**Gridview basic example for insert update and delete the records**

1. Insert the data in database
2. Binding the data to gridview from database
3. Grid view row editing
4. Updating the records in database
5. Grid view row deleting and taking confirmation before deleting the record

**SQL query to create table tblCustomers :**

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

SET ANSI\_PADDING ON

GO

CREATE TABLE [dbo].[tblCustomers](

      [CustomerID] [int] IDENTITY(1,1) NOT NULL,

      [CustomerName] [varchar](50) NULL,

      [PhoneNumber] [varchar](10) NULL,

      [Address] [varchar](200) NULL,

      [IsActive] [bit] NULL,

 CONSTRAINT [PK\_tblCustomers] PRIMARY KEY CLUSTERED

(

      [CustomerID] ASC

)WITH (PAD\_INDEX  = OFF, STATISTICS\_NORECOMPUTE  = OFF, IGNORE\_DUP\_KEY = OFF,ALLOW\_ROW\_LOCKS  = ON, ALLOW\_PAGE\_LOCKS  = ON) ON [PRIMARY]

) ON [PRIMARY]

GO

SET ANSI\_PADDING OFF

GO

**GridviewSample.aspx**

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

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN""http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

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

<head runat="server">

    <title>Gridview Basics example.</title>

    <style type="text/css">

        .gv

        {

            font-family: Arial;

            margin-top: 30px;

            font-size: 14px;

        }

        .gv th

        {

            background-color: #5D7B9D;

            font-weight: bold;

            color: #fff;

            padding: 2px 10px;

        }

        .gv td

        {

            padding: 2px 10px;

        }

        input[type="submit"]

        {

            margin: 2px 10px;

            padding: 2px 20px;

            background-color: #5D7B9D;

            border-radius: 10px;

            border: solid 1px #000;

            cursor: pointer;

            color: #fff;

        }

        input[type="submit"]:hover

        {

            background-color: orange;

        }

    </style>

</head>

<body>

    <form id="form1" runat="server">

    <div>

        <table align="center" style="position: relative; top: 20px;">

            <tr>

                <td>

                    <table align="center">

                        <tr>

                            <td>

                                Customer Name :

                            </td>

                            <td>

                                <asp:TextBox ID="txtCustomerName" runat="server"MaxLength="50" Width="250px"></asp:TextBox>

                            </td>

                        </tr>

                        <tr>

                            <td>

                                Phone Number :

                            </td>

                            <td>

                                <asp:TextBox ID="txtPhoneNumber" runat="server"MaxLength="10" Width="250px"></asp:TextBox>

                            </td>

                        </tr>

                        <tr>

                            <td>

                                Address :

                            </td>

                            <td>

                                <asp:TextBox ID="txtAddress" runat="server" MaxLength="200"Width="250px"></asp:TextBox>

                            </td>

                        </tr>

                        <tr>

                            <td colspan="2" align="center">

                                <asp:Button ID="btnSave" runat="server" Text="Save"OnClick="btnSave\_Click" />

                                <asp:Button ID="btnUpdate" runat="server" Text="Update"OnClick="btnUpdate\_Click"

                                    Visible="false" />

                                <asp:Button ID="btnClear" runat="server" Text="Clear"OnClick="btnClear\_Click" />

                            </td>

                        </tr>

                    </table>

                </td>

            </tr>

            <tr>

                <td align="center">

                    <br />

                    <asp:Label ID="lblMessage" runat="server" EnableViewState="false"ForeColor="Blue"></asp:Label>

                </td>

            </tr>

            <tr>

                <td>

                    <asp:GridView ID="gvDepartments" runat="server"AutoGenerateColumns="False" ShowHeaderWhenEmpty="True"

                        EmptyDataText="No Records Found" GridLines="both" CssClass="gv"EmptyDataRowStyle-ForeColor="Red">

                        <Columns>

                            <asp:TemplateField HeaderText="Customer Name">

                                <ItemTemplate>

                                    <asp:Label ID="lblCustomerName" runat="server"Text='<%#Eval("CustomerName") %>'></asp:Label>

                                </ItemTemplate>

                            </asp:TemplateField>

                            <asp:TemplateField HeaderText="Phone Number">

                                <ItemTemplate>

                                    <asp:Label ID="lblPhoneNumber" runat="server"Text='<%#Eval("PhoneNumber") %>'></asp:Label>

                                </ItemTemplate>

                            </asp:TemplateField>

                            <asp:TemplateField HeaderText="Address">

                                <ItemTemplate>

                                    <asp:Label ID="lblAddress" runat="server"Text='<%#Eval("Address") %>'></asp:Label>

                                </ItemTemplate>

                            </asp:TemplateField>

                            <asp:TemplateField HeaderText="Action">

                                <ItemTemplate>

                                    <asp:Button ID="btnEdit" runat="server" Text="Edit"OnClick="btnEdit\_Click" />

                                    <asp:Button ID="btnDelete" runat="server" Text="Delete"OnClientClick="return confirm('Are you sure? want to delete the department.');"

