

Practical – 12

Aim: Create a website to retrieve data from the database and shown under the gridview with edit/update operation.

- **Code of WebForm1.aspx**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="Practical_12.WebForm1" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Employee Data</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h2>Employee Data</h2>
            <asp:TextBox ID="inp_name" runat="server" Placeholder="Name" /><br />
            <asp:TextBox ID="inp_city" runat="server" Placeholder="City" /><br />
            <asp:TextBox ID="inp_age" runat="server" Placeholder="Age" TextMode="Number"
/><br />
            <asp:TextBox ID="inp_gender" runat="server" Placeholder="Gender" /><br />
            <asp:TextBox ID="inp_join_date" runat="server" Placeholder="Join Date (yyyy-mm-dd)"
/><br />
            <asp:TextBox ID="inp_contact" runat="server" Placeholder="Contact" /><br /><br />
            <asp:Button ID="btn_add" runat="server" Text="Add" OnClick="btn_add_Click" />
            <br /><br />
            <asp:Label ID="lblMessage" runat="server" ForeColor="Green" /><br />
            <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False"
DataKeyNames="emp_id"
OnRowEditing="GridView1_RowEditing"
OnRowUpdating="GridView1_RowUpdating"
OnRowCancelingEdit="GridView1_RowCancelingEdit">
                <Columns>
                    <asp:BoundField DataField="emp_id" HeaderText="ID" ReadOnly="True" />
                    <asp:BoundField DataField="emp_name" HeaderText="Name" />
                    <asp:BoundField DataField="emp_city" HeaderText="City" />
                    <asp:BoundField DataField="emp_age" HeaderText="Age" />
                    <asp:BoundField DataField="emp_gender" HeaderText="Gender" />
                    <asp:BoundField DataField="emp_join_date" HeaderText="Join Date" />
                    <asp:BoundField DataField="emp_contact" HeaderText="Contact" />
                    <asp:CommandField ShowEditButton="True" />
                </Columns>
            </asp:GridView>
        </div>
    </form>
</body>
</html>
```

- **Design**

Employee Data

Name
City
Age
Gender
Join Date (yyyy-mm-dd)
Contact

[lblMessage]

ID	Name	City	Age	Gender	Join Date	Contact	
Databound	Databound	Databound	Databound	Databound	Databound	Databound	Edit
Databound	Databound	Databound	Databound	Databound	Databound	Databound	Edit
Databound	Databound	Databound	Databound	Databound	Databound	Databound	Edit
Databound	Databound	Databound	Databound	Databound	Databound	Databound	Edit
Databound	Databound	Databound	Databound	Databound	Databound	Databound	Edit

- **Code of WebForm1.aspx.cs**

```

using System;
using System.Data;
using System.Data.SqlClient;
using System.Web.UI.WebControls;
namespace Practical_12 {
    public partial class WebForm1 : System.Web.UI.Page {
        string connectionString = @"Data Source=(localdb)\ProjectModels;Initial
Catalog=Practical_12;Integrated Security=True;";
        protected void Page_Load(object sender, EventArgs e) {
            if (!IsPostBack) {
                LoadEmployeeData();
            }
        }
        private void LoadEmployeeData() {
            using (SqlConnection conn = new SqlConnection(connectionString)) {
                string query = "SELECT * FROM Employee";
                SqlDataAdapter da = new SqlDataAdapter(query, conn);
                DataTable dt = new DataTable();
                da.Fill(dt);
                GridView1.DataSource = dt;
                GridView1.DataBind();
            }
        }
        protected void btn_add_Click(object sender, EventArgs e) {
            using (SqlConnection conn = new SqlConnection(connectionString)) {
                string query = "INSERT INTO Employee (emp_name, emp_city, emp_age,
emp_gender, emp_join_date, emp_contact) VALUES (@Name, @City, @Age, @Gender,
@JoinDate, @Contact)";

```

