**Aim:** Design a web-pages to demonstrate a connection-oriented architecture and Disconnected architecture. (Install-Package MySql.Data)

### Code:

1. Create a student table in mysql having attributes: s\_id, s\_rollno s\_name, s\_email, s\_city,s\_country. Using connection-oriented architecture insert data into the table using ASP.Net and Display the Data.

studentData.aspx:

using System;

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

using System.Web; using System.Web.UI;

using System.Web.UI.WebControls;

namespace practical\_3\_1

{

public partial class studentdata : System.Web.UI.flage

{

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

{

if (!IsflostBack)

{

BindGridView();

}

}

private void BindGridView()

{

DatabaseConnection dbConnection = new DatabaseConnection(); List<Student> students = dbConnection.GetStudents(); GridViewStudents.DataSource = students; GridViewStudents.DataBind();

}

}

}

Student.cs:

using System;

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

using System.Web;

namespace practical\_3\_1

{

public class Student

{

public int Id { get; set; } public string Roll o { get; set; } public string ame { get; set; } public string Email { get; set; } public string City { get; set; }

public string Country { get; set; }

}

}

Databaseconnection.cs using System;

using System.Collections.Generic;

using System.Data.SqlClient;

using System.Linq; using System.Web;

using MySql.Data.MySqlClient;

namespace practical\_3\_1

{

public class DatabaseConnection

{

public MySqlConnection GetConnection()

{

string connectionString = "server=localhost;database=studentdb;username=root;password=howareyou";

MySqlConnection connection = new MySqlConnection(connectionString); return connection;

}

public void InsertStudent(string roll o, string name, string email, string city, string country)

{

using (MySqlConnection connection = GetConnection())

{

connection.Open();

string query = "I SERT I TO student (s\_rollno, s\_name, s\_email, s\_city, s\_country) VALUES (@roll o, @name, @email, @city, @country)";

MySqlCommand command = new MySqlCommand(query, connection); command.flarameters.AddWithValue("@roll o", roll o); command.flarameters.AddWithValue("@name", name); command.flarameters.AddWithValue("@email", email); command.flarameters.AddWithValue("@city", city); command.flarameters.AddWithValue("@country", country); command.Execute onQuery();

}

}

public List<Student> GetStudents()

{

List<Student> students = new List<Student>();

using (MySqlConnection connection = GetConnection())

{

connection.Open();

string query = "SELECT \* FROM student";

MySqlCommand command = new MySqlCommand(query, connection); using (MySqlDataReader reader = command.ExecuteReader())

{

while (reader.Read())

{

students.Add(new Student

{

});

}

}

}

Id = Convert.ToInt32(reader["s\_id"]), Roll o = reader["s\_rollno"].ToString(), ame = reader["s\_name"].ToString(), Email = reader["s\_email"].ToString(), City = reader["s\_city"].ToString(), Country = reader["s\_country"].ToString()

return students;

}

}

}

Studentdetails.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\_3\_1

{

public partial class studentdetails : System.Web.UI.flage

{

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

{

}

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

{

string roll o = txtRoll o.Text; string name = txt ame.Text; string email = txtEmail.Text; string city = txtCity.Text; string country = txtCountry.Text;

DatabaseConnection dbConnection = new DatabaseConnection(); dbConnection.InsertStudent(roll o, name, email, city, country);

lblMessage.Text = "Student added successfully!"; ClearFields();

}

private void ClearFields()

{

txtRoll o.Text = ""; txt ame.Text = ""; txtEmail.Text = ""; txtCity.Text = ""; txtCountry.Text = "";

}

}

}

Studentdetails.aspx:

<%@ flage Language="C " AutoEventWireup="true" CodeBehind="studentdetails.aspx.cs" Inherits="practical\_3\_1.studentdetails" %>

<!DOCTYflE html>

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

<head runat="server">

<title>Add Student</title>

</head>

<body>

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

<div>

<h2>Add Student</h2>

<asp:Label ID="lblMessage" runat="server" Text=""></asp:Label>

<br />

<asp:TextBox ID="txtRoll o" runat="server" placeholder="Roll o"></asp:TextBox>

<br />

<asp:TextBox ID="txt ame" runat="server" placeholder=" ame"></asp:TextBox>

<br />

<asp:TextBox ID="txtEmail" runat="server" placeholder="Email"></asp:TextBox>

<br />

<asp:TextBox ID="txtCity" runat="server" placeholder="City"></asp:TextBox>

<br />

<asp:TextBox ID="txtCountry" runat="server" placeholder="Country"></asp:TextBox>

<br />

<asp:Button ID="btnAddStudent" runat="server" Text="Add Student" OnClick="btnAddStudent\_Click" />

</div>

</form>

</body>

</html>

Index.aspx:

<%@ flage Language="C " AutoEventWireup="true" CodeBehind="Index.aspx.cs" Inherits="practical\_3\_1.Index" %>

<!DOCTYflE html>

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

<head runat="server">

<title></title>

</head>

<body>

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

<div>

<h2>This is the Main flage: Use the links below to add or view

data</h2>

<p>

<asp:HyperLink ID="add\_student" runat="server"

avigateUrl="~/studentdetails.aspx">Add Student</asp:HyperLink> finbsp;<asp:HyperLink ID="view\_data" runat="server" avigateUrl="~/studentdata.aspx">View Student Data</asp:HyperLink>

finbsp;finbsp;

<asp:HyperLink ID="HyperLink1" runat="server" avigateUrl="~/Index.aspx">home</asp:HyperLink>

</p>

</div>

</form>

</body>

</html>

Studentdata.aspx:

<%@ flage Language="C " AutoEventWireup="true" CodeBehind="studentdata.aspx.cs" Inherits="practical\_3\_1.studentdata" %>

<!DOCTYflE html>

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

<head runat="server">

<title></title>

</head>

<body>

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

<div>

<h2>Student Data</h2>

<asp:GridView ID="GridViewStudents" runat="server" AutoGenerateColumns="false">

<Columns>

<asp:BoundField DataField="Roll o" HeaderText="Roll o" />

<asp:BoundField DataField=" ame" HeaderText=" ame" />

<asp:BoundField DataField="Email" HeaderText="Email" />

<asp:BoundField DataField="City" HeaderText="City" />

<asp:BoundField DataField="Country" HeaderText="Country" />

</Columns>

</asp:GridView>

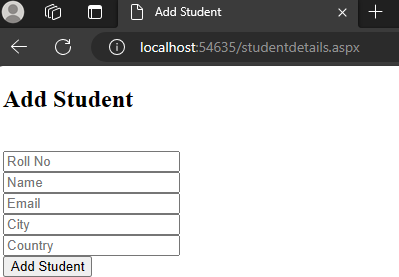
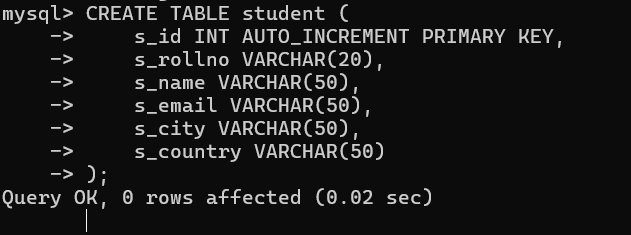
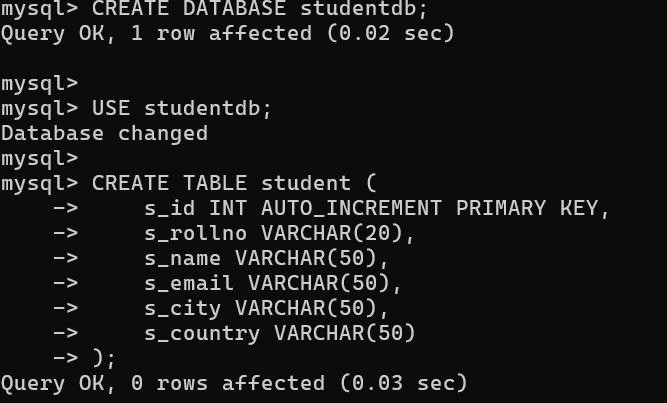
</div>

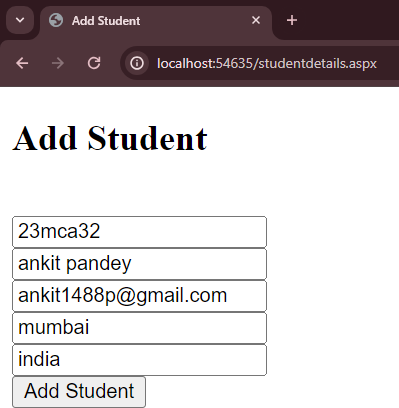
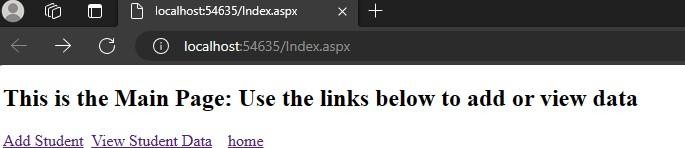
</form>

