

## Practical 10: CRUD using Repeater Control

Default.aspx:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Default.aspx.cs"
Inherits="RepeaterCrudDemo.Default" %>

<!DOCTYPE html>
<html>
<head runat="server">
    <title>Repeater CRUD Demo</title>
    <style>
        .row { margin-bottom: 8px; }
        .label { display:inline-block; width:100px; }
        .table { width:100%; border-collapse:collapse; margin-top:10px; }
        .table th, .table td { border:1px solid #ccc; padding:6px; text-align:left; }
    </style>
</head>
<body>
    <form id="form1" runat="server">
        <div style="width:700px; margin:20px auto;">
            <h2>Employee CRUD (Repeater)</h2>

            <!-- Add new employee -->
            <asp:Panel ID="pnlAdd" runat="server">
                <div class="row">
                    <span class="label">Full Name:</span>
                    <asp:TextBox ID="txtFullName" runat="server"></asp:TextBox>
                    <asp:RequiredFieldValidator ID="rfvName"
ControlToValidate="txtFullName"
ErrorMessage="Required" ForeColor="Red" runat="server"
Display="Dynamic" />
                </div>
                <div class="row">
                    <span class="label">Email:</span>
                    <asp:TextBox ID="txtEmail" runat="server"></asp:TextBox>
                </div>
                <div class="row">
                    <span class="label">Department:</span>
                    <asp:TextBox ID="txtDept" runat="server"></asp:TextBox>
                </div>
                <div class="row">
                    <span class="label">Salary:</span>
                    <asp:TextBox ID="txtSalary" runat="server"></asp:TextBox>
                </div>
                <asp:Button ID="btnAdd" runat="server" Text="Add Employee"
OnClick="btnAdd_Click" />
                <hr />
            </asp:Panel>

            <!-- Repeater -->
            <asp:Repeater ID="rptEmployees" runat="server"
OnItemCommand="rptEmployees_ItemCommand"
OnItemDataBound="rptEmployees_ItemDataBound">
                <HeaderTemplate>
                    <table class="table">
                        <tr>
                            <th>Full Name</th>
                            <th>Email</th>
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        <th>Department</th>
        <th>Salary</th>
        <th>Actions</th>
    </tr>
</HeaderTemplate>

<ItemTemplate>
    <tr>
        <td>
            <!-- View panel -->
            <asp:Panel ID="pView" runat="server">
                <%# Eval("FullName") %>
            </asp:Panel>

            <!-- Edit panel -->
            <asp:Panel ID="pEdit" runat="server" Visible="false">
                <asp:TextBox ID="txtEditTextName" runat="server" Text='<%# Eval("FullName") %>'></asp:TextBox>
                </asp:Panel>
            </td>
            <td>
                <asp:Panel ID="pViewEmail" runat="server"><%# Eval("Email") %></asp:Panel>
                <asp:Panel ID="pEditEmail" runat="server" Visible="false">
                    <asp:TextBox ID="txtEditTextEmail" runat="server" Text='<%# Eval("Email") %>'></asp:TextBox>
                    </asp:Panel>
                </td>
                <td>
                    <asp:Panel ID="pViewDept" runat="server"><%# Eval("Department") %></asp:Panel>
                    <asp:Panel ID="pEditDept" runat="server" Visible="false">
                        <asp:TextBox ID="txtEditTextDept" runat="server" Text='<%# Eval("Department") %>'></asp:TextBox>
                        </asp:Panel>
                    </td>
                    <td>
                        <asp:Panel ID="pViewSalary" runat="server"><%# Eval("Salary") %></asp:Panel>
                        <asp:Panel ID="pEditSalary" runat="server" Visible="false">
                            <asp:TextBox ID="txtEditTextSalary" runat="server" Text='<%# Eval("Salary") %>'></asp:TextBox>
                            </asp:Panel>
                        </td>
                        <td>
                            <asp:Button ID="btnEdit" runat="server" CommandName="Edit" CommandArgument='<%# Eval("EmployeeID") %>' Text="Edit" />
                            <asp:Button ID="btnDelete" runat="server" CommandName="Delete" CommandArgument='<%# Eval("EmployeeID") %>' Text="Delete" OnClientClick="return confirm('Delete?');;" />
                            <asp:Button ID="btnUpdate" runat="server" CommandName="Update" CommandArgument='<%# Eval("EmployeeID") %>' Text="Update" Visible="false" />
                            <asp:Button ID="btnCancel" runat="server" CommandName="Cancel" CommandArgument='<%# Eval("EmployeeID") %>' Text="Cancel" Visible="false" />
                        </td>
                    </tr>
    </ItemTemplate>

