Application Details</title>
    <link rel="stylesheet" type="text/css" href="stylesheet/JobApplicationStyleSheet1.css" />
</head>
<body>
    <div class="container">
        <h2>Candidate Details</h2>
        <p><strong>Candidate ID:</strong> <asp:Label ID="lblCandidateID" runat="server"
/></p>
        <p><strong>Name:</strong> <asp:Label ID="lblName" runat="server" /></p>
        <p><strong>Address:</strong> <asp:Label ID="lblAddress" runat="server" /></p>
        <p><strong>Mobile:</strong> <asp:Label ID="lblMobile" runat="server" /></p>
        <p><strong>Email:</strong> <asp:Label ID="lblEmail" runat="server" /></p>
        <p><strong>Photo:</strong></p>
        <asp:Image ID="imgPhoto" runat="server" Width="150px" />
        <p><strong>Resume:</strong> <asp:HyperLink ID="lnkResume" runat="server"
Text="Download Resume" /></p>
    </div>
</body>
</html>

```

### JobApplicationDetails.aspx.cs

```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
namespace Practical2AWT
{
    public partial class JobApplicationDetails : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!IsPostBack)
            {
                lblCandidateID.Text = Session["CandidateID"] as string;
                lblName.Text = Session["Name"] as string;
            }
        }
    }
}

```

```
        lblAddress.Text = Session["Address"] as string;
        lblMobile.Text = Session["Mobile"] as string;
        lblEmail.Text = Session["Email"] as string;
        imgPhoto.ImageUrl = Session["Photo"] as string;
        lnkResume.NavigateUrl = Session["Resume"] as string;
    }
}
}
```

### **JobApplicationStyleSheet1.css**

```
body {
    font-family: Arial, sans-serif;
    background-color: #f8f9fa;
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
    margin: 0;
}

.container {
    background: white;
    padding: 20px;
    border-radius: 8px;
    box-shadow: 0px 4px 8px rgba(0, 0, 0, 0.2);
    width: 350px;
    text-align: center;
}

h2 {
    font-size: 20px;
    margin-bottom: 15px;
}

.textbox, .file-upload {
    width: 90%;
    padding: 8px;
```

```
margin: 5px 0;
border: 1px solid #ccc;
border-radius: 4px;
}

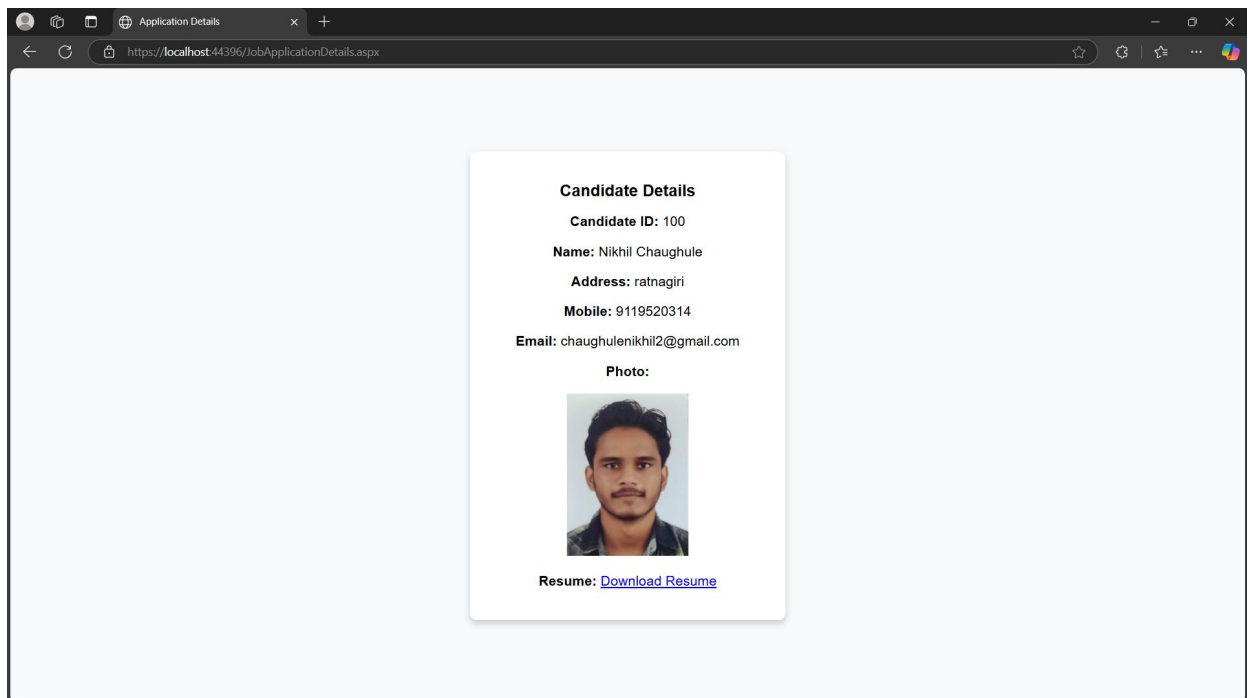
.btn-submit {
background-color: green;
color: white;
border: none;
padding: 10px;
width: 100%;
cursor: pointer;
margin-top: 10px;
border-radius: 4px;
}