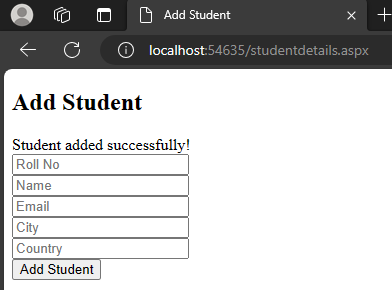
</body>

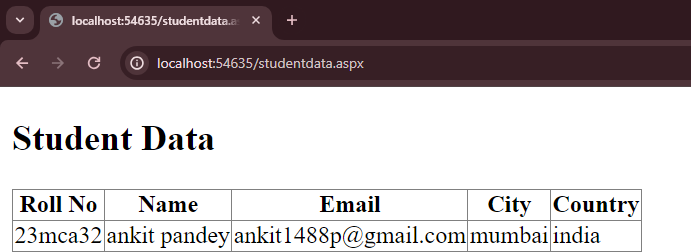
</html>

Output:









1. Create a customer table in mysql having attributes: c\_id, c\_name, c\_email, c\_city,c\_country,c\_pincode. Using Disconnected architecture insert data into the table using ASP.Net and Display the Data which user has inserted.

### Code:

DatabaseConnection.cs:

using System;

using System.Collections.Generic; using System.Data.SqlClient; using System.Data;

using System.Linq; using System.Web;

using MySql.Data.MySqlClient;

namespace practical\_3\_2

{

public class DatabaseConnection

{

private string connectionString = "server=localhost;database=customerdb;username=root;password=howareyou";

public DataTable GetCustomers()

{

DataTable dt = new DataTable();

using (MySqlConnection connection = new MySqlConnection(connectionString))

{

string query = "SELECT c\_name, c\_email, c\_city, c\_country, c\_pincode FROM customer";

MySqlCommand command = new MySqlCommand(query, connection); MySqlDataAdapter adapter = new MySqlDataAdapter(command);

adapter.Fill(dt);

}

return dt;

}

public void InsertCustomer(string name, string email, string city, string country, string pincode)

{

using (MySqlConnection connection = new MySqlConnection(connectionString))

{

string query = "I SERT I TO customer (c\_name, c\_email, c\_city, c\_country, c\_pincode) VALUES (@name, @email, @city, @country, @pin)";

MySqlCommand command = new MySqlCommand(query, connection); command.flarameters.AddWithValue("@name", name); command.flarameters.AddWithValue("@email", email); command.flarameters.AddWithValue("@city", city); command.flarameters.AddWithValue("@country", country); command.flarameters.AddWithValue("@pin", pincode);

connection.Open(); command.Execute onQuery();

}

}

}

}

customerDetails.aspx:

<%@ flage Language="C " AutoEventWireup="true" CodeBehind="CustomerDetail.aspx.cs" Inherits="practical\_3\_2.CustomerDetail" %>

<!DOCTYflE html>

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

<head runat="server">

<title></title>

</head>

<body>

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

<div>

<h2>Kindly Fill the form to Add your details</h2>

<asp:Label ID="lblMessage" runat="server" Text=""></asp:Label>

<br />

<asp:TextBox ID="txt ame" runat="server" placeholder=" ame"></asp:TextBox>

<br />

<asp:TextBox ID="txtEmail" runat="server" placeholder="Email"></asp:TextBox>

<br />

<asp:TextBox ID="txtCity" runat="server" placeholder="City"></asp:TextBox>

<br />

<asp:TextBox ID="txtCountry" runat="server" placeholder="Country"></asp:TextBox>

<br />

<asp:TextBox ID="txtflincode" runat="server" placeholder="flincode"></asp:TextBox>

<br />

<asp:Button ID="btnAddCustomer" runat="server" Text="Add Customer" OnClick="btnAddCustomer\_Click" />

</div>

</div>

</form>

</body>

</html>

customerDetails.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\_3\_2

{

public partial class CustomerDetail : System.Web.UI.flage

{

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

{

}

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

{

string name = txt ame.Text; string email = txtEmail.Text; string city = txtCity.Text; string country = txtCountry.Text; string pincode = txtflincode.Text;