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        <FooterTemplate>
            </table>
        </FooterTemplate>
    </asp:Repeater>

    <asp:Label ID="lblStatus" runat="server" Text="" ForeColor="Green"></asp:Label>
</div>
</form>
</body>
</html>

```

**Default.aspx.cs :**

```

using System;
using System.Configuration;
using System.Data;
using System.Data.SqlClient;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace RepeaterCrudDemo
{
    public partial class Default : System.Web.UI.Page
    {
        private string connString =
ConfigurationManager.ConnectionStrings["EmployeeDb"].ConnectionString;

        protected void Page_Load(object sender, EventArgs e)
        {
            if (!IsPostBack)
            {
                BindRepeater();
            }
        }

        private DataTable GetEmployees()
        {
            DataTable dt = new DataTable();
            using (SqlConnection con = new SqlConnection(connString))
            {
                string sql = "SELECT EmployeeID, FullName, Email, Department, Salary FROM Employees ORDER BY EmployeeID DESC";
                using (SqlCommand cmd = new SqlCommand(sql, con))
                {
                    using (SqlDataAdapter da = new SqlDataAdapter(cmd))
                    {
                        da.Fill(dt);
                    }
                }
            }
            return dt;
        }

        private void BindRepeater()
        {
            DataTable dt = GetEmployees();
            rptEmployees.DataSource = dt;
            rptEmployees.DataBind();
        }
    }
}

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protected void btnAdd_Click(object sender, EventArgs e)
{
    string fullName = txtFullName.Text.Trim();
    string email = txtEmail.Text.Trim();
    string dept = txtDept.Text.Trim();
    decimal salary = 0;
    decimal.TryParse(txtSalary.Text.Trim(), out salary);

    using (SqlConnection con = new SqlConnection(connString))
    {
        string sql = "INSERT INTO Employees(FullName, Email, Department,
Salary) VALUES(@FullName, @Email, @Department, @Salary)";
        using (SqlCommand cmd = new SqlCommand(sql, con))
        {
            cmd.Parameters.AddWithValue("@FullName", fullName);
            cmd.Parameters.AddWithValue("@Email", (object)email ??
DBNull.Value);
            cmd.Parameters.AddWithValue("@Department", (object)dept ??
DBNull.Value);
            cmd.Parameters.AddWithValue("@Salary", salary);
            con.Open();
            cmd.ExecuteNonQuery();
        }
    }

    txtFullName.Text = txtEmail.Text = txtDept.Text = txtSalary.Text =
"";

    lblStatus.Text = "Employee added successfully.";
    BindRepeater();
}

protected void rptEmployees_ItemCommand(object source,
RepeaterCommandEventArgs e)
{
    int id = Convert.ToInt32(e.CommandArgument);

    if (e.CommandName == "Edit")
    {
        // store editing id in ViewState
        ViewState["EditingID"] = id;
        BindRepeater();
    }
    else if (e.CommandName == "Cancel")
    {
        ViewState["EditingID"] = null;
        BindRepeater();
    }
    else if (e.CommandName == "Delete")
    {
        using (SqlConnection con = new SqlConnection(connString))
        {
            string sql = "DELETE FROM Employees WHERE EmployeeID =
@EmployeeID";
            using (SqlCommand cmd = new SqlCommand(sql, con))
            {
                cmd.Parameters.AddWithValue("@EmployeeID", id);
                con.Open();
                cmd.ExecuteNonQuery();
            }
        }
        lblStatus.Text = "Employee deleted.";
        ViewState["EditingID"] = null;
        BindRepeater();
    }
}

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        }
        else if (e.CommandName == "Update")
        {
            // find controls in the item
            TextBox txtName = (TextBox)e.Item.FindControl("txtEditName");
            TextBox txtEmailEdit =
            (TextBox)e.Item.FindControl("txtEditEmail");
            TextBox txtDeptEdit = (TextBox)e.Item.FindControl("txtEditDept");
            TextBox txtSalaryEdit =
            (TextBox)e.Item.FindControl("txtEditSalary");

            string name = txtName.Text.Trim();
            string email = txtEmailEdit.Text.Trim();
            string dept = txtDeptEdit.Text.Trim();
            decimal salary = 0;
            decimal.TryParse(txtSalaryEdit.Text.Trim(), out salary);

