Progressive Education Society's

**Modern College of Engineering, Pune**

**MCA Department**

**A.Y.2024-25**

**(410906) Web Technologies Lab**

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**Class:** SY-MCA **Shift / Div:** A **Batch:** S3 **Roll Number:** 52062

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**Q1. Design a Registration form Default.aspx page with fields Username, choose password, confirm password, age, email id, city and a submit button.**

<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Default.aspx.cs" Inherits="WebApplication1.Default" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">

<head runat="server">

<title></title>

</head>

<body>

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

<p>

<table class="auto-style1">

<tr>

<td>Name :</td>

<td>

<asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>

</td>

</tr>

<tr>

<td>Password</td>

<td>

<asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>

</td>

</tr>

<tr>

<td>Confirm Password</td>

<td>

<asp:TextBox ID="TextBox3" runat="server" TextMode="Password"></asp:TextBox>

</td>

</tr>

<tr>

<td>City</td>

<td>

<asp:DropDownList ID="DropDownList1" runat="server">

<asp:ListItem Text="Select City" Value="select" Selected="True"></asp:ListItem>

<asp:ListItem Text="Bangalore" Value="Bangalore"></asp:ListItem>

<asp:ListItem Text="Pune" Value="Pune"></asp:ListItem>

<asp:ListItem Text="Mumbai" Value="Mumbai"></asp:ListItem>

</asp:DropDownList>

</td>

</tr>

<tr>

<td>Age</td>

<td>

<asp:TextBox ID="TextBox5" runat="server"></asp:TextBox>

</td>

</tr>

<tr>

<td>Gmail</td>

<td>

<asp:TextBox ID="TextBox4" runat="server"></asp:TextBox>

</td>

</tr>

<tr>

<td>

<asp:Button ID="Button1" runat="server" Text="Submit" OnClick="Button1\_Click" />

