

Source code of mess management project

Table of Contents

Source code of mess management project	1
Site.master	2
Site.master.vb	3
Default.aspx	4
Default.aspx.vb	6
Admin_Bill_Manage.aspx	6
Admin_Bill_Manage.aspx.vb	8
admin_dashboard.aspx	11
admin_dashboard.aspx.vb	13
Admin_Menu_Manage.aspx	13
Admin_Menu_Manage.aspx.vb	15
Admin_Orders_Manage.aspx	18
Admin_Orders_Manage.aspx.vb	20
Admin_Product_Manage.aspx	25
Admin_Product_Manage.aspx.vb	27
Admin_User_Manage.aspx	32
Admin_User_Manage.aspx.vb	33
customer_dashboard.aspx	37
customer_dashboard.aspx.vb	38
direct_tsqL_order_update	41
login.aspx	47
login.aspx.vb	48
MakePayment.aspx	50
MakePayment.aspx.vb	51
register.aspx	55
register.aspx.vb	57

User_Credit_View.aspx.....	59
User_Credit_View.aspx.vb	59
User_View_Bill.aspx.....	61
User_View_Bill.aspx.vb.....	62
User_View_Menu.aspx	64
User_View_Menu.aspx.vb	64

Site.master

```
<%@ Master Language="VB" AutoEventWireup="true" CodeFile="Site.master.vb"
Inherits="Site" %>
```

```
<!DOCTYPE html>
```

```
<html>
```

```
<head runat="server">
```

```
    <title>MESS MANAGEMENT</title>
```

```
</head>
```

```
<body>
```

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

```
        <div id="header" style="background: #333; color: white; padding: 10px;">
```

```
            <h2>Mess Management System</h2>
```

```
        </div>
```

```
        <div id="menu" style="background: #eee; padding: 10px;">
```

```
            <a href="login.aspx">LOGIN</a> |
```

```
            <a href="register.aspx">REGISTER</a> |
```

```

</div>

<asp:ContentPlaceHolder ID="MainContent" runat="server" />

<asp:Panel ID="pnlLogout" runat="server" Visible="false">
    Welcome, <asp:Label ID="lblUser" runat="server" />
    |
    <asp:LinkButton ID="LinkButton1" runat="server"
OnClick="lnkLogout_Click">Logout</asp:LinkButton>
</asp:Panel>

<div id="footer" style="background: #333; color: white; padding: 10px;">
    <p>© 2025 MESS Management<p>
</div>

</form>

</body>

</html>

```

Site.master.vb

Partial Class Site

Inherits System.Web.UI.MasterPage

Protected Sub lnkLogout_Click(sender As Object, e As EventArgs)

Session.Clear()

```
        Session.Abandon()

        Response.Redirect("login.aspx")

    End Sub

    Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load

        If Not IsPostBack Then

            If Session("Username") IsNot Nothing Then

                pnlLogout.Visible = True

                lblUser.Text = Session("Username").ToString()

            Else

                pnlLogout.Visible = False

            End If

        End If

    End Sub

End Class
```

Default.aspx

```
<%@ Page Title="Home" Language="VB" MasterPageFile="~/Site.Master"
AutoEventWireup="false" CodeFile="Default.aspx.vb" Inherits="_Default" %>

<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">

    <style>

        .home-container {

            text-align: center;

            margin-top: 50px;
```

```
}
```

```
.home-button {  
    display: inline-block;  
    margin: 10px;  
    padding: 12px 25px;  
    background-color: #007bff;  
    color: white;  
    text-decoration: none;  
    font-weight: bold;  
    border-radius: 5px;  
}
```

```
.home-button:hover {  
    background-color: #0056b3;  
}
```

```
</style>
```

```
<div class="home-container">
```

```
    <h1>Welcome to Mess Management System</h1>
```

```
    <p>Please choose an option:</p>
```

```
    <a class="home-button" href="register.aspx">Register</a>
```

```
    <a class="home-button" href="login.aspx">Login</a>
```

```
</div>
```

```
</asp:Content>
```