            using (SqlConnection con = new SqlConnection(connString))
            {
                string sql = "UPDATE Employees SET FullName=@FullName,
Email=@Email, Department=@Department, Salary=@Salary WHERE
EmployeeID=@EmployeeID";
                using (SqlCommand cmd = new SqlCommand(sql, con))
                {
                    cmd.Parameters.AddWithValue("@FullName", name);
                    cmd.Parameters.AddWithValue("@Email", (object)email ??
DBNull.Value);
                    cmd.Parameters.AddWithValue("@Department", (object)dept ??
DBNull.Value);
                    cmd.Parameters.AddWithValue("@Salary", salary);
                    cmd.Parameters.AddWithValue("@EmployeeID", id);
                    con.Open();
                    cmd.ExecuteNonQuery();
                }
            }
            lblStatus.Text = "Employee updated.";
            ViewState["EditingID"] = null;
            BindRepeater();
        }
    }

    protected void rptEmployees_ItemDataBound(object sender,
RepeaterItemEventArgs e)
{
    if (e.Item.ItemType != ListItemType.Item && e.Item.ItemType !=
ListItemType.AlternatingItem) return;

    // current row id
    int currentId = Convert.ToInt32(DataBinder.Eval(e.Item.DataItem,
"EmployeeID"));
    object editingObj = ViewState["EditingID"];
    int editingId = editingObj == null ? -1 :
Convert.ToInt32(editingObj);

    Panel pView = (Panel)e.Item.FindControl("pView");
    Panel pEdit = (Panel)e.Item.FindControl("pEdit");
    Panel pViewEmail = (Panel)e.Item.FindControl("pViewEmail");
    Panel pEditEmail = (Panel)e.Item.FindControl("pEditEmail");
    Panel pViewDept = (Panel)e.Item.FindControl("pViewDept");
    Panel pEditDept = (Panel)e.Item.FindControl("pEditDept");
    Panel pViewSalary = (Panel)e.Item.FindControl("pViewSalary");
    Panel pEditSalary = (Panel)e.Item.FindControl("pEditSalary");
}

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        Button btnEdit = (Button)e.Item.FindControl("btnEdit");
        Button btnDelete = (Button)e.Item.FindControl("btnDelete");
        Button btnUpdate = (Button)e.Item.FindControl("btnUpdate");
        Button btnCancel = (Button)e.Item.FindControl("btnCancel");

        if (currentId == editingId)
        {
            // show edit controls
            pView.Visible = pViewEmail.Visible = pViewDept.Visible =
pViewSalary.Visible = false;
                pEdit.Visible = pEditEmail.Visible = pEditDept.Visible =
pEditSalary.Visible = true;
                    btnEdit.Visible = btnDelete.Visible = false;
                    btnUpdate.Visible = btnCancel.Visible = true;
            }
            else
            {
                pView.Visible = pViewEmail.Visible = pViewDept.Visible =
pViewSalary.Visible = true;
                    pEdit.Visible = pEditEmail.Visible = pEditDept.Visible =
pEditSalary.Visible = false;
                        btnEdit.Visible = btnDelete.Visible = true;
                        btnUpdate.Visible = btnCancel.Visible = false;
            }
        }
    }
}

```

## Output:

### CREATE AND READ:

**Employee CRUD (Repeater)**

Full Name:

Email:

Department:

Salary:

Add Employee

Full Name	Email	Department	Salary	Actions
Dan	Dan@gmail.com	CSE	80000.00	<button>Edit</button> <button>Delete</button>
john	john@gmail.com	MCA	50000.00	<button>Edit</button> <button>Delete</button>
jack	jack@gmail.com	MCA	90000.00	<button>Edit</button> <button>Delete</button>

Employee added successfully.



## UPDATE:

Employee CRUD (Repeater)

Full Name:

Email:

Department:

Salary:

Add Employee

Full Name	Email	Department	Salary	Actions
Dan	Dan@gmail.com	MCA	80000.00	<button>Edit</button> <button>Delete</button>
john	john@gmail.com	MCA	50000.00	<button>Edit</button> <button>Delete</button>
jack	jack@gmail.com	MCA	90000.00	<button>Edit</button> <button>Delete</button>

Employee updated.



## DELETE:

Employee CRUD (Repeater)

Full Name:

Email:

Department:

Salary:

Add Employee

Full Name	Email	Department	Salary	Actions
john	john@gmail.com	MCA	50000.00	<button>Edit</button> <button>Delete</button>
jack	jack@gmail.com	MCA	90000.00	<button>Edit</button> <button>Delete</button>

Employee deleted.

