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

<!DOCTYPE html>

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

<head runat="server">

<title>Matching Dates</title>

</head>

<body>

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

<div><p><asp:Button ID="startProcess" runat="server" onclick="clickedButton" Text="Start Process" BorderStyle="NotSet" /></p></div>

<div><p><asp:Label ID="dateMatched" runat="server" Text="Label" BorderStyle="NotSet"></asp:Label></p></div>

<div><p><asp:Label ID="numberGenerated" runat="server" Text="Label" BorderStyle="NotSet"></asp:Label></p></div>

<div><p>Number of times process ran: <asp:Label ID="lblCounter" runat="server" Text="0" BorderStyle="NotSet"></asp:Label></p></div>

<div>

<asp:Table ID="tblResults" runat="server" BackColor="White" BorderColor="Black"

BorderWidth="3" ForeColor="Black" GridLines="Both" BorderStyle="Outset" CellPadding="5" CellSpacing="5">

<asp:TableRow>

<asp:TableCell>Count</asp:TableCell>

<asp:TableCell>Matched Date</asp:TableCell>

<asp:TableCell>Attempts</asp:TableCell>

</asp:TableRow>

</asp:Table>

</div>

</form>

</body>

</html>

using System;

using System.Collections;

using System.Collections.Generic;

using System.Diagnostics;

using System.Linq;

using System.Web;

using System.Web.UI;

using System.Web.UI.WebControls;

namespace WebApp

{

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

{

Random gen = new Random();

// Variables

string sGenDate1 = null;

string sGenDate2 = null;

int nLoopCounter;

DateTime dtGenDate2;

int nProcessCount;

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

{

sGenDate1 = GetRandomDate().ToShortDateString();

IList dateList = new ArrayList();

dateList.Add(sGenDate1);

do

{

dtGenDate2 = GetRandomDate();

sGenDate2 = dtGenDate2.ToShortDateString();

nLoopCounter++;

if (dateList.Contains(sGenDate2))

{

break;

}

else {

dateList.Add(sGenDate2);

}

} while (nLoopCounter < 1000);

// Output

dateMatched.Text = " Matching date: " + sGenDate2;

numberGenerated.Text = "Number of dates generated to find a match: " + nLoopCounter.ToString();

DisplayResults(dtGenDate2, nLoopCounter, nProcessCount);

}

private void DisplayResults(DateTime date, int lCount, int pCount)

{

TableRow row = new TableRow();

TableCell clCount = new TableCell();

TableCell clDate = new TableCell();

TableCell clAttempts = new TableCell();

clCount.Text = nLoopCounter.ToString();

row.Cells.Add(clCount);

tblResults.Rows.Add(row);

clDate.Text = dtGenDate2.ToShortDateString();

row.Cells.Add(clDate);

tblResults.Rows.Add(row);

clAttempts.Text = nProcessCount.ToString();

row.Cells.Add(clAttempts);

tblResults.Rows.Add(row);

}

protected void clickedButton(object sender, EventArgs e)

{

try

{

nProcessCount = (int)ViewState["Counter"];

}

catch (Exception)

{

nProcessCount = 0;

}

nProcessCount++;

ViewState["Counter"] = nProcessCount;

lblCounter.Text = nProcessCount.ToString();

}

// Generate Random Dates

public DateTime GetRandomDate()

{

return DateTime.Now.AddDays(gen.Next(365));

}

}

}