Default.aspx.vb

Partial Class _Default

Inherits System.Web.UI.Page

End Class

Admin_Bill_Manage.aspx

```
<%@ Page Title="Admin BILL Manage" Language="VB" MasterPageFile="~/Site.Master"
AutoEventWireup="false" CodeFile="Admin_Bill_Manage.aspx.vb"
Inherits="Admin_Bill_Manage" %>
```

```
<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
```

```
<div class="welcome-section">
```

```
<h2>Welcome, <asp:Literal ID="litUserName" runat="server" />!/</h2>
```

```
<p>You are logged in as Administrator. From here you can manage the entire mess
Bill system.</p>
```

```
</div>
```

```
<h2><img alt="document icon" data-bbox="178 798 198 818" style="vertical-align: middle;"/> View All Generated Bills</h2>
```

```
<asp:GridView ID="gvBills" runat="server" AutoGenerateColumns="False"
CssClass="table table-bordered">
```

```
<Columns>
```

```
<asp:BoundField DataField="BILLID" HeaderText="Bill ID" />

<asp:BoundField DataField="USERID" HeaderText="User ID" />

<asp:BoundField DataField="BILLPRICE" HeaderText="Total Amount"
DataFormatString="{0:C}" />

<asp:BoundField DataField="STATUS" HeaderText="Status" />

<asp:BoundField DataField="MONTH" HeaderText="Month" />

</Columns>

</asp:GridView>

<asp:Panel ID="pnlBillGeneration" runat="server">

<h2>Generate Monthly Bill</h2>

<asp:Label ID="lblUser" runat="server" Text="Enter User ID:"
AssociatedControlID="txtUserID" />

<asp:TextBox ID="txtUserID" runat="server" />

<br /><br />

<asp:Label ID="lblMonth" runat="server" Text="Enter Month (YYYY-MM):"
AssociatedControlID="txtMonth" />

<asp:TextBox ID="txtMonth" runat="server" />

<br /><br />

<asp:Button ID="btnGenerate" runat="server" Text="Generate Bill"
OnClick="btnGenerate_Click" />

<br /><br />

<asp:Label ID="lblResult" runat="server" ForeColor="Green" />
```

</asp:Panel>

</asp:Content>

Admin_Bill_Manage.aspx.vb

Imports System.Data.SqlClient

Imports System.IO

Partial Class Admin_Bill_Manage

Inherits System.Web.UI.Page

Protected Sub Page_Load(ByVal sender As Object, ByVal e As EventArgs) Handles Me.Load

If Not IsPostBack Then

LoadBills()

litUserName.Text = "Admin" ' Change this if using session for login

End If

End Sub

Protected Sub btnGenerate_Click(sender As Object, e As EventArgs)

Try

Dim userID As Integer = Integer.Parse(txtUserID.Text)

Dim billMonth As String = txtMonth.Text

' Path to SQL script file

```

Dim sqlScriptPath As String = Server.MapPath("~/direct_tsqL_bill_manage.sql")
Dim script As String = File.ReadAllText(sqlScriptPath)

' Replace placeholders

script = script.Replace("@UserID = 1", "@UserID = " & userID)

script = script.Replace("@BillMonth = '2025-05'", "@BillMonth = '" & billMonth &
"")

' Split script into individual commands (because GO can't be run via
SqlCommand)

Dim commandList As String() = script.Split(New String() {"GO" &
Environment.NewLine}, StringSplitOptions.RemoveEmptyEntries)

Dim connectionString As String =
System.Configuration.ConfigurationManager.ConnectionStrings("MessSystemConnec
tionString").ConnectionString

Using conn As New SqlConnection(connectionString)

    conn.Open()

    For Each commandText As String In commandList

        If Not String.IsNullOrEmpty(commandText) Then

            Using cmd As New SqlCommand(commandText, conn)

                cmd.ExecuteNonQuery()

            End Using

        End If

    Next

```

lblResult.Text = "✅ Bill generated successfully for User ID: " & userID

lblResult.ForeColor = Drawing.Color.Green

End Using

Catch ex As Exception

lblResult.Text = "❌ Error: " & ex.Message

lblResult.ForeColor = Drawing.Color.Red

End Try

End Sub

Private Sub LoadBills()

**Dim connectionString As String =
System.Configuration.ConfigurationManager.ConnectionStrings("MessSystemConnec
tionString").ConnectionString**

**Dim query As String = "SELECT BILLID, USERID, BILLPRICE, STATUS, MONTH FROM
BILL_T ORDER BY BILLID DESC"**

Using conn As New SqlConnection(connectionString)

Using cmd As New SqlCommand(query, conn)

conn.Open()

