

A Simple Demonstration with ASP.net GridView

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GridView is a powerful control of ASP.net. Here I tried to demonstrate gridview with a simple project. I have stored employee information then displayed it in gridview and insert, update and delete employee information.

Step 1: Create a table name hrm_employee and insert some sample data in it.

```
--Create Table : hrm_employee---
CREATE TABLE hrm_employee
(
    emp_gid INT PRIMARY KEY IDENTITY,
    emp_fullnm VARCHAR(100),
    emp_nicknm VARCHAR(50),
    emp_designation VARCHAR(100)
)

---Insert data ito table: hrm_employee----

-- Insert data i.e. row-1 ---
INSERT INTO hrm_employee
(
    emp_fullnm
    , emp_nicknm
    , emp_designation
)
VALUES
(
    'Md. Mahedee Hasan'
    , 'Mahedee'
    , 'Senior Software Engineer'
)

-- Insert data i.e. row-2 ---
INSERT INTO hrm_employee
(
    emp_fullnm
    , emp_nicknm
    , emp_designation
)
VALUES
(
    'Md. Asrafuzzaman'
    , 'Emon'
    , 'Senior Software Engineer'
)

-- Insert data i.e. row-3 ---
INSERT INTO hrm_employee
(
    emp_fullnm
    , emp_nicknm
```

```

        , emp_designation
    )
VALUES
(
    'Md. Khondakar Enamul Haque'
    , 'Rony'
    , 'Broadcast Engineer'
)

```

Step 2: Create an ASP.net website with 3 Layers - DAL for data access layer, BLL for Business Logic Layer and presentation Layer. Also create another layer name Model for mapping with data.

Step 3: Create connection string in web.config file.

```

<connectionstrings>
  <add name="SQLServerConnectionString" connectionstring="Data
Source=SOFT;Initial Catalog=TestDB;User ID=sa;Password=sa"
providername="System.Data.SqlClient">
</add></connectionstrings>

```

Step 4: Create Images Folder and store icon edit_icon.gif for edit and icon_remove.png for delete.

Step 5: Create EmployeeInfo model class.

```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;

///
/// Model class of EmployeeInfo
///

public class EmployeeInfo
{
    public int EmpGid { get; set; }
    public string EmpFullNm { get; set; }
    public string EmpNickNm { get; set; }
    public string EmpDesignation { get; set; }
}

```

Step 6: Create a DBConnector Class for connecting with database in DAL.

```
/// Class          : DBConnector
/// Author         : Md. Mahedee Hasan
/// Purpose        : For Connecting with database
///Creation Date   : 21/04/201
///
=====
///  || Modification History ||
///  -----
//
///  S1
No.      Date:              Author:              Ver:  Area of
Change:
///
///*****
*****

using System;
using System.Data;
using System.Configuration;
using System.Web;
using System.Web.Security;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Web.UI.WebControls.WebParts;
using System.Web.UI.HtmlControls;
using System.Data.SqlClient;

public class DBConnector
{
    private string connectionString = null;
    private SqlConnection sqlConn = null;
    private SqlCommand cmd = null;

    public DBConnector()
    {
        connectionString =
ConfigurationManager.ConnectionStrings["SQLServerConnectionString"].ToString(
);
    }

    public void SetMainConnectionString()
    {
        connectionString =
ConfigurationManager.ConnectionStrings["BlueChipConnectionString"].ToString(
);
    }

    public SqlCommand GetCommand()
    {
        cmd = new SqlCommand();
        cmd.Connection = sqlConn;
        return cmd;
    }
}
```

```

        public SqlConnection GetConn()
        {
            sqlConn = new SqlConnection(connectionString);
            return sqlConn;
        }
    }
}

```

Step 7: Create EmployeeInfoDAL class in DAL layer for accessing data (Employee Information related) from database.

Step 8: Create EmployeeInfoBLL in BLL for writing business logic and accessing data by DAL.

```

/// Class          : EmployeeInfoBLL
/// Author         : Md. Mahedee Hasan
/// Purpose        : Business Logic Layer - Write business logic here
/// Creation Date   : 21/04/2012
///
=====
/// || Modification History ||
///-----
/// Sl No.   Date:           Author:           Ver:           Area of Change:
///
/// *****

using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Data;

///
/// Summary description for EmployeeInfoBLL
///

public class EmployeeInfoBLL
{
    public EmployeeInfoBLL()
    {

    }

    public DataTable GetEmployeeInfoAll()
    {
        try
        {
            EmployeeInfoDAL objEmployeeInfoDAL = new EmployeeInfoDAL();
            return objEmployeeInfoDAL.GetEmployeeInfoAll();
        }
        catch (Exception exp)