</td>

</tr>

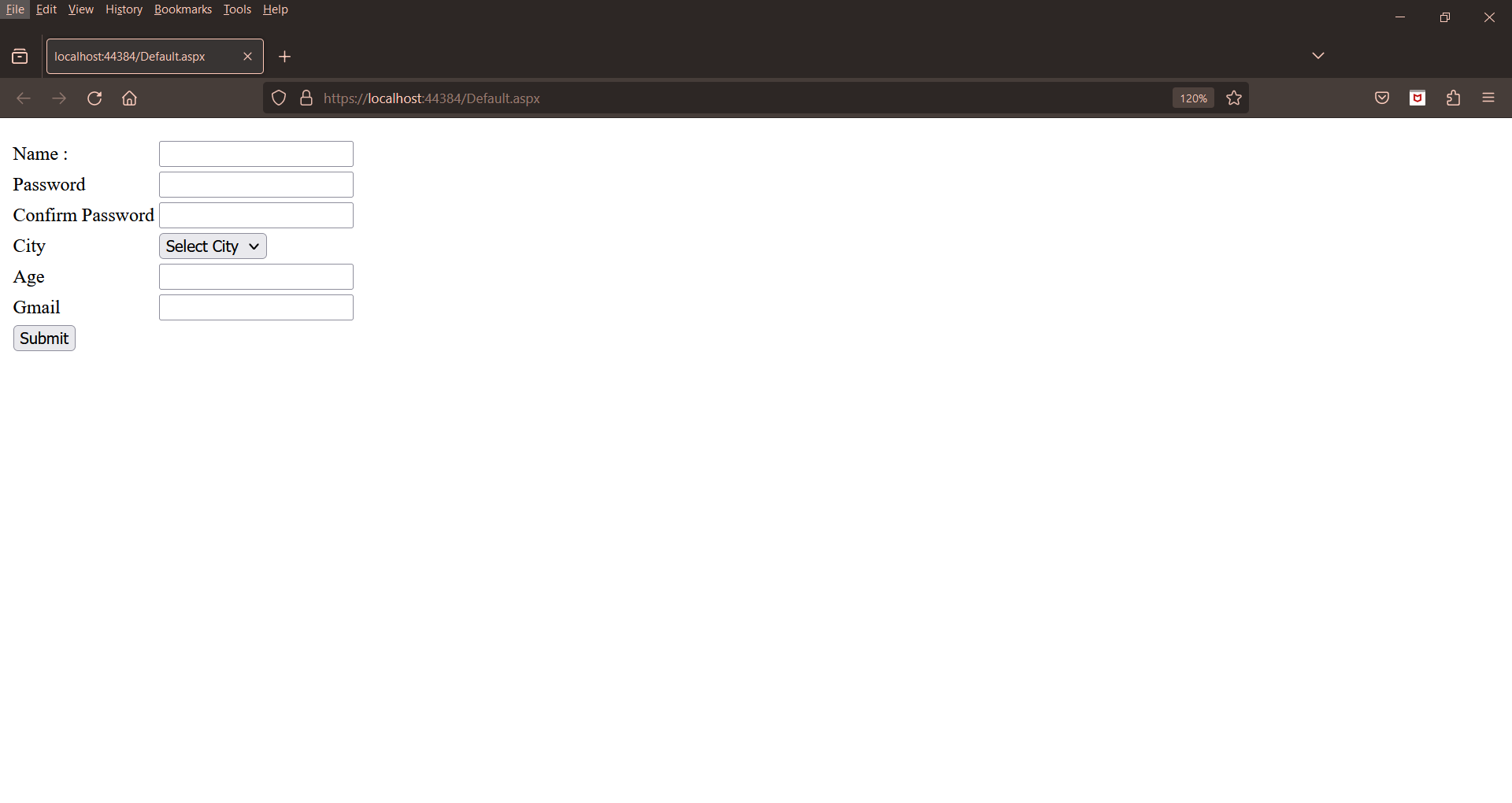
</table>

</p>

</form>

</body>

</html>



**Q.2 Write a simple ASP.NET program to display the following Web Controls:**

i. A button with text “click me”. The button control must be in the

center of the form.

ii. A label with a text hello

iii. A checkbox. The form name must be Web Controls.

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

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">

<head runat="server">

<title>Web Controls</title>

<style>

.center {

display: flex;

justify-content: center;

align-items: center;

height: 100vh;

}

.controls {

text-align: center;

}

</style>

</head>

<body>

<form id="form1" runat="server" class="center">

<div class="controls">

<!-- Label -->

<asp:Label ID="Label1" runat="server" Text="Hello"></asp:Label>

<br /><br />

<!-- Button -->

<asp:Button ID="Button1" runat="server" Text="Click me" OnClick="Button1\_Click" />

<br /><br />

<!-- Checkbox -->

<asp:CheckBox ID="CheckBox1" runat="server" Text="Check me!" />

</div>

</form>

</body>

</html>

**Q3. Create ASP.NET application to store and retrieve values in database (Use Employee database having fields**

**E-Id, EName, Contact No., Department, Salary)**

**Database Query:**

CREATE TABLE Employees (

EId INT PRIMARY KEY IDENTITY(1,1),

EName NVARCHAR(100),

ContactNo NVARCHAR(20),

Department NVARCHAR(50),

Salary DECIMAL(18, 2)

);

**Webconfig:**

<connectionStrings>

<add name="EmployeeDBConnectionString" connectionString="Data Source=(LocalDB)\\MSSQLLocalDB;AttachDbFilename=\"D:\\PESMCOE\\Web Technology\\Assign 6\\Database\_site\\App\_Data\\Database1.mdf\";Integrated Security=True"" providerName="System.Data.SqlClient" />

