**Practical Number 5: Webpage Demonstrating Disconnected Architecture (ASP.NET Web Forms with SQL Server Database)**

**📌 Step 1: Create SQL Server Table**

Run the following SQL script in **SQL Server Management Studio (SSMS)**:

CREATE DATABASE SampleDB;

USE SampleDB;

CREATE TABLE Users (

ID INT IDENTITY(1,1) PRIMARY KEY,

Name NVARCHAR(50),

Email NVARCHAR(100)

);

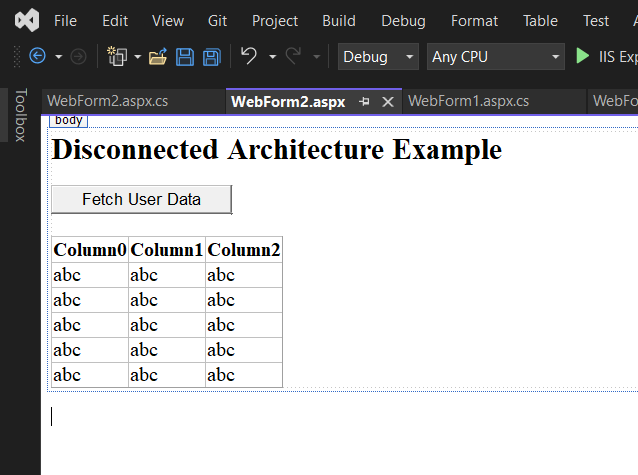
INSERT INTO Users (Name, Email) VALUES

('Alice', 'alice@example.com'),

('Bob', 'bob@example.com'),

('Charlie', 'charlie@example.com');

**📌 Step 2: Design a web page(Frontend UI)**

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<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs" Inherits="practical\_Number\_4.WebForm2" %>

<!DOCTYPE html>

<html>

<head runat="server">

<title>Disconnected Architecture Example</title>

</head>

<body>

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

<h2>Disconnected Architecture Example</h2>

<asp:Button ID="FetchDataButton" runat="server" Text="Fetch User Data" OnClick="FetchDataButton\_Click" />

<br /><br />

<asp:GridView ID="UsersGridView" runat="server" AutoGenerateColumns="true" BorderWidth="1" />

</form>

</body>

</html>

**📌 Step 3: Code-Behind**

using System;

using System.Collections.Generic;

using System.Data.SqlClient;

using System.Data;

using System.Linq;

using System.Web;

using System.Web.UI;

using System.Web.UI.WebControls;

namespace practical\_Number\_4

{

public partial class WebForm2 : System.Web.UI.Page

{

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

{

}

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

{

// Define the connection string (Update with your server details)

string connectionString = "Data Source=LAPTOP-V83LPSDI\\SQLEXPRESS;Initial Catalog=SampleDB;Integrated Security=True";

// Create objects for disconnected architecture

SqlDataAdapter da;

DataSet ds = new DataSet();

try

{

using (SqlConnection conn = new SqlConnection(connectionString))

{

// SQL query to fetch data

string query = "SELECT \* FROM Users";

da = new SqlDataAdapter(query, conn);

// Fill dataset with data from the database

da.Fill(ds, "Users");

} // Connection is closed after this block

// Bind data to GridView (data remains in memory)

UsersGridView.DataSource = ds.Tables["Users"];

UsersGridView.DataBind();

}

catch (Exception ex)

{

Response.Write("<script>alert('Error: " + ex.Message + "');</script>");

}

}

}

}