```

SqlCommand cmd = new SqlCommand(query, conn);
cmd.Parameters.AddWithValue("@Name", inp_name.Text);
cmd.Parameters.AddWithValue("@City", inp_city.Text);
cmd.Parameters.AddWithValue("@Age", inp_age.Text);
cmd.Parameters.AddWithValue("@Gender", inp_gender.Text);
cmd.Parameters.AddWithValue("@JoinDate", inp_join_date.Text);
cmd.Parameters.AddWithValue("@Contact", inp_contact.Text);
try {
    conn.Open();
    cmd.ExecuteNonQuery();
    lblMessage.Text = "Employee added successfully!";
    LoadEmployeeData();
} catch (Exception ex) {
    lblMessage.Text = "Error: " + ex.Message;
}
}
protected void GridView1_RowEditing(object sender, GridViewEditEventArgs e) {
    GridView1.EditIndex = e.NewEditIndex;
    LoadEmployeeData();
}
protected void GridView1_RowCancelingEdit(object sender,
GridViewCancelEventArgs e) {
    GridView1.EditIndex = -1;
    LoadEmployeeData();
}
protected void GridView1_RowUpdating(object sender, GridViewUpdateEventArgs e) {
    GridViewRow row = GridView1.Rows[e.RowIndex];
    int empId = Convert.ToInt32(GridView1.DataKeys[e.RowIndex].Value);
    string name = ((TextBox)row.Cells[1].Controls[0]).Text;
    string city = ((TextBox)row.Cells[2].Controls[0]).Text;
    string age = ((TextBox)row.Cells[3].Controls[0]).Text;
    string gender = ((TextBox)row.Cells[4].Controls[0]).Text;
    string joinDate = ((TextBox)row.Cells[5].Controls[0]).Text;
    string contact = ((TextBox)row.Cells[6].Controls[0]).Text;

    using (SqlConnection conn = new SqlConnection(connectionString)) {
        string query = "UPDATE Employee SET emp_name = @Name, emp_city = @City,
emp_age = @Age, emp_gender = @Gender, emp_join_date = @JoinDate, emp_contact =
@Contact WHERE emp_id = @Id";
        SqlCommand cmd = new SqlCommand(query, conn);
        cmd.Parameters.AddWithValue("@Name", name);
        cmd.Parameters.AddWithValue("@City", city);
        cmd.Parameters.AddWithValue("@Age", age);
        cmd.Parameters.AddWithValue("@Gender", gender);
        cmd.Parameters.AddWithValue("@JoinDate", joinDate);
        cmd.Parameters.AddWithValue("@Contact", contact);
        cmd.Parameters.AddWithValue("@Id", empId);
        try {
            conn.Open();
            cmd.ExecuteNonQuery();

```

```

        lblMessage.Text = "Employee updated successfully!";
    } catch (Exception ex) {
        lblMessage.Text = "Error updating: " + ex.Message;
    }
}
GridView1.EditIndex = -1;
LoadEmployeeData();
}
}
}

```

- **Output**

Employee Data

Riauhas Thanki
New York
36
Male
1/8/2022 12:00:00 AM
780184829

ID	Name	City	Age	Gender	Join Date	Contact	
1	Rishi Joshi	Los Angeles	20	Male	12/8/2020 12:00:00 AM	7801848925	Edit
2	Harssh Thanki	San Francisco	20	Male	12/8/2020 12:00:00 AM	7801848924	Edit

Employee Data

Riauhas Thanki
New York
36
Male
1/8/2022 12:00:00 AM
780184829

Employee added successfully!

ID	Name	City	Age	Gender	Join Date	Contact	
1	Rishi Joshi	Los Angeles	20	Male	12/8/2020 12:00:00 AM	7801848925	Edit
2	Harssh Thanki	San Francisco	20	Male	12/8/2020 12:00:00 AM	7801848924	Edit
3	Riauhas Thanki	New York	36	Male	1/8/2022 12:00:00 AM	780184829	Edit

Practical – 13

Aim: Create a web page demonstrating the structure of MDI form.

- **Code of MDI.aspx**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="MDI.aspx.cs"
Inherits="Practical_13.MDI" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>MDI Form Simulation</title>
</head>
<body>
    <form id="form1" runat="server">
        <h2>MDI Form (Parent)</h2>
        <asp:Button ID="btnChild1" runat="server" Text="Open Child 1"
OnClick="btnChild1_Click" />
        <asp:Button ID="btnChild2" runat="server" Text="Open Child 2"
OnClick="btnChild2_Click" />
        <br /><br />
        <!-- Iframe acts as a container for child pages -->
        <iframe id="iframeChild" runat="server" style="width: 100%; height: 400px;"
src=""></iframe>
    </form>
</body>
</html>
```