</connectionStrings>

**Default.aspx**

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

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">

<head runat="server">

<title>Employee Management</title>

</head>

<body>

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

<div>

<h2>Employee Information</h2>

<div>

Employee Name: <asp:TextBox ID="txtEName" runat="server"></asp:TextBox><br />

Contact No.: <asp:TextBox ID="txtContactNo" runat="server"></asp:TextBox><br />

Department: <asp:TextBox ID="txtDepartment" runat="server"></asp:TextBox><br />

Salary: <asp:TextBox ID="txtSalary" runat="server"></asp:TextBox><br />

<asp:Button ID="btnSubmit" runat="server" Text="Submit" OnClick="btnSubmit\_Click" />

</div>

</div>

</form>

</body>

</html>

**Default.aspx.cs**

using System;

using System.Data.SqlClient;

using System.Configuration;

namespace EmployeeManagement

{

public partial class Default : System.Web.UI.Page

{

protected void btnSubmit\_Click(object sender, EventArgs e)

{

string connectionString = ConfigurationManager.ConnectionStrings["EmployeeDBConnectionString"].ConnectionString;

using (SqlConnection connection = new SqlConnection(connectionString))

{

connection.Open();

string query = "INSERT INTO Employees (EName, ContactNo, Department, Salary) VALUES (@EName, @ContactNo, @Department, @Salary)";

using (SqlCommand command = new SqlCommand(query, connection))

{

command.Parameters.AddWithValue("@EName", txtEName.Text);

command.Parameters.AddWithValue("@ContactNo", txtContactNo.Text);

command.Parameters.AddWithValue("@Department", txtDepartment.Text);

command.Parameters.AddWithValue("@Salary", Convert.ToDecimal(txtSalary.Text));

command.ExecuteNonQuery();

}

}

// Redirect to EmployeeManagement page after submitting

Response.Redirect("EmployeeManagement.aspx");

}

}

}

**EmployeeManagment.aspx.cs**

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

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">

<head runat="server">

<title>Employee Management</title>

</head>

<body>

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

<div>

<h2>Employee List</h2>

<asp:GridView ID="gvEmployees" runat="server" AutoGenerateColumns="true"></asp:GridView>

</div>

</form>

</body>

</html>

**EmployeeManagement.aspx.cs:**

using System;

using System.Configuration;

using System.Data;

using System.Data.SqlClient;

namespace EmployeeManagement

{

public partial class EmployeeManagement : System.Web.UI.Page

{

protected void Page\_Load(object sender, EventArgs e)

{

if (!IsPostBack)

{

BindGrid();

}

}

private void BindGrid()

{

string connectionString = ConfigurationManager.ConnectionStrings["EmployeeDBConnectionString"].ConnectionString;

using (SqlConnection connection = new SqlConnection(connectionString))

{

connection.Open();

string query = "SELECT \* FROM Employees";

using (SqlDataAdapter adapter = new SqlDataAdapter(query, connection))

{

DataTable dataTable = new DataTable();

adapter.Fill(dataTable);

gvEmployees.DataSource = dataTable;

gvEmployees.DataBind();

}

}

}

}

}

**Q4. Create login form in ASP.NET with database connectivity**

**Database:**

CREATE TABLE Users (

Username NVARCHAR(50) PRIMARY KEY,

Password NVARCHAR(50)

);

**Web.config:**

<connectionStrings>

<add name="UserDBConnectionString" connectionString =” Data Source=(LocalDB)\\MSSQLLocalDB;AttachDbFilename=\"D:\\PESMCOE\\Web Technology\\Assign 6\\Database\_site\\App\_Data\\logincreds.mdf\" providerName="System.Data.SqlClient" />

</connectionStrings>

**Login.aspx:**

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

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">

<head runat="server">

<title>Login</title>

</head>

<body>

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

<div>

<h2>Login</h2>

<div>

Username: <asp:TextBox ID="txtUsername" runat="server"></asp:TextBox><br />

Password: <asp:TextBox ID="txtPassword" runat="server" TextMode="Password"></asp:TextBox><br />

<asp:Button ID="btnLogin" runat="server" Text="Login" OnClick="btnLogin\_Click" />