DatabaseConnection dbConnection = new DatabaseConnection(); dbConnection.InsertCustomer(name, email, city, country, pincode);

lblMessage.Text = "Customer added successfully!";

ClearFields();

}

private void ClearFields()

{

txt ame.Text = ""; txtEmail.Text = ""; txtCity.Text = ""; txtCountry.Text = ""; txtflincode.Text = "";

}

}

}

DisplayCustomer.aspx.cs:

using System;

using System.Collections.Generic; using System.Data;

using System.Linq; using System.Web; using System.Web.UI;

using System.Web.UI.WebControls;

namespace practical\_3\_2

{

public partial class DisplayCustomer : System.Web.UI.flage

{

DatabaseConnection dbConnection = new DatabaseConnection(); DataTable dt;

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

{

dt = dbConnection.GetCustomers(); if (!IsflostBack)

{

BindGridView();

}

}

protected void BindGridView()

{

GridViewCustomers.DataSource = dt; GridViewCustomers.DataBind();

}

protected void Button1\_Click(object sender, EventArgs e)

{

DataView dv = new DataView(dt); if (city\_list.SelectedIndex == 0)

{

dv.RowFilter = "c\_city = 'Mumbai'";

}

if (city\_list.SelectedIndex == 1)

{

dv.RowFilter = "c\_city = 'flune'";

}

GridViewCustomers.DataSource = dv; GridViewCustomers.DataBind();

}

}

}

Index.aspx:

<%@ flage Language="C " AutoEventWireup="true" CodeBehind="Index.aspx.cs" Inherits="practical\_3\_2.Index" %>

<!DOCTYflE html>

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

<head runat="server">

<title></title>

</head>

<body>

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

This is the main page: Choose the operation you want to perform:<br />

<asp:HyperLink ID="addcustomer" runat="server" avigateUrl="~/CustomerDetail.aspx">Add Customer</asp:HyperLink> finbsp;

<asp:HyperLink ID="displaycustomer" runat="server" avigateUrl="~/DisplayCustomer.aspx">View Customer</asp:HyperLink>

finbsp;<asp:HyperLink ID="HyperLink1" runat="server" avigateUrl="~/customer\_mumbai.aspx">Mumbai Customers</asp:HyperLink>

</form>

</body>

</html>

DisplayCustomer.aspx:

<%@ flage Language="C " AutoEventWireup="true" CodeBehind="DisplayCustomer.aspx.cs" Inherits="practical\_3\_2.DisplayCustomer" %>

<!DOCTYflE html>

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

<head runat="server">

<title></title>

</head>

<body>

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

<div>

<h2>The following are the customers available</h2>

<asp:GridView ID="GridViewCustomers" runat="server" AutoGenerateColumns="false">

<Columns>

<asp:BoundField DataField="c\_name" HeaderText=" ame" />

<asp:BoundField DataField="c\_email" HeaderText="Email" />

<asp:BoundField DataField="c\_city" HeaderText="City" />

<asp:BoundField DataField="c\_country" HeaderText="Country" />

<asp:BoundField DataField="c\_pincode" HeaderText="flincode" />

</Columns>

</asp:GridView>

</div>

<asp:DropDownList ID="city\_list" runat="server">

<asp:ListItem Value="mumbai"></asp:ListItem>

<asp:ListItem>pune</asp:ListItem>

</asp:DropDownList>

<asp:Button ID="Button1" runat="server" OnClick="Button1\_Click" Text="Display" />

</form>

</body>

</html>

Customer\_mumbai.aspx:

<%@ flage Language="C " AutoEventWireup="true" CodeBehind="customer\_mumbai.aspx.cs" Inherits="practical\_3\_2.customer\_mumbai" %>

<!DOCTYflE html>

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

<head runat="server">

<title></title>

</head>

<body>

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

<div>

<div>

<h2>Customer Data</h2>

<asp:GridView ID="GridViewCustomers" runat="server" AutoGenerateColumns="false">

<Columns>

<asp:BoundField DataField="c\_name" HeaderText=" ame" />

<asp:BoundField DataField="c\_email" HeaderText="Email" />

<asp:BoundField DataField="c\_city" HeaderText="City" />

<asp:BoundField DataField="c\_country" HeaderText="Country" />

<asp:BoundField DataField="c\_pincode" HeaderText="flincode" />

</Columns>

</asp:GridView>

</div>

</div>

</form>

</body>

</html>

**Output:**