Dim reader As SqlDataReader = cmd.ExecuteReader()

gvBills.DataSource = reader

gvBills.DataBind()

End Using

End Using

End Sub

End Class

admin_dashboard.aspx

```
<%@ Page Title="Admin Dashboard" Language="VB" MasterPageFile="~/Site.Master"
AutoEventWireup="false" CodeFile="admin_dashboard.aspx.vb"
Inherits="admin_dashboard" %>
```

```
<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
```

```
<h2>Welcome, <asp:Literal ID="litUserName" runat="server" />!/</h2>
```

```
<p>You are logged in as Administrator. Below are your management options:</p>
```

```
<h3>Admin Dashboard</h3>
```

```
<ul>
```

```
<li>
```

```
<strong>Manage Users:</strong>
```

```
<a href="Admin_User_Manage.aspx">Manage users</a>
```

```
</li>
```

```
<li>
```

```
<strong>Manage Products:</strong>
```

```
<a href="Admin_Product_Manage.aspx">Manage Products</a>
```

```
</li>
```


Manage Menu:

Manage Menu

Billing:

Manage Bills

Orders:

Manage Orders

Reports:

</asp:Content>

admin_dashboard.aspx.vb

Partial Class admin_dashboard

Inherits System.Web.UI.Page

' i added this because of security featues like no one other then admin can access,,

Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load

If Session("UserID") Is Nothing OrElse Session("RoleID") <> 1 Then

Response.Redirect("login.aspx")

End If

If Not IsPostBack Then

If Session("Username") IsNot Nothing Then

litUserName.Text = Session("Username").ToString()

End If

End If

End Sub

End Class

Admin_Menu_Manage.aspx

```
<%@ Page Title="Manage Menu" Language="VB" MasterPageFile="~/Site.Master"
AutoEventWireup="false" CodeFile="Admin_Menu_Manage.aspx.vb"
Inherits="Admin_Menu_Manage" %>
```

```
<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
```

```
<h2>Menu Management</h2>
```

```
<asp:Label ID="lblStatus" runat="server" ForeColor="Green" />
```

```
<br /><br />
```

```
<table>
```

```
<tr>
```

```
<td><asp:Label ID="lblDate" runat="server" Text="Meal Date:" /></td>
```

```
<td><asp:TextBox ID="txtMealDate" runat="server" TextMode="Date" /></td>
```

```
</tr>
```

```
<tr>
```

```
<td><asp:Label ID="lblMealType" runat="server" Text="Meal Type:" /></td>
```

```
<td><asp:DropDownList ID="ddlMealType" runat="server" /></td>
```

```
</tr>
```

```
<tr>
```

```
<td><asp:Label ID="lblAvailableMeal" runat="server" Text="Available Meal:" /></td>
```

```
<td><asp:DropDownList ID="ddlAvailableMeal" runat="server" /></td>
```

```
</tr>
```

```
<tr>
```

```
<td colspan="2" style="padding-top: 10px;">
```

```
<asp:Button ID="btnCreateMenu" runat="server" Text="Create Menu"
OnClick="btnCreateMenu_Click" />
```

```
</td>
```

```
</tr>
```

```
</table>
```

```
<br /><br />
```

```
<asp:GridView ID="gvMenu" runat="server" AutoGenerateColumns="True"  
    GridLines="Both" CellPadding="6" Font-Size="Medium"  
    HeaderStyle-BackColor="#444" HeaderStyle-ForeColor="White"  
    AlternatingRowStyle-BackColor="#f9f9f9"  
    BorderStyle="Solid" BorderWidth="1px" />  
</asp:Content>
```