</div>

</div>

</form>

</body>

</html>

**Login.aspx.cs:**

using System;

using System.Configuration;

using System.Data.SqlClient;

namespace UserAuthentication

{

public partial class Login : System.Web.UI.Page

{

protected void btnLogin\_Click(object sender, EventArgs e)

{

string username = txtUsername.Text.Trim();

string password = txtPassword.Text.Trim();

string connectionString = ConfigurationManager.ConnectionStrings["UserDBConnectionString"].ConnectionString;

using (SqlConnection connection = new SqlConnection(connectionString))

{

connection.Open();

string query = "SELECT COUNT(\*) FROM Users WHERE Username = @Username AND Password = @Password";

using (SqlCommand command = new SqlCommand(query, connection))

{

command.Parameters.AddWithValue("@Username", username);

command.Parameters.AddWithValue("@Password", password);

int count = (int)command.ExecuteScalar();

if (count > 0)

{

// Successful login

Response.Redirect("Welcome.aspx");

}

else

{

// Failed login

Response.Write("<script>alert('Invalid username or password');</script>");

}

}

}

}

}

}

**Q5. Create a Web Site in ASP.NET. The Web Site present weather data from the Weather station**

**Details.cshtml**

@model WeatherApp.Data.WeatherData

@{

string url ="http://openweathermap.org/img/wn/" + Model.weather[0].icon + "@2x.png";

}

<div class="container">

<div class="row">

<div class="col-2"></div>

<div class="col-8">

<div style="height:2.5vw;"></div>

<div class="card shadow text-white" style="background-color: #292a2c !important;font-family:'Times New Roman'">

<div class="card-body">

<h4 class="card-title">Weather in @Html.DisplayFor(model => model.name)</h4>

<div style="border-bottom:2px solid #968d7b;width:100%;"></div>

<div class="card-img">

<img src=@url />

</div>

<dl class="row">

<dt class="col-2">

General Info:

</dt>

<dd class="col-10">

@Html.DisplayFor(model => model.weather[0].main)

</dd>

<dt class="col-3" style="margin-right:-3vw;">

Temperature:

</dt>

<dd class="col-9">

@Html.DisplayFor(model => model.main.temp)°C

</dd>

<dt class="col-2">

Highest:

</dt>

<dd class="col-10">

@Html.DisplayFor(model => model.main.temp\_max)°C

</dd>

<dt class="col-2">

Lowest:

</dt>

<dd class="col-10">

@Html.DisplayFor(model => model.main.temp\_min)°C

</dd>

<dt class="col-3" style="margin-right:-3.vw;">

Feels like:

</dt>

<dd class="col-9" >

@Html.DisplayFor(model => model.main.feels\_like)°C

</dd>

<dt class="col-2">

Humidity:

</dt>

<dd class="col-10">

@Html.DisplayFor(model => model.main.humidity)

</dd>

<dt class="col-2">

Pressure:

</dt>

<dd class="col-10">

@Html.DisplayFor(model => model.main.pressure) Bar

</dd>

</dl>

<a asp-area="" asp-controller="Weather" asp-action="Search" class="btn btn-primary text-white" style="margin-left:85%;font-family:'Times New Roman'">Cancel</a>

</div>

</div>

</div>

<div class="col-2"></div>

</div>

</div>

**Search.cshtml**

@model List<WeatherApp.Data.WeatherData>

<script type="text/javascript" src="https://www.gstatic.com/charts/loader.js"></script>

<div class="container-fluid jumbotron mw-100 img-fluid">

<div class="row center mw-100 w-100">

<div class="col-5"></div>

<div class="col-2">

<h1 style="font-family:'Times New Roman'">Weather ASP.NET</h1>

</div>

<div class="col-5"></div>

</div>

</div>

<div class="shadow text-left text-white" style="background-color:#3f3f3e;">

<div class="row mw-100 center w-100">

<div class="col-5"></div>

<div class="col-2">

<div style="height:0.5vw;"></div>

@using (Html.BeginForm("Search", "Weather"))

{

<label class="d-block">Search By City Name</label>

@Html.TextBox("CityName")

