Part 1

```
public class HolidaysApiService : IHolidaysApiService
{
    private static readonly HttpClient client;
    static HolidaysApiService()
    {
        client = new HttpClient()
        {
            BaseAddress = new Uri("https://date.nager.at")
        };
    }
    public async Task<List<HolidayModel>> GetHolidays(string countryCode, int
year)
    {
        var url = string.Format("/api/v2/PublicHolidays/{0}/{1}", year,
        countryCode);
        var result = new List<HolidayModel>();
        var response = await client.GetAsync(url);
        if (response.IsSuccessStatusCode)
        {
            4
        var stringResponse = await response.Content.ReadAsStringAsync();
            result =
            JsonSerializer.Deserialize<List<HolidayModel>>(stringResponse,
            new JsonSerializerOptions()
            {
                PropertyNamingPolicy =
            JsonNamingPolicy.CamelCase
            });
        }
        else
        {
            throw new HttpRequestException(response.ReasonPhrase);
        }
        return result;
    }
}
```

```
public interface IHolidaysApiService
{
    Task<List<HolidayModel>> GetHolidays(string countryCode, int year);
}
```

```
using CECS475_Lab3.Models;
using Microsoft.AspNetCore.Mvc;
using System.Diagnostics;

namespace CECS475_Lab3.Controllers
{
    public class HomeController : Controller
    {

        private readonly IHolidaysApiService _holidaysApiService;

        public HomeController(IHolidaysApiService holidaysApiService)
        {
            _holidaysApiService = holidaysApiService;
        }

        public async Task<IActionResult> Index(string countryCode, int year)
        {
            List<HolidayModel> holidays = new List<HolidayModel>();
            holidays = await _holidaysApiService.GetHolidays(countryCode,
            year);
            return View(holidays);
        }

        public IActionResult Privacy()
        {
            return View();
        }


        [ResponseCache(Duration = 0, Location = ResponseCacheLocation.None, NoStore = true)]
        public IActionResult Error()
        {
            return View(new ErrorViewModel { RequestId = Activity.Current?.Id ?? HttpContext.TraceIdentifier });
        }


    }
}
```

```
public class HolidayModel
{
    public string Name { get; set; }
    public string LocalName { get; set; }
    public DateTime? Date { get; set; }
    public string CountryCode { get; set; }
    public bool Global { get; set; }
}
```

```
namespace CECS475_Lab3.Models
{
    public class ErrorViewModel
    {
        public string? RequestId { get; set; }

        public bool ShowRequestId => !string.IsNullOrEmpty(RequestId);
    }
}
```

Part 2

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Public Holidays Finder</title>
    <link rel="stylesheet" type="text/css" href="styles.css">
</head>
<body>
    <div class="container">
        <h3>Public Holidays Finder</h3>
        <form id="holidayForm">
            <input type="text" id="txtCountryCode" name="CountryCode" placeholder="Enter Country Code (e.g., US)" />
            <input type="text" id="txtYear" name="Year" placeholder="Enter Year (e.g., 2023)" />
            <input type="submit" value="Submit" />
        </form>
        <div id="holidayData"></div>
    </div>

    <script src="script.js"></script>
</body>
</html>

document.getElementById('holidayForm').addEventListener('submit', function(event) {
    event.preventDefault();

    var countryCode = document.getElementById('txtCountryCode').value;
    var year = document.getElementById('txtYear').value;

    fetchHolidays(countryCode, year);
});

function fetchHolidays(countryCode, year) {
    var apiUrl = `https://date.nager.at/api/v2/PublicHolidays/${year}/${countryCode}`;
    fetch(apiUrl)
    .then(response => {
        if (!response.ok) {
            throw new Error('Network response was not ok');
        }
        return response.json();
    })
    .then(data => {
        displayHolidays(data);
    })
    .catch(error => {
        console.error('Error fetching holiday data:', error);
    });
}

function displayHolidays(holidays) {
    var table = '<table>';
    table += '<thead><tr><th>Date</th><th>Name</th><th>Local Name</th><th>Country Code</th><th>Global</th></tr></thead>';
    table += '<tbody>';
    holidays.forEach(function (holiday) {
        var dateParts = holiday.date.split('-');
        var formattedDate = dateParts[1] + '/' + dateParts[2] + '/' + dateParts[0];
        table += '<tr>';
        table += `<td>${formattedDate}</td>`;
        table += `<td>${holiday.name}</td>`;
        table += `<td>${holiday.localName}</td>`;
        table += `<td>${holiday.countryCode}</td>`;
        table += `<td>${holiday.global}</td>`;
        table += '</tr>';
    });
    table += '</tbody></table>';

    document.getElementById('holidayData').innerHTML = table;
}

body {
```

```css
    font-family: Arial, sans-serif;
    background-color: #f0f0f0;
    margin: 0;
    padding: 0;
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
}

.container {
    background-color: #fff;
    border-radius: 10px;
    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
    padding: 20px;
    max-width: 600px;
    width: 100%;
    box-sizing: border-box;
}

h3 {
    text-align: center;
    margin-bottom: 20px;
    color: #333;
}

form {
    text-align: center;
}

table {
    width: 100%;
    border-collapse: collapse;
    margin-top: 20px;
}

th, td {
    border: 1px solid #ddd;
    padding: 8px;
    text-align: left;
}

th {
    background-color: #f2f2f2;
}

input[type="text"],
input[type="submit"] {
    padding: 10px;
    border-radius: 5px;
    border: 1px solid #ccc;
    margin-bottom: 10px;
    width: calc(50% - 10px);
}

input[type="submit"] {
    background-color: #4caf50;
    color: white;
    cursor: pointer;
    width: auto;
}

input[type="submit"]:hover {
    background-color: #45a049;
}
```