Admin_Menu_Manage.aspx.vb

```
Imports System.Data.SqlClient
```

```
Partial Class Admin_Menu_Manage
```

```
    Inherits System.Web.UI.Page
```

```
    Dim connStr As String =  
    ConfigurationManager.ConnectionStrings("MessSystemConnectionString").ConnectionStri  
ng
```

```
    Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load
```

```
        If Not IsPostBack Then
```

```
            LoadDropdowns()
```

```
            LoadMenuGrid()
```

```
        End If
```

```
    End Sub
```

```

Private Sub LoadDropdowns()

    ' Load Meal Types

    Using conn1 As New SqlConnection(connStr)

        conn1.Open()

        Dim cmd1 As New SqlCommand("SELECT MealTypeID, MealTime FROM
MEALTYPE_T", conn1)

        ddlMealType.DataSource = cmd1.ExecuteReader()

        ddlMealType.DataTextField = "MealTime"

        ddlMealType.DataValueField = "MealTypeID"

        ddlMealType.DataBind()

        ddlMealType.Items.Insert(0, New ListItem("-- Select Meal Type --", ""))

    End Using

    ' Load Available Meals

    Using conn2 As New SqlConnection(connStr)

        conn2.Open()

        Dim cmd2 As New SqlCommand("SELECT am.AVAILABLEMEAL_ID, p.ProductName "
&
        "FROM AVAILABLEMEAL_T am " &
        "JOIN PRODUCT_T p ON am.PRODUCTID = p.PRODUCTID", conn2)

        ddlAvailableMeal.DataSource = cmd2.ExecuteReader()

        ddlAvailableMeal.DataTextField = "ProductName"

        ddlAvailableMeal.DataValueField = "AVAILABLEMEAL_ID"

        ddlAvailableMeal.DataBind()

        ddlAvailableMeal.Items.Insert(0, New ListItem("-- Select Meal --", ""))

```

End Using

End Sub

Protected Sub btnCreateMenu_Click(sender As Object, e As EventArgs)

Dim selectedDate As DateTime = DateTime.Parse(txtMealDate.Text)

Dim selectedMealType As Integer = Integer.Parse(ddlMealType.SelectedValue)

Dim selectedAvailableMeal As Integer = Integer.Parse(ddlAvailableMeal.SelectedValue)

Using conn As New SqlConnection(connStr)

conn.Open()

Dim cmd As New SqlCommand("INSERT INTO MEALSCHEDULE_T (MealDate,
MealTypeID, AVAILABLEMEAL_ID) VALUES (@MealDate, @MealTypeID,
@AvailableMealID)", conn)

cmd.Parameters.AddWithValue("@MealDate", selectedDate)

cmd.Parameters.AddWithValue("@MealTypeID", selectedMealType)

cmd.Parameters.AddWithValue("@AvailableMealID", selectedAvailableMeal)

cmd.ExecuteNonQuery()

End Using

LoadMenuGrid()

lblStatus.Text = "Menu created successfully."

End Sub

Private Sub LoadMenuGrid()

Using conn As New SqlConnection(connStr)

conn.Open()

```

        Dim cmd As New SqlCommand("SELECT * FROM MENU_VIEW ORDER BY MenuDate
DESC", conn)

        Dim reader As SqlDataReader = cmd.ExecuteReader()

        gvMenu.DataSource = reader

        gvMenu.DataBind()

        reader.Close()

    End Using

End Sub

End Class

```

Admin_Orders_Manage.aspx

```

<%@ Page Language="VB" AutoEventWireup="false"
CodeFile="Admin_Orders_Manage.aspx.vb" Inherits="Admin_Orders_Manage"
MasterPageFile="~/Site.Master" %>

<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">

    <h2>Add Product to Order</h2>

    <asp:Panel ID="pnlAddOrder" runat="server" Width="400px">

        <asp:Label ID="lblUserID" runat="server" Text="User ID:" /><br />

        <asp:TextBox ID="txtUserID" runat="server" /><br /><br />

        <asp:Label ID="lblProductID" runat="server" Text="Product ID:" /><br />

```

```
<asp:TextBox ID="txtProductID" runat="server" /><br /><br />
```

```
<asp:Label ID="lblQuantity" runat="server" Text="Quantity:" /><br />
```

```
<asp:TextBox ID="txtQuantity" runat="server" /><br /><br />
```

```
<asp:Button ID="btnExecute" runat="server" Text="Add to Order"  
OnClick="btnExecute_Click" /><br /><br />
```

```
<asp:Label ID="lblResult" runat="server" ForeColor="Green" /><br />
```

```
<asp:Label ID="lblError" runat="server" ForeColor="Red" />
```

```
</asp:Panel>
```

```
<hr />
```

```
<asp:Button ID="btnViewOrders" runat="server" Text="View Orders"  
OnClick="btnViewOrders_Click" />
```

```
<asp:GridView ID="gvOrders" runat="server" AutoGenerateColumns="False"  
    OnRowDataBound="gvOrders_RowDataBound" Width="100%" BorderStyle="Solid"  
    BorderWidth="1px" GridLines="Both">
```

```
<Columns>
```

```
<asp:BoundField DataField="OrderID" HeaderText="Order ID" />
```

```
<asp:BoundField DataField="UserID" HeaderText="User ID" />
```

```
<asp:BoundField DataField="OrderDate" HeaderText="Order Date"  
DataFormatString="{0:yyyy-MM-dd}" />
```

```
<asp:BoundField DataField="OrderLineID" HeaderText="Order Line ID" />
<asp:BoundField DataField="ProductID" HeaderText="Product ID" />
<asp:BoundField DataField="Quantity" HeaderText="Quantity" />

<asp:BoundField DataField="ProductName" HeaderText="Product Name" />
<asp:BoundField DataField="UnitPrice" HeaderText="Unit Price"
DataFormatString="{0:C}" />

</Columns>

</asp:GridView>

</asp:Content>
```