<button class="d-inline-block btn btn-primary text-white p-2" type="submit" value="Search" style="margin-left:0.2vw;font-family:'Times New Roman'">Search</button>

}

<div style="height:0.5vw;"></div>

</div>

<div class="col-5"></div>

</div>

</div>

<div style="height:16vw;"></div>

<div class="shadow text-white" style="background-color:#3f3f3e;">

<div class="row mw-100 center w-100">

<div class="col-3"></div>

<div class="col-3">

<div class="card">

<div class="card-body">

<div class="card-title">

</div>

</div>

</div>

</div>

<div class="col-3 text-dark">

<div id="piechart">

@if (Model == null ||

Model.Count <= 0)

{

<div class="card">

<div class="card-body">

<div class="card-title">

<h4 style="color:red;text-align:center;">Error! Could not read data</h4>

</div>

</div>

</div>

}

else

{

<div class="card">

<div class="card-body">

<div class="card-title">Population data</div>

<div class="card-text">

<script type="text/javascript">

// Load google charts

google.charts.load('current', { 'packages': ['corechart'] });

google.charts.setOnLoadCallback(drawChart);

// Draw the chart and set the chart values. TODO needs to grab value from Model[e].city.population

function drawChart() {

var data = google.visualization.arrayToDataTable([

['Task', 'Population'],

['@Model[0].name', 1000],

['@Model[1].name', 2060],

['@Model[2].name', 4004],

['@Model[3].name', 3060],

['@Model[4].name', 2000]

]);

// Optional; add a title and set the width and height of the chart

var options = {'width': 800, 'height': 400 };

// Display the chart inside the <div> element with id="piechart"

var chart = new google.visualization.PieChart(document.getElementById('piechart'));

chart.draw(data, options);

}

</script>

</div>

</div>

</div>

}

</div>

</div>

<div class="col-3"></div>

</div>

</div>

<div style="height:16vw;"></div>

**Layout.cshtml**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>@ViewData["Title"] - WebWeatherApp</title>

<link rel="stylesheet" href="~/lib/bootstrap/dist/css/bootstrap.min.css" />

<link rel="stylesheet" href="~/css/site.css" />

</head>

<body>

<header>

<nav class="navbar navbar-expand-sm navbar-toggleable-sm navbar-inverse bg-white border-bottom box-shadow">

@\*<div class="container">

<a class="navbar-brand" asp-area="" asp-controller="Weather" asp-action="Search">Search By City</a>

<button class="navbar-toggler" type="button" data-toggle="collapse" data-target=".navbar-collapse" aria-controls="navbarSupportedContent"

aria-expanded="false" aria-label="Toggle navigation">

<span class="navbar-toggler-icon"></span>

</button>

</div>\*@

</nav>

</header>

<div class="mw-100">

<main role="main" class="pb-3">

@RenderBody()

</main>

</div>

<footer class="border-top footer text-muted">

<div class="container">

<div class="row">

<div class="col-2" style="text-align:left;">

<div class="row">

<a href="https://github.com/Carpenteri1" class="d-block">

<img src="https://www.flaticon.com/svg/vstatic/svg/2111/2111432.svg?token=exp=1611438684~hmac=3c301b0744669fae0ed77d99a967a96a" height="20" width="20" />

</a>

@\*

<a href="" class="d-block">

<img src="https://www.flaticon.com/svg/vstatic/svg/174/174857.svg?token=exp=1611438577~hmac=e164a78987da3a63f62f8fa7d4bbe5c0" height="20" width="20" />