.btn-submit:hover {
background-color: darkgreen;
}
```

## Output:

The screenshot displays a web browser window with the title 'Job Application Form' and the URL 'https://localhost:44396/JobApplication.aspx'. The form is centered on a light blue background. It contains the following fields and elements:

- Job Application Form** (Section Header)
- Candidate ID:** Input field with value '100'.
- Name:** Input field with value 'Nikhil Chaughule'.
- Address:** Input field with value 'ratnagiri'.
- Mobile Number:** Input field with value '9119520314'.
- Email ID:** Input field with value 'chaughulenikhil2@gmail.com'.
- Upload Photo:** Button 'Choose File' followed by the filename 'WhatsApp Imag...dd3b - Copy.jpg'.
- Upload Resume:** Button 'Choose File' followed by the filename 'Nikhil Santosh ...esume Final.pdf'.
- Submit Application** (Green button).



## 5. Design asp.net web application to show information of college ongoing sport activities. Use AdRotator to show the various upcoming sports events.

### Program:

### SportActivityAdRotator.aspx

```
<%@ Page Language="C#" AutoEventWireup="true"  
CodeBehind="SportActivityAdRotator.aspx.cs"  
Inherits="Practical2AWT.SportActivityAdRotator" %>
```

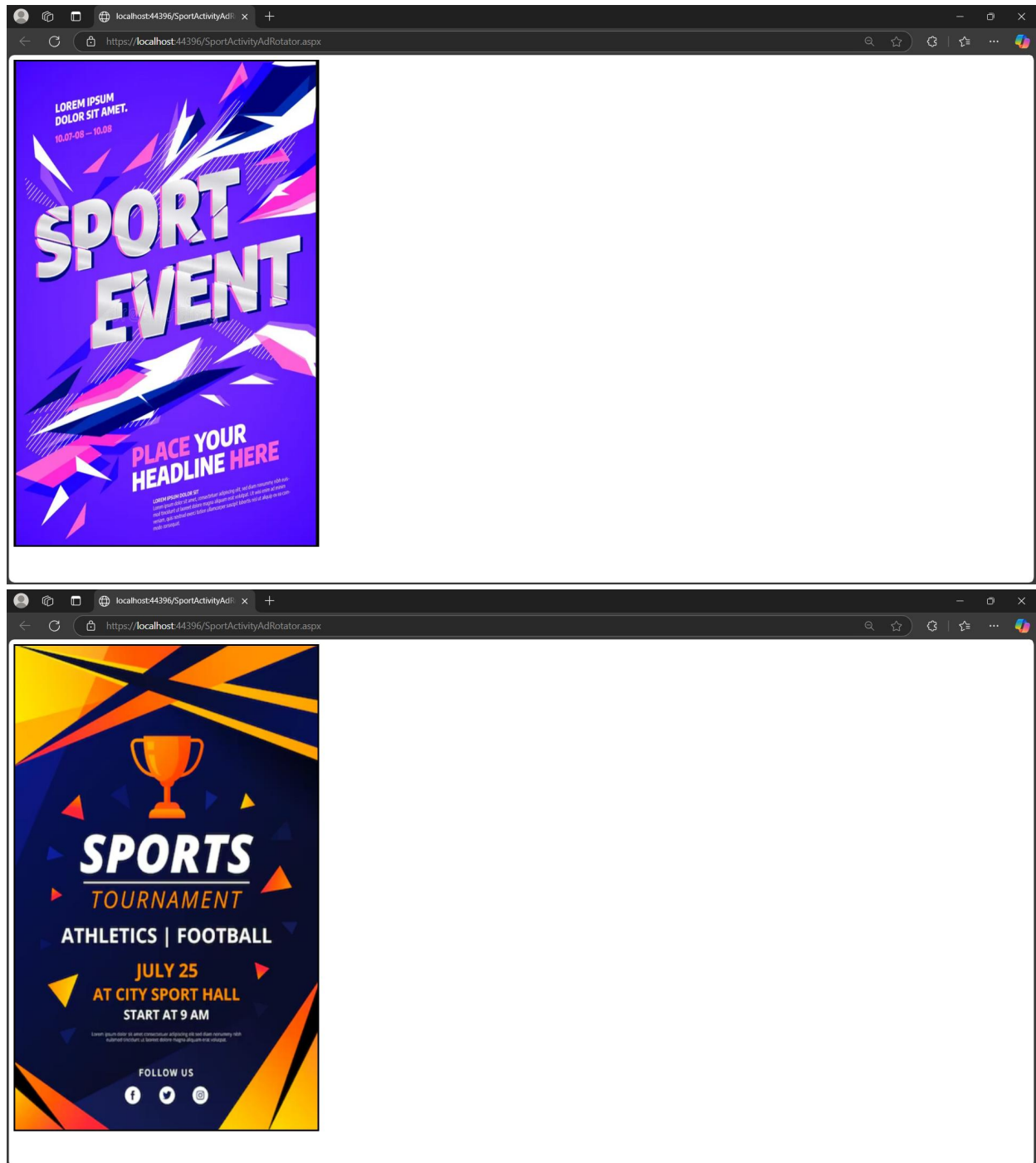
```
<!DOCTYPE html>  
<html xmlns="http://www.w3.org/1999/xhtml">  
<head runat="server">  
  <title></title>  
</head>  
<body>  