- **Code of MDI.aspx.cs**

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

namespace Practical_13 {
    public partial class MDI : System.Web.UI.Page {
        protected void Page_Load(object sender, EventArgs e) {}
        Protected void btnChild1_Click(object sender, EventArgs e) {
            iframeChild.Attributes["src"] = "Child1.aspx";
        }
        protected void btnChild2_Click(object sender, EventArgs e){
            iframeChild.Attributes["src"] = "Child2.aspx";
        }
    }
}
```

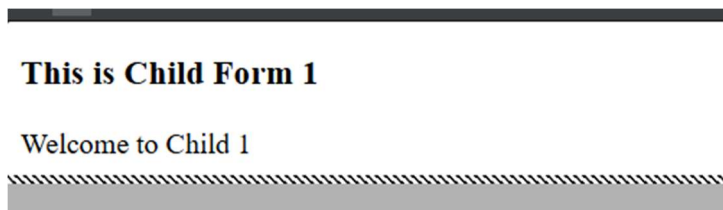
- **Design**



- **Code of Child1.aspx**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Child1.aspx.cs"
Inherits="Practical_13.WebForm2" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title>Child 1</title>
</head>
<body>
  <form id="form1" runat="server">
    <h3>This is Child Form 1</h3>
    <asp:Label ID="Label1" runat="server" Text="Welcome to Child 1"></asp:Label>
  </form>
</body>
</html>
```

- **Design**



- **Code of Child2.aspx**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Child2.aspx.cs"
Inherits="Practical_13.WebForm3" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title>Child 2</title>
</head>
<body>
  <form id="form1" runat="server">
    <h3>This is Child Form 2</h3>
    <asp:Label ID="Label1" runat="server" Text="Welcome to Child 2"></asp:Label>
  </form>
</body>
</html>
```

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

- **Design**

This is Child Form 2

Welcome to Child 2

- **Output**

MDI Form (Parent)

Open Child 1

Open Child 2

MDI Form (Parent)

Open Child 1

Open Child 2

This is Child Form 1

Welcome to Child 1

MDI Form (Parent)

Open Child 1

Open Child 2

This is Child Form 2

Welcome to Child 2

Practical – 14

Aim: Creating a website using CRUD operations.

- **Code of WebForm1.aspx**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="Practical_14.WebForm1" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Employee CRUD</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h2>Add Employee</h2>
            <asp:TextBox ID="emp_name" runat="server" Placeholder="Name"></asp:TextBox><br />
            <asp:TextBox ID="emp_city" runat="server" Placeholder="City"></asp:TextBox><br />
            <asp:TextBox ID="emp_age" runat="server" Placeholder="Age"></asp:TextBox><br />
            <asp:TextBox ID="emp_gender" runat="server"
Placeholder="Gender"></asp:TextBox><br />
            <asp:TextBox ID="emp_join_date" runat="server" Placeholder="Join Date (yyyy-mm-
dd)"></asp:TextBox><br />
            <asp:TextBox ID="emp_contact" runat="server"
Placeholder="Contact"></asp:TextBox><br />
            <asp:Button ID="btn_add" runat="server" Text="Add" OnClick="btn_add_Click" /><br
/>

            <asp:Label ID="lblMessage" runat="server" ForeColor="Green" /><br /><br />
            <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False"
DataKeyNames="emp_id"
OnRowEditing="GridView1_RowEditing"
OnRowUpdating="GridView1_RowUpdating"
OnRowCancelingEdit="GridView1_RowCancelingEdit"
OnRowDeleting="GridView1_RowDeleting">
                <Columns>
                    <asp:BoundField DataField="emp_id" HeaderText="ID" ReadOnly="True" />
                    <asp:BoundField DataField="emp_name" HeaderText="Name" />
                    <asp:BoundField DataField="emp_city" HeaderText="City" />
                    <asp:BoundField DataField="emp_age" HeaderText="Age" />
                    <asp:BoundField DataField="emp_gender" HeaderText="Gender" />
                    <asp:BoundField DataField="emp_join_date" HeaderText="Join Date" />
                    <asp:BoundField DataField="emp_contact" HeaderText="Contact" />
                    <asp:CommandField ShowEditButton="True" ShowDeleteButton="True" />
                </Columns>
            </asp:GridView>
        </div>
    </form>
</body>
</html>
```