</a>

\*@

</div>

<div class="row">

</div>

<div class="row"></div>

</div>

<div class="col-8">

</div>

<div class="col-2"></div>

</div>

</div>

</footer>

<script src="~/lib/jquery/dist/jquery.min.js"></script>

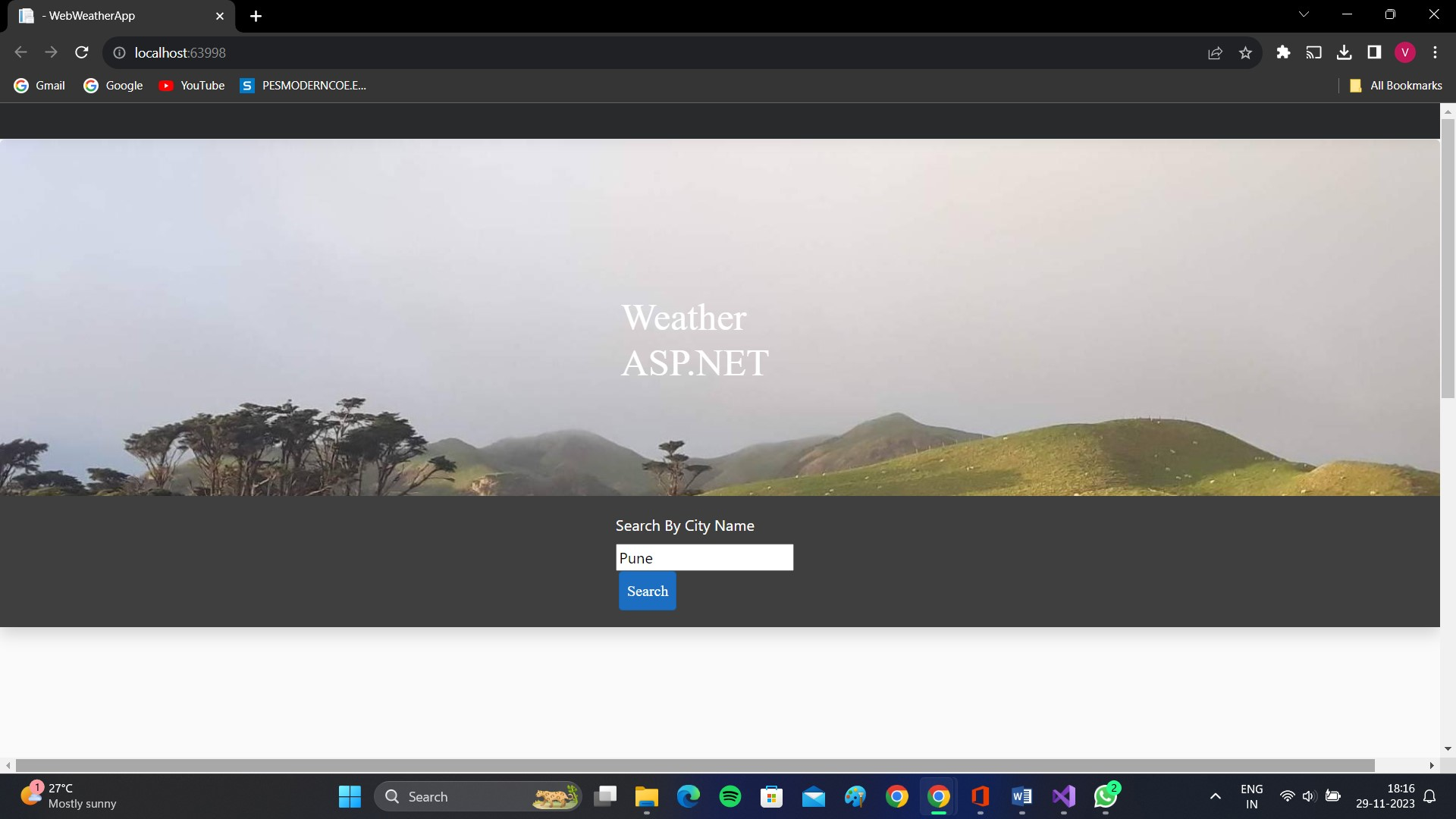
<script src="~/lib/bootstrap/dist/js/bootstrap.bundle.min.js"></script>

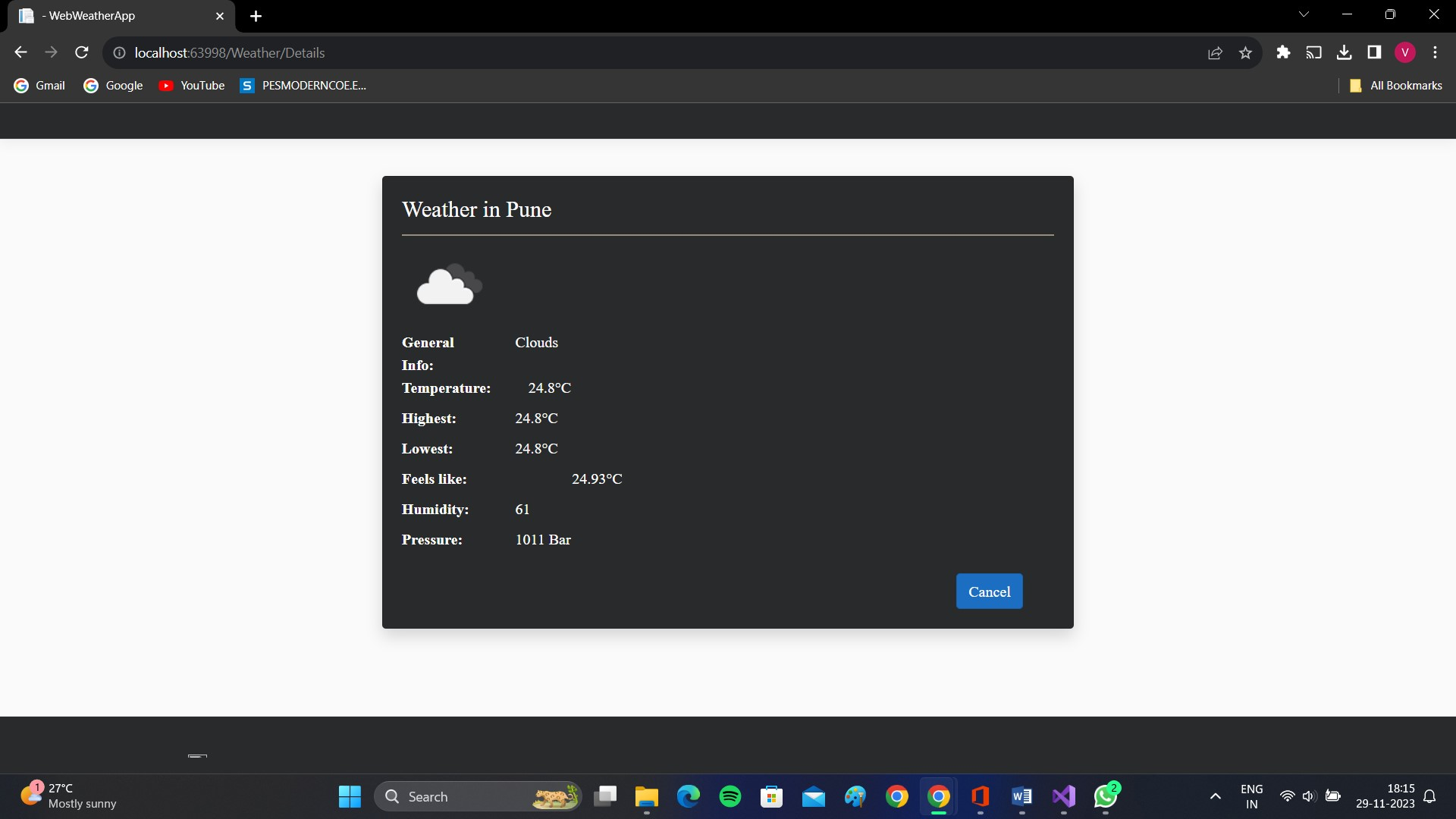
<script src="~/js/site.js" asp-append-version="true"></script>

@RenderSection("Scripts", required: false)

</body>

</html>





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