```

```

        {
            throw (exp);
        }
    }

    public string SaveEmployeeInfo(EmployeeInfo objEmployeeInfo)
    {
        try
        {
            EmployeeInfoDAL objEmployeeInfoDAL = new EmployeeInfoDAL();
            return objEmployeeInfoDAL.InsertEmployeeInfo(objEmployeeInfo);
        }
        catch (Exception exp)
        {
            throw (exp);
        }
    }

    public string EditEmployeeInfo(EmployeeInfo objEmployeeInfo)
    {
        try
        {
            EmployeeInfoDAL objEmployeeInfoDAL = new EmployeeInfoDAL();
            return objEmployeeInfoDAL.UpdateEmployeeInfo(objEmployeeInfo);
        }
        catch (Exception exp)
        {
            throw (exp);
        }
    }

    public string RemoveEmployeeInfo(int empGid)
    {
        try
        {
            EmployeeInfoDAL objEmployeeInfoDAL = new EmployeeInfoDAL();
            return objEmployeeInfoDAL.DeleteEmployeeInfo(empGid);
        }
        catch (Exception exp)
        {
            throw (exp);
        }
    }
}

```

Step 9: Create a gridview and update form in UI page (Here Default.aspx).

Default.aspx

```

<table>
    <tr>

```

```

        <td align="right">
            Full Name :
        <td>
        <td>
            <asp:TextBox ID="txtEmpFullNm" Width ="200px"
runat="server">asp:TextBox>
        <td>
    <tr>
    <tr>
        <td align="right">
            Nick Name :
        <td>
        <td>
            <asp:TextBox ID="txtEmpNickNm" Width ="200px"
runat="server">asp:TextBox>
        <td>
    <tr>

    <tr>
        <td align="right">
            Designation :
        <td>
        <td>
            <asp:TextBox ID="txtDesignation" runat="server"
                Width="200px">asp:TextBox>
        <td>
    <tr>
table>

    <asp:Button ID = "btnSave" runat = "server" Text ="Save"
Height="23px"
        style="font-weight: 700" Width="100px" onclick="btnSave_Click"
/>

    <asp:HiddenField ID ="hf_emp_gid" runat ="server" />
    <br />
    <br />
    <asp:GridView ID="gvEmpInfo" runat="server"
AutoGenerateColumns="False" CellPadding="4"
        ForeColor="#333333" GridLines="None">
        <AlternatingRowStyle BackColor="White" />
        <Columns>
            <asp:BoundField DataField="emp_fullnm" HeaderText="Full
Name" />
            <asp:BoundField DataField="emp_nicknm" HeaderText="Nick
Name" />

```

```

        <asp:BoundField DataField="emp_designation"
HeaderText="Designation" />
        <asp:TemplateField HeaderText="Edit">
            <ItemStyle HorizontalAlign="Center"
VerticalAlign="Middle" Width="80px" />
            <ItemTemplate>
                <asp:HiddenField ID="hidemp_gid" runat="server"
Value='<%#Eval("emp_gid") %>' />
                <asp:LinkButton ID="btnEdit" Text="Edit"
runat="server" CausesValidation="false"
RowIndex='<%# Container.DisplayIndex %>'
OnClick="btnEdit_Click">
                    <img style="border:none;" src =
"Images/edit_icon.gif"/>asp:LinkButton>
                </ItemTemplate>
            <asp:TemplateField>
                <asp:TemplateField HeaderText="Delete">
                    <ItemStyle HorizontalAlign="Center"
VerticalAlign="Middle" Width="80px" />
                    <ItemTemplate>
                        <asp:LinkButton ID="btnDelete" Text="Delete"
runat="server" CausesValidation="false"
RowIndex='<%# Container.DisplayIndex %>'
OnClick="btnDelete_Click">
                            <img style="border:none;" src =
"Images/icon_remove.png"/>asp:LinkButton>
                        </ItemTemplate>
                    </asp:TemplateField>
                </asp:TemplateField>
            </Columns>
            <EditRowStyle BackColor="#2461BF" />
            <FooterStyle BackColor="#507CD1" Font-Bold="True"
ForeColor="White" />
            <HeaderStyle BackColor="#507CD1" Font-Bold="True"
ForeColor="White" />
            <PagerStyle BackColor="#2461BF" ForeColor="White"
HorizontalAlign="Center" />
            <RowStyle BackColor="#EFF3FB" />
            <SelectedRowStyle BackColor="#D1DDF1" Font-Bold="True"
ForeColor="#333333" />
            <SortedAscendingCellStyle BackColor="#F5F7FB" />
            <SortedAscendingHeaderStyle BackColor="#6D95E1" />
            <SortedDescendingCellStyle BackColor="#E9EBEF" />
            <SortedDescendingHeaderStyle BackColor="#4870BE" />
        </asp:GridView>