Admin_Orders_Manage.aspx.vb

Imports System.Data

Imports System.Data.SqlClient

Imports System.IO

Partial Class Admin_Orders_Manage

Inherits System.Web.UI.Page

' Add to order button click event

Protected Sub btnExecute_Click(sender As Object, e As EventArgs)

Try

Dim userId As Integer = Integer.Parse(txtUserID.Text)

Dim productId As Integer = Integer.Parse(txtProductID.Text)

```
Dim quantity As Integer = Integer.Parse(txtQuantity.Text)
```

```
Dim connectionString As String =  
ConfigurationManager.ConnectionStrings("MessSystemConnectionString").ConnectionStri  
ng
```

```
Dim scriptPath As String = Server.MapPath("~/direct_tsql_order_update.sql")
```

```
' Load and modify the SQL script
```

```
Dim sql As String = File.ReadAllText(scriptPath)
```

```
sql = sql.Replace("@UserID INT = 1", "@UserID INT = " & userId)
```

```
sql = sql.Replace("@ProductID INT = 3", "@ProductID INT = " & productId)
```

```
sql = sql.Replace("@Quantity INT = 2", "@Quantity INT = " & quantity)
```

```
Using conn As New SqlConnection(connectionString)
```

```
Using cmd As New SqlCommand(sql, conn)
```

```
conn.Open()
```

```
Using reader As SqlDataReader = cmd.ExecuteReader()
```

```
Dim output As String = ""
```

```
If reader.HasRows Then
```

```
While reader.Read()
```

```
output &= reader(0).ToString() & "<br />"
```

```
End While
```

```
Else
```

```
output = "No results returned."
```

```
End If
```

```
lblResult.Text = output
```

```

        lblError.Text = ""

    End Using

    End Using

    End Using

    Catch ex As Exception

        lblError.Text = "Error: " & ex.Message

        lblResult.Text = ""

    End Try

End Sub

```

' View orders button click event

```

Protected Sub btnViewOrders_Click(sender As Object, e As EventArgs)

    Dim connectionString As String =
ConfigurationManager.ConnectionStrings("MessSystemConnectionString").ConnectionStri
ng

```

```

Dim sql As New System.Text.StringBuilder()

sql.AppendLine("SELECT o.OrderID, o.UserID, o.OrderDate,")
sql.AppendLine("    ol.OrderLineID, ol.ProductID, ol.Quantity,")
sql.AppendLine("    p.ProductName,")
sql.AppendLine("    ph.Price AS UnitPrice")
sql.AppendLine("FROM ORDERS_T o")
sql.AppendLine("INNER JOIN ORDERLINE_T ol ON o.OrderID = ol.OrderID")
sql.AppendLine("INNER JOIN PRODUCT_T p ON ol.ProductID = p.ProductID")
sql.AppendLine("INNER JOIN PRICEHISTORY_T ph ON ph.ProductID = p.ProductID")
sql.AppendLine("INNER JOIN (")
sql.AppendLine("    SELECT ProductID, MAX(EffectiveDate) AS MaxDate")

```

```

sql.AppendLine(" FROM PRICEHISTORY_T")
sql.AppendLine(" GROUP BY ProductID")
sql.AppendLine(") maxph ON ph.ProductID = maxph.ProductID AND ph.EffectiveDate =
maxph.MaxDate")
sql.AppendLine("ORDER BY o.OrderID, p.ProductName")