                                        OnClick="btnDelete\_Click" />

                                    <asp:Label ID="lblCustomerID" runat="server"Text='<%#Eval("CustomerID") %>' Visible="false"></asp:Label>

                                </ItemTemplate>

                            </asp:TemplateField>

                        </Columns>

                    </asp:GridView>

                </td>

            </tr>

        </table>

        <input type="hidden" runat="server" id="hidCustomerID" />

    </div>

    </form>

</body>

</html>

**GridviewSample.aspx.cs (Codebehind)**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Web;

using System.Web.UI;

using System.Web.UI.WebControls;

using System.Data.SqlClient;

using System.Data;

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

{

    SqlConnection con = new SqlConnection(@"Data Source=localhost\sqlexpress;persist security info=True; Integrated Security=SSPI; Database=Sample;");

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

    {

        try

        {

            txtCustomerName.Focus();

            if (!IsPostBack)

            {

                FillGrid();

            }

        }

        catch

        {

        }

    }

    void FillGrid()

    {

        try

        {

            SqlCommand cmd = new SqlCommand();

            cmd.CommandText = "Select CustomerID,CustomerName,PhoneNumber,Address from tblCustomers where IsActive=1";

            cmd.Connection = con;

            SqlDataAdapter da = new SqlDataAdapter(cmd);

            DataSet ds = new DataSet();

            da.Fill(ds);

            gvDepartments.DataSource = ds;

            gvDepartments.DataBind();

        }

        catch

        {

        }

    }

    void ClearControls()

    {

        try

        {

            txtCustomerName.Text = "";

            txtPhoneNumber.Text = "";

            txtAddress.Text = "";

            hidCustomerID.Value = "";

            btnSave.Visible = true;

            btnUpdate.Visible = false;

        }

        catch

        {

            throw;

        }

    }

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

    {

        try

        {

            SqlCommand cmd = new SqlCommand();

            cmd.CommandText = "insert into tblCustomers (CustomerName,PhoneNumber,Address,IsActive) values (@CustomerName,@PhoneNumber,@Address,1)";

            cmd.Parameters.AddWithValue("@CustomerName", txtCustomerName.Text);

            cmd.Parameters.AddWithValue("@PhoneNumber", txtPhoneNumber.Text);

            cmd.Parameters.AddWithValue("@Address", txtAddress.Text);

            cmd.Connection = con;

            con.Open();

            cmd.ExecuteNonQuery();

            con.Close();

            FillGrid();

            ClearControls();

            lblMessage.Text = "Saved Successfully.";

        }

        catch

        {

        }

        finally

        {

            if (con.State == ConnectionState.Open)

                con.Close();

        }

    }

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

    {

        try

        {

            ClearControls();

        }

        catch

        {

        }

    }

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

    {

        try

        {

            ClearControls();

            Button btn = sender as Button;

            GridViewRow grow = btn.NamingContainer as GridViewRow;

            hidCustomerID.Value = (grow.FindControl("lblCustomerID") as Label).Text;

            txtCustomerName.Text = (grow.FindControl("lblCustomerName") as Label).Text;

            txtPhoneNumber.Text = (grow.FindControl("lblPhoneNumber") as Label).Text;

            txtAddress.Text = (grow.FindControl("lblAddress") as Label).Text;

            btnSave.Visible = false;

            btnUpdate.Visible = true;

        }

        catch

        {

        }

    }

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

    {

        try

        {

            SqlCommand cmd = new SqlCommand();

            cmd.CommandText = "update tblCustomers set CustomerName=@CustomerName,PhoneNumber=@PhoneNumber,Address=@Address where CustomerID=@CustomerID";

            cmd.Parameters.AddWithValue("@CustomerName", txtCustomerName.Text);

            cmd.Parameters.AddWithValue("@PhoneNumber", txtPhoneNumber.Text);

            cmd.Parameters.AddWithValue("@Address", txtAddress.Text);

            cmd.Parameters.AddWithValue("@CustomerID", hidCustomerID.Value);

            cmd.Connection = con;

            con.Open();

            cmd.ExecuteNonQuery();

            con.Close();

            FillGrid();

            ClearControls();

            lblMessage.Text = "Updated Successfully.";

        }

        catch

        {

        }

        finally

        {

            if (con.State == ConnectionState.Open)

                con.Close();

        }

    }

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

    {

        try

        {

            ClearControls();

            Button btn = sender as Button;

            GridViewRow grow = btn.NamingContainer as GridViewRow;

            SqlCommand cmd = new SqlCommand();

            cmd.CommandText = "update tblCustomers set IsActive=0 where CustomerID=@CustomerID";

            cmd.Parameters.AddWithValue("@CustomerID", (grow.FindControl("lblCustomerID") asLabel).Text);

            cmd.Connection = con;

            con.Open();

            cmd.ExecuteNonQuery();

            con.Close();

            FillGrid();

            lblMessage.Text = "Deleted Successfully.";

        }

        catch

        {

        }

        finally

        {

            if (con.State == ConnectionState.Open)

                con.Close();

        }

    }

}