```

Defult.aspx.cs

```
/// Author : Md. Mahedee Hasan
/// Purpose : Code behind of Default.aspx page
/// Creation Date : 21/04/2012
///
=====
/// || Modification History ||
/// -----
/// Sl No. Date: Author: Ver: Area of Change:
///
/// *****

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

public partial class _Default : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        if (!Page.IsPostBack)
        {
            Load_gvEmpInfo();
        }
    }

    ///
    /// Binding gridview gvEmpInfo
    ///

    private void Load_gvEmpInfo()
    {
        EmployeeInfoBLL objEmployeeInfoBLL = new EmployeeInfoBLL();
        this.gvEmpInfo.DataSource = objEmployeeInfoBLL.GetEmployeeInfoAll();
        this.gvEmpInfo.DataBind();
    }

    protected void btnEdit_Click(object sender, EventArgs e)
    {
        this.btnSave.Text = "Edit";

        LinkButton btnEdit = sender as LinkButton;

        //Identify the clicked row
        int rowIndex = Convert.ToInt32(btnEdit.Attributes["RowIndex"]);
    }
}
```



```

        GridViewRow gvRow = this.gvEmpInfo.Rows[rowIndex];

        //Identify the hidden filed value of clicked row
        int emp_gid =
        Convert.ToInt32(((HiddenField)gvRow.FindControl("hidemp_gid")).Value);

        this.txtEmpFullNm.Text = gvRow.Cells[0].Text;
        this.txtEmpNickNm.Text = gvRow.Cells[1].Text;
        this.txtDesignation.Text = gvRow.Cells[2].Text;

        this.hf_emp_gid.Value = emp_gid.ToString();

    }

```

```

protected void btnDelete_Click(object sender, EventArgs e)
{
    LinkButton btnDelete = sender as LinkButton;

    //Identify the clicked row
    int rowIndex = Convert.ToInt32(btnDelete.Attributes["RowIndex"]);

    GridViewRow gvRow = this.gvEmpInfo.Rows[rowIndex];

    //Identify the hidden filed value of clicked row
    int emp_gid =
    Convert.ToInt32(((HiddenField)gvRow.FindControl("hidemp_gid")).Value);

    string msg = String.Empty;

    try
    {
        EmployeeInfoBLL objEmployeeInfoBLL = new EmployeeInfoBLL();
        msg = objEmployeeInfoBLL.RemoveEmployeeInfo(emp_gid);
        Load_gvEmpInfo();
        ClearForm();
    }
    catch (Exception exp)
    {
        msg = exp.Message;
    }

}

```

```

protected void btnSave_Click(object sender, EventArgs e)
{
    String msg = String.Empty;
    Button btnSave = sender as Button;

```

```

EmployeeInfoBLL objEmployeeInfoBLL = new EmployeeInfoBLL();
EmployeeInfo objEmployeeInfo = new EmployeeInfo();
objEmployeeInfo.EmpFullNm = this.txtEmpFullNm.Text;
objEmployeeInfo.EmpNickNm = this.txtEmpNickNm.Text;
objEmployeeInfo.EmpDesignation = this.txtDesignation.Text;

try
{
    if (btnSave.Text == "Edit")
    {
        objEmployeeInfo.EmpGid =
Convert.ToInt32(this.hf_emp_gid.Value);
        msg = objEmployeeInfoBLL.EditEmployeeInfo(objEmployeeInfo);
        this.btnSave.Text = "Save";
    }
    else
    {
        msg = objEmployeeInfoBLL.SaveEmployeeInfo(objEmployeeInfo);
    }

    Load_gvEmpInfo();
    ClearForm();
}
catch (Exception exp)
{
    msg = exp.Message;
}

}

///
/// Clear form
///

private void ClearForm()
{
    this.txtEmpFullNm.Text = "";
    this.txtEmpNickNm.Text = "";
    this.txtDesignation.Text = "";
}
}

```

Yes! You have done this. Now you will see the following form where you can insert update and delete employee information.

Employee Information











Md. Mahedee Hasan

Full Name :

Nick Name :

Designation :

Edit

Full Name	Nick Name	Designation	Edit	Delete
Md. Mahedee Hasan	Mahedee	Senior Software Engineer		
Md. Asrafuzzaman	Emon	Senior Software Engineer		
Md. Khondakar Enamul Haque	Rony	Broadcast Engineer		
Md. Jakir Hossain	Jakir	Senior Accountants		
Md. Safiul Bashar	Sonnet	Software Engineer		

Source: <http://mahedee.blogspot.com/2012/04/simple-demonstration-with-aspnet.html>