```

Try

```

Using conn As New SqlConnection(connectionString)
    Using cmd As New SqlCommand(sql.ToString(), conn)
        conn.Open()
        Dim dt As New DataTable()
        Using reader As SqlDataReader = cmd.ExecuteReader()
            dt.Load(reader)
        End Using
        gvOrders.DataSource = dt
        gvOrders.DataBind()
    End Using
End Using
lblError.Text = ""

```

Catch ex As Exception

```

    lblError.Text = "Error loading orders: " & ex.Message

```

End Try

End Sub

' Optional: RowDataBound event if you want to customize row appearance or controls

```

Protected Sub gvOrders_RowDataBound(sender As Object, e As GridViewRowEventArgs)

```

```

If e.Row.RowType = DataControlRowType.DataRow Then

    Dim drv As DataRowView = CType(e.Row.DataItem, DataRowView)

    ' Example: Highlight orders with quantity > 10
    Dim qty As Integer = Convert.ToInt32(drv("Quantity"))
    If qty > 10 Then
        e.Row.BackColor = System.Drawing.Color.LightYellow
    End If

    ' If you want to manually set any control text, find control here:
    ' Dim lblProduct As Label = CType(e.Row.FindControl("LabelID"), Label)
    ' lblProduct.Text = drv("ProductName").ToString()

End If

End Sub

' Optional Page_Load if you want to restrict access or initialize stuff
Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load

    If Not IsPostBack Then

        ' You can initialize or check session here
        ' e.g. litUserName.Text = Session("Username")?.ToString() or redirect if unauthorized

    End If

End Sub

End Class

```

Admin_Product_Manage.aspx

```
<%@ Page Title="Manage Products" Language="VB" MasterPageFile="~/Site.Master"
AutoEventWireup="false" CodeFile="Admin_Product_Manage.aspx.vb"
Inherits="Admin_Product_Manage" %>
```

```
<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
```

```
    <h2>Product Management</h2>
```

```
    <!-- Product Line Section -->
```

```
    <h3>Create Product Line</h3>
```

```
    <asp:TextBox ID="txtLineName" runat="server" Placeholder="Line Name" />
```

```
    <asp:TextBox ID="txtQuantity" runat="server" Placeholder="Quantity" />
```

```
    <asp:TextBox ID="txtCategory" runat="server" Placeholder="Category" />
```

```
    <asp:Button ID="btnCreateLine" runat="server" Text="Create"
OnClick="btnCreateLine_Click" />
```

```
    <h3>View Product Lines</h3>
```

```
    <asp:Button ID="btnViewLine" runat="server" Text="View Product Lines"
OnClick="btnViewLine_Click" />
```

```
    <asp:GridView ID="gvProductLines" runat="server" AutoGenerateColumns="True" />
```

```
    <h3>Delete Product Line</h3>
```

```
    <asp:TextBox ID="txtDeleteLineID" runat="server" Placeholder="ProductLineID to Delete"
/>
```

```
    <asp:Button ID="btnDeleteLine" runat="server" Text="Delete Line"
OnClick="btnDeleteLine_Click" />
```

<hr />

<!-- Product Section -->

<h3>Create Product</h3>

<asp:TextBox ID="txtProductName" runat="server" Placeholder="Product Name" />

<asp:TextBox ID="txtProductLineID" runat="server" Placeholder="Product Line ID" />

<asp:TextBox ID="txtInitialPrice" runat="server" Placeholder="Initial Price" />

<asp:Button ID="btnCreateProduct" runat="server" Text="Create Product"
OnClick="btnCreateProduct_Click" />

<h3>View Products</h3>

<asp:Button ID="btnViewProducts" runat="server" Text="View Products"
OnClick="btnViewProducts_Click" />

<asp:GridView ID="gvProducts" runat="server" AutoGenerateColumns="True" />

<h3>Delete Product</h3>

<asp:TextBox ID="txtDeleteProductID" runat="server" Placeholder="ProductID to Delete"
/>

<asp:Button ID="btnDeleteProduct" runat="server" Text="Delete Product"
OnClick="btnDeleteProduct_Click" />

<h3>Update Product Price</h3>

<asp:TextBox ID="txtUpdateProductID" runat="server" Placeholder="ProductID" />

<asp:TextBox ID="txtNewPrice" runat="server" Placeholder="New Price" />

<asp:Button ID="btnUpdatePrice" runat="server" Text="Update Price"
OnClick="btnUpdatePrice_Click" />