- **Design**

Add Employee

Name
City
Age
Gender
Join Date (yyyy-mm-dd)
Contact
<input type="button" value="Add"/>

[lblMessage]

ID	Name	City	Age	Gender	Join Date	Contact	
Databound	Databound	Databound	Databound	Databound	Databound	Databound	Edit Delete
Databound	Databound	Databound	Databound	Databound	Databound	Databound	Edit Delete
Databound	Databound	Databound	Databound	Databound	Databound	Databound	Edit Delete
Databound	Databound	Databound	Databound	Databound	Databound	Databound	Edit Delete
Databound	Databound	Databound	Databound	Databound	Databound	Databound	Edit Delete

- **Code of WebForm1.aspx.cs**

```

using System;
using System.Data;
using System.Data.SqlClient;
using System.Web.UI;
using System.Web.UI.WebControls;
namespace Practical_14 {
    public partial class We1\bForm1 : System.Web.UI.Page {
        string connectionString = @"Data Source=(localdb)\ProjectModels;Initial
Catalog=Practical_12;Integrated Security=True;Connect Timeout=30;Encrypt=False;";
        protected void Page_Load(object sender, EventArgs e) {
            if (!IsPostBack) {
                LoadEmployeeData();
            }
        }
        private void LoadEmployeeData() {
            using (SqlConnection conn = new SqlConnection(connectionString)) {
                SqlDataAdapter da = new SqlDataAdapter("SELECT * FROM Employee", conn);
                DataTable dt = new DataTable();
                da.Fill(dt);
                GridView1.DataSource = dt;
                GridView1.DataBind();
            }
        }
        protected void btn_add_Click(object sender, EventArgs e) {
            using (SqlConnection conn = new SqlConnection(connectionString)) {
                SqlCommand cmd = new SqlCommand("INSERT INTO Employee (emp_name,
emp_city, emp_age, emp_gender, emp_join_date, emp_contact) VALUES (@Name, @City,
@Age, @Gender, @JoinDate, @Contact)", conn);
                cmd.Parameters.AddWithValue("@Name", emp_name.Text);
            }
        }
    }
}

```

```

        cmd.Parameters.AddWithValue("@City", emp_city.Text);
        cmd.Parameters.AddWithValue("@Age", emp_age.Text);
        cmd.Parameters.AddWithValue("@Gender", emp_gender.Text);
        cmd.Parameters.AddWithValue("@JoinDate", emp_join_date.Text);
        cmd.Parameters.AddWithValue("@Contact", emp_contact.Text);
        conn.Open();
        cmd.ExecuteNonQuery();
        conn.Close();
        lblMessage.Text = "Employee added successfully!";
        LoadEmployeeData();
    }
}

protected void GridView1_RowEditing(object sender, GridViewEditEventArgs e) {
    GridView1.EditIndex = e.NewEditIndex;
    LoadEmployeeData();
}

protected void GridView1_RowCancelingEdit(object sender,
GridViewCancelEventArgs e) {
    GridView1.EditIndex = -1;
    LoadEmployeeData();
}

protected void GridView1_RowUpdating(object sender, GridViewUpdateEventArgs e) {
    int id = Convert.ToInt32(GridView1.DataKeys[e.RowIndex].Value);
    GridViewRow row = GridView1.Rows[e.RowIndex];
    string name = ((TextBox)row.Cells[1].Controls[0]).Text;
    string city = ((TextBox)row.Cells[2].Controls[0]).Text;
    string age = ((TextBox)row.Cells[3].Controls[0]).Text;
    string gender = ((TextBox)row.Cells[4].Controls[0]).Text;
    string joinDate = ((TextBox)row.Cells[5].Controls[0]).Text;
    string contact = ((TextBox)row.Cells[6].Controls[0]).Text;
    using (SqlConnection conn = new SqlConnection(connectionString)) {
        SqlCommand cmd = new SqlCommand("UPDATE Employee SET
emp_name=@Name, emp_city=@City, emp_age=@Age, emp_gender=@Gender,
emp_join_date=@JoinDate, emp_contact=@Contact WHERE emp_id=@Id", conn);
        cmd.Parameters.AddWithValue("@Name", name);
        cmd.Parameters.AddWithValue("@City", city);
        cmd.Parameters.AddWithValue("@Age", age);
        cmd.Parameters.AddWithValue("@Gender", gender);
        cmd.Parameters.AddWithValue("@JoinDate", joinDate);
        cmd.Parameters.AddWithValue("@Contact", contact);
        cmd.Parameters.AddWithValue("@Id", id);
        conn.Open();
        cmd.ExecuteNonQuery();
    }
    GridView1.EditIndex = -1;
    LoadEmployeeData();
}

protected void GridView1_RowDeleting(object sender, GridViewDeleteEventArgs e) {
    int id = Convert.ToInt32(GridView1.DataKeys[e.RowIndex].Value);
    using (SqlConnection conn = new SqlConnection(connectionString)) {

```

```

        SqlCommand cmd = new SqlCommand("DELETE FROM Employee WHERE
emp_id=@Id", conn);
        cmd.Parameters.AddWithValue("@Id", id);
        conn.Open();
        cmd.ExecuteNonQuery();
    }
    LoadEmployeeData();
}
}
}
}

```

- **Output**

Add Employee

Name
City
Age
Gender
Join Date (yyyy-mm-dd)
Contact
<input type="button" value="Add"/>

ID	Name	City	Age	Gender	Join Date	Contact	
1	Rishi Joshi	Los Angeles	20	Male	12/8/2020 12:00:00 AM	7801848925	Edit Delete
2	Harssh Thanki	San Francisco	20	Male	12/8/2020 12:00:00 AM	7801848924	Edit Delete
3	Riauhas Thanki	New York	36	Male	1/8/2022 12:00:00 AM	780184829	Edit Delete

Practical – 15

Aim: Creating a website using Web services for addition of two numbers

- **Code of WebService1.asmx.cs**

```
using System;
using System.Web.Services;
namespace Practical_15 {
    [WebService(Namespace = "http://tempuri.org/")]
    [WebServiceBinding(ConformsTo = WsiProfiles.BasicProfile1_1)]
    [System.ComponentModel.ToolboxItem(false)]
    public class WebService1 : System.Web.Services.WebService {
        public int Add(int a, int b) {
            return a + b;
        }
        public int Subtract(int a, int b) {
            return a - b;
        }
        public int Multiply(int a, int b) {
            return a * b;
        }
        public double Divide(double a, double b) {
            if (b == 0)
                return double.NaN; // Return Not-a-Number if division by zero
            return a / b;
        }
    }
}
```

- **Output**

Add

Test

To test the operation using the HTTP POST protocol, click the 'Invoke' button.

Parameter	Value
a:	<input type="text" value="5"/>
b:	<input type="text" value="6"/>

This XML file does not appear to have any style inf

```
<int xmlns="http://tempuri.org/">11</int>
```

Divide

Test

To test the operation using the HTTP POST protocol, click the 'Invoke' button.

Parameter	Value
a:	<input type="text" value="10"/>
b:	<input type="text" value="2"/>

This XML file does not appear to have any style inform

```
<double xmlns="http://tempuri.org/">5</double>
```