  <form id="form1" runat="server">  
  
    <div>
```



```
<asp:AdRotator ID="AdRotator1" BorderStyle="Solid" Height="800px"
Width="500px" runat="server" AdvertisementFile="~/AdFile.xml"/>
</div>
</form>
</body>
</html>
```

## AdFile.xml

```
<?xml version="1.0" encoding="utf-8" ?>
<Advertisements>
  <Ad>
    <ImageUrl>./images/event1.png</ImageUrl>
    <AlternetText >This is sport event</AlternetText>
    <Impression>5</Impression>
  </Ad>
  <Ad>
    <ImageUrl>./images/event2.png</ImageUrl>
    <AlternetText >This is sport event</AlternetText>
    <Impression>8</Impression>
  </Ad>
  <Ad>
    <ImageUrl>./images/event3.png</ImageUrl>
    <AlternetText >This is sport event</AlternetText>
    <Impression>9</Impression>
  </Ad>
  <Ad>
    <ImageUrl>./images/event4.png</ImageUrl>
    <AlternetText >This is sport event</AlternetText>
    <Impression>10</Impression>
  </Ad>
</Advertisements>
```

**Output:**

**6. Design asp.net web application for Maharashtra Tourism to show information of tourist places in Maharashtra using Master Page and Content Page.**

## Program:

### Site1.Master

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

```
<!DOCTYPE html>
<html>
<head runat="server">
  <title></title>
  <asp:ContentPlaceHolder ID="head" runat="server">
    <link rel="stylesheet" type="text/css" href="Content/MainStyleSheet1.css" />
  </asp:ContentPlaceHolder>
</head>

<body>
  <form id="form1" runat="server">
    <div class="section1">
      <p id="section1-p">Maharashtra Tourism</p>
    </div>
    <div class="content">
      <asp:ContentPlaceHolder ID="MainContent1" runat="server">
        </asp:ContentPlaceHolder>

      <asp:ContentPlaceHolder ID="MainContent12" runat="server">
        </asp:ContentPlaceHolder>
    </div>

    <div class="footer">
      <p>&copy; MHT-Tourism 2025</p>
    </div>
  </form>
</body>
</html>
```

### Home.aspx

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master"
AutoEventWireup="true" CodeBehind="Home.aspx.cs" Inherits="MhtTourism.Home" %>
```

```
<asp:Content ID="Content2" ContentPlaceHolderID="MainContent1" runat="server">
```

```
<p><b>Ideal visit duration:</b> 1-2 Weeks</p>
```

```
<p>Maharashtra is a state in the western peninsular region of India occupying a substantial portion of the Deccan Plateau. As the second-most populous state and third-largest state by area in India, Maharashtra hosts the Arabian Sea to its west and is bordered by the states of Karnataka, Telangana, Goa, Gujarat, Chhattisgarh, Madhya Pradesh and the Union territory of Dadra and Nagar Haveli. </p>
```

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

```
<asp:Content ID="Content3" ContentPlaceHolderID="MainContent12" runat="server">
```

```
<p><b>Places to Visit in Maharashtra</b></p>
```

```
<div class="locations">
```

```
<div class="place">
```

```

```

```
<p>Ratnagiri</p>
```

```
</div>
```

```
<div class="place">
```

```

```

```
<p>Ganapatipule</p>
```

```
</div>
```

```
<div class="place">
```

```

```

```
<p>Matheran</p>
```

```
</div>
```

```
<div class="place">
```

```

```

```
<p>Thane</p>
```

```
</div>
```

```
</div>
```

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

## MainStyleSheet1.css

```
body{
```

```
font-size:18px;
font-family:'Times New Roman', Times, serif;
text-align: center;
}

#section1-p{
font-size:24px;
font-weight:bold;
font-family:Algerian;
}

.locations {
display: flex;
justify-content: center;
flex-wrap: wrap;
gap: 20px;
margin-top: 20px;
}

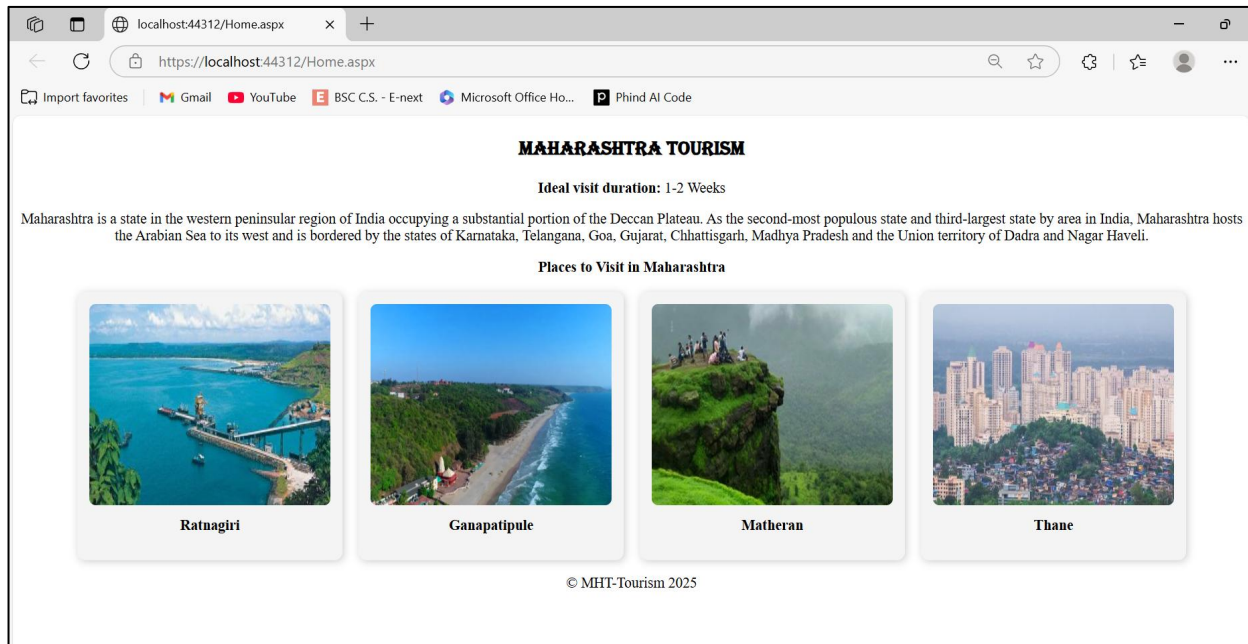
.place {
text-align: center;
background-color: #f4f4f4;
padding: 15px;
border-radius: 10px;
box-shadow: 2px 2px 10px rgba(0, 0, 0, 0.2);
transition: transform 0.3s ease-in-out;
}

.place img {
width: 300px;
height: 250px;
border-radius: 8px;
}

.place p {
font-size: 18px;
font-weight: bold;
margin-top: 10px;
}
```

```
.place:hover {
    transform: scale(1.05);
    background-color: #e0e0e0;
}
```

## Output:



**7. Design asp.net registration web form to register for online programming courses. Use appropriate validation controls. Consider the fields as candidate id, name, address, age, gender, password, confirm password, course name, batch etc. And show the data on another form once registration is done. Use appropriate validation controls.**

## Program:

### OnlineRegistration.aspx

```
<%@ Page Language="C#" AutoEventWireup="true"
CodeBehind="OnlineRegistration.aspx.cs"
Inherits="Practical2AWTKunal.OnlineRegistracton" %>
```

```
<!DOCTYPE html>
```

```
<html>
```

```
<head runat="server">
```

```
<title>Online Registration</title>
```

```

<link rel="stylesheet" type="text/css" href="stylesheet/RegistrationCourseStyleSheet1.css"/>
<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
</head>
<body>
  <form id="form1" runat="server">
    <div>
      <h1>Online Programming Courses Registration</h1>

      <asp:Label ID="Label1" runat="server" Text="Id"></asp:Label><br />
      <asp:TextBox ID="id" runat="server"></asp:TextBox>
      <asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server" Text="Enter
The Id" ForeColor="Red" ControlToValidate="id"></asp:RequiredFieldValidator>

      <br />
      <asp:Label ID="Label2" runat="server" Text="Name"></asp:Label><br />
      <asp:TextBox ID="name" runat="server"></asp:TextBox>
      <asp:RequiredFieldValidator ID="RequiredFieldValidator2" runat="server" Text="Enter
The Name" ForeColor="Red" ControlToValidate="name"></asp:RequiredFieldValidator>

      <br />
      <asp:Label ID="Label3" runat="server" Text="Address"></asp:Label><br />
      <asp:TextBox ID="add" runat="server"></asp:TextBox>
      <asp:RequiredFieldValidator ID="RequiredFieldValidator3" runat="server" Text="Enter
The Address" ForeColor="Red" ControlToValidate="add"></asp:RequiredFieldValidator>

      <br />
      <asp:Label ID="Label4" runat="server" Text="Age"></asp:Label><br />
      <asp:TextBox ID="age" runat="server"></asp:TextBox>
      <asp:RangeValidator ID="RangeValidator1" runat="server" Text="Enter Valid Age (20-
40)" ForeColor="Red" ControlToValidate="age" MaximumValue="40"
MinimumValue="20"></asp:RangeValidator>

      <br />
      <div class="gender-container">
        <label class="gender-label">Gender:</label>
        <asp:RadioButtonList ID="gender" runat="server" CssClass="gender">
          <asp:ListItem>Male</asp:ListItem>
          <asp:ListItem>Female</asp:ListItem>
        </asp:RadioButtonList>

```

```
<asp:RequiredFieldValidator ID="RequiredFieldValidator4" runat="server" Text="Select
Gender" ForeColor="Red" ControlToValidate="gender"></asp:RequiredFieldValidator>
</div>
```

```
<br />
<asp:Label ID="Label6" runat="server" Text="Password"></asp:Label><br />
<asp:TextBox ID="password" runat="server"></asp:TextBox>
<asp:CustomValidator ID="CustomValidator1" runat="server" Text="Password Must
Have 8 Length" ForeColor="Red" ControlToValidate="password"
OnServerValidate="validPassword"></asp:CustomValidator>
```

```
<br />
<asp:Label ID="Label7" runat="server" Text="Confirm Password"></asp:Label><br />
<asp:TextBox ID="cpassword" runat="server"></asp:TextBox>
<asp:CompareValidator ID="CompareValidator1" runat="server" Text="Password not
match" ForeColor="Red" ControlToValidate="cpassword"
ControlToCompare="password"></asp:CompareValidator>
```

```
<br />
<asp:Label ID="Label8" runat="server" Text="Course Name"></asp:Label><br />
<asp:DropDownList ID="course" runat="server">
  <asp:ListItem Text="Java" Value="Java" />
  <asp:ListItem Text="C#" Value="C#" />
  <asp:ListItem Text="C++" Value="C++" />
  <asp:ListItem Text="Python" Value="Python" />
</asp:DropDownList>
```

```
<br />
<asp:Label ID="Label9" runat="server" Text="Batch"></asp:Label><br />
<asp:DropDownList ID="batch" runat="server">
  <asp:ListItem Text="9 AM TO 12 PM" Value="9 AM TO 12 PM" />
  <asp:ListItem Text="1 PM TO 4 PM" Value="1 PM TO 4 PM" />
  <asp:ListItem Text="5 PM TO 8 PM" Value="5 PM TO 8 PM" />
</asp:DropDownList>
```

```
<br />
<asp:Button runat="server" Text="Submit" PostBackUrl="~/RegistrationSubmit.aspx"/>
```

```
</div>
```



```

    </form>
</body>
</html>

```

### OnlineRegistration.aspx.cs

```

using System;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace Practical2AWT
{
    public partial class OnlineRegistration : Page
    {
        public void validPassword(object source, ServerValidateEventArgs args)
        {
            string password = args.Value.Trim();
            args.IsValid = password.Length >= 8;
        }
    }
}

```

### RegistrationSubmit.aspx

```

<%@ Page Language="C#" AutoEventWireup="true"
CodeBehind="RegistrationSubmit.aspx.cs" Inherits="Practical2AWT.RegistrationSubmit" %>

<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
    <link rel="stylesheet" type="text/css" href="stylesheet/RegistrationCourseStyleSheet1.css"/>
    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h1>Registration Information</h1>
            <br />

```

```

<asp:Label ID="Label1" runat="server" Text="Id : "></asp:Label>
<asp:Label ID="id1" runat="server" Text="Label"></asp:Label>
<br />
<asp:Label ID="Label2" runat="server" Text="Name : "></asp:Label>
<asp:Label ID="name1" runat="server" Text="Label"></asp:Label>
<br />
<asp:Label ID="Label4" runat="server" Text="Address : "></asp:Label>
<asp:Label ID="address" runat="server" Text="Label"></asp:Label>
<br />
<asp:Label ID="Label6" runat="server" Text="Age : "></asp:Label>
<asp:Label ID="age1" runat="server" Text="Label"></asp:Label>
<br />
<asp:Label ID="Label8" runat="server" Text="Gender : "></asp:Label>
<asp:Label ID="gender1" runat="server" Text="Label"></asp:Label>
<br />
<asp:Label ID="Label10" runat="server" Text="password : "></asp:Label>
<asp:Label ID="password" runat="server" Text="Label"></asp:Label>
<br />
<asp:Label ID="Label12" runat="server" Text="Course : "></asp:Label>
<asp:Label ID="course1" runat="server" Text="Label"></asp:Label>
<br />
<asp:Label ID="Label14" runat="server" Text="Batch : "></asp:Label>
<asp:Label ID="batch1" runat="server" Text="Label"></asp:Label>
</div>
</form>
</body>
</html>

```

### RegistrationSubmit.aspx.cs

```

using System;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace Practical2AWT
{
    public partial class RegistrationSubmit : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)

```

```

{
    if (!IsPostBack) // Prevent resetting values on postback
    {
        if (PreviousPage != null && PreviousPage.IsCrossPagePostBack)
        {
            // Retrieve values using FindControl
            TextBox id = (TextBox)PreviousPage.FindControl("id");
            TextBox name = (TextBox)PreviousPage.FindControl("name");
            TextBox address = (TextBox)PreviousPage.FindControl("add");
            TextBox age = (TextBox)PreviousPage.FindControl("age");
            RadioButtonList gender = (RadioButtonList)PreviousPage.FindControl("gender");
            TextBox password = (TextBox)PreviousPage.FindControl("password");
            DropDownList course = (DropDownList)PreviousPage.FindControl("course");
            DropDownList batch = (DropDownList)PreviousPage.FindControl("batch");

            // Set label values
            if (id != null) id1.Text = id.Text;
            if (name != null) name1.Text = name.Text;
            if (address != null) this.address.Text = address.Text;
            if (age != null) age1.Text = age.Text;
            if (gender != null) gender1.Text = gender.SelectedValue;
            if (password != null) this.password.Text = password.Text; // Consider encrypting
this before displaying
            if (course != null) course1.Text = course.SelectedValue;
            if (batch != null) batch1.Text = batch.SelectedValue;
        }
    }
}
}
}
}

```

### Global.asax

```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.Security;
using System.Web.SessionState;
using System.Web.UI;

```

```
namespace Practical2AWT
{
    public class Global : System.Web.HttpApplication
    {
        protected void Application_Start(object sender, EventArgs e)
        { }
        protected void Session_Start(object sender, EventArgs e)
        {
            ScriptManager.ScriptResourceMapping.AddDefinition("jquery",
                new ScriptResourceDefinition
                {
                    Path = "https://code.jquery.com/jquery-3.6.0.min.js",
                    DebugPath = "https://code.jquery.com/jquery-3.6.0.js",
                    CdnSupportsSecureConnection = true
                });
        }

        protected void Application_BeginRequest(object sender, EventArgs e)
        { }

        protected void Application_AuthenticateRequest(object sender, EventArgs e)
        { }

        protected void Application_Error(object sender, EventArgs e)
        { }

        protected void Session_End(object sender, EventArgs e)
        { }

        protected void Application_End(object sender, EventArgs e)
        { }
    }
}
```

### Output:

The image displays two browser windows. The top window shows a web form titled "Online Programming Courses Registration" at the URL "https://localhost:44396/OnlineRegistration.aspx". The form contains the following fields: "Id" (text box with "100"), "Name" (text box with "Nikhil Chaughule"), "Address" (text box with "Kolisare, Ratnagiri"), "Age" (text box with "21"), "Gender" (radio buttons for "Male" and "Female", with "Male" selected), "Password" (text box with "Nick#1007"), "Confirm Password" (text box with "Nick#1007"), "Course Name" (dropdown menu with "C++" selected), and "Batch" (dropdown menu with "1 PM TO 4 PM" selected). A "Submit" button is at the bottom. The bottom window shows the "Registration Information" confirmation page at the URL "https://localhost:44396/RegistrationSubmit.aspx". It lists the submitted details: Id : 100, Name : Nikhil Chaughule, Address : Kolisare, Ratnagiri, Age : 21, Gender : Male, password : Nick#1007, Course : C++, and Batch : 1 PM TO 4 PM.

**Online Programming Courses Registration**

Id  
100

Name  
Nikhil Chaughule

Address  
Kolisare, Ratnagiri

Age  
21

Gender:  
☒ Male  
☐ Female

Password  
Nick#1007

Confirm Password  
Nick#1007

Course Name  
C++

Batch  
1 PM TO 4 PM

Submit

**Registration Information**

Id : 100  
Name : Nikhil Chaughule  
Address : Kolisare, Ratnagiri  
Age : 21  
Gender : Male  
password : Nick#1007  
Course : C++  
Batch : 1 PM TO 4 PM