</asp:Content>

Admin_Product_Manage.aspx.vb

Imports System.Data

Imports System.Data.SqlClient

Partial Class Admin_Product_Manage

Inherits System.Web.UI.Page

Dim conStr As String =
ConfigurationManager.ConnectionStrings("MessSystemConnectionString").ConnectionString

Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load

If Not IsPostBack Then

End If

End Sub

' 1. CREATE PRODUCT LINE

Protected Sub btnCreateLine_Click(sender As Object, e As EventArgs)

Using con As New SqlConnection(conStr)

Dim query As String = "INSERT INTO PRODUCTLINE_T (PRODUCTQUANTITY,
PRODUCTLINENAME, CATEGORY) VALUES (@quantity, @name, @category)"

Using cmd As New SqlCommand(query, con)

cmd.Parameters.AddWithValue("@quantity", txtQuantity.Text)

cmd.Parameters.AddWithValue("@name", txtLineName.Text)

cmd.Parameters.AddWithValue("@category", txtCategory.Text)

```
        con.Open()

        cmd.ExecuteNonQuery()

    End Using

End Using

End Sub
```

' 2. VIEW PRODUCT LINES

```
Protected Sub btnViewLine_Click(sender As Object, e As EventArgs)
```

```
    Using con As New SqlConnection(conStr)

        Dim da As New SqlDataAdapter("SELECT * FROM PRODUCTLINE_T", con)

        Dim dt As New DataTable()

        da.Fill(dt)

        gvProductLines.DataSource = dt

        gvProductLines.DataBind()

    End Using

End Sub
```

' 3. DELETE PRODUCT LINE (with products + price history)

```
Protected Sub btnDeleteLine_Click(sender As Object, e As EventArgs)
```

```
    Using con As New SqlConnection(conStr)

        con.Open()

        ' First delete price history entries related to products in this line

        Dim deleteHistory As String = "DELETE FROM PRICEHISTORY_T WHERE PRODUCTID
IN (SELECT PRODUCTID FROM PRODUCT_T WHERE PRODUCTLINEID = @id)"

        Dim deleteProducts As String = "DELETE FROM PRODUCT_T WHERE
PRODUCTLINEID = @id"
```

```
Dim deleteLine As String = "DELETE FROM PRODUCTLINE_T WHERE  
PRODUCTLINEID = @id"
```

```
Using cmd1 As New SqlCommand(deleteHistory, con)  
    cmd1.Parameters.AddWithValue("@id", txtDeleteLineID.Text)  
    cmd1.ExecuteNonQuery()
```

```
End Using
```

```
Using cmd2 As New SqlCommand(deleteProducts, con)  
    cmd2.Parameters.AddWithValue("@id", txtDeleteLineID.Text)  
    cmd2.ExecuteNonQuery()
```

```
End Using
```

```
Using cmd3 As New SqlCommand(deleteLine, con)  
    cmd3.Parameters.AddWithValue("@id", txtDeleteLineID.Text)  
    cmd3.ExecuteNonQuery()
```

```
End Using
```

```
End Using
```

```
End Sub
```

' 4. CREATE PRODUCT + INSERT INITIAL PRICE

```
Protected Sub btnCreateProduct_Click(sender As Object, e As EventArgs)
```

```
    Using con As New SqlConnection(conStr)  
        con.Open()
```

```
        Dim insertProduct As String = "INSERT INTO PRODUCT_T (PRODUCTLINEID,  
PRODUCTNAME) VALUES (@lineID, @name); SELECT SCOPE_IDENTITY();" 
```

```
        Dim insertPrice As String = "INSERT INTO PRICEHISTORY_T (PRODUCTID,  
EFFECTIVEDATE, Price) VALUES (@pid, GETDATE(), @price)"
```

```

Dim productID As Integer = 0

Using cmd As New SqlCommand(insertProduct, con)
    cmd.Parameters.AddWithValue("@lineID", txtProductLineID.Text)
    cmd.Parameters.AddWithValue("@name", txtProductName.Text)
    productID = Convert.ToInt32(cmd.ExecuteScalar())
End Using

Using cmd2 As New SqlCommand(insertPrice, con)
    cmd2.Parameters.AddWithValue("@pid", productID)
    cmd2.Parameters.AddWithValue("@price", txtInitialPrice.Text)
    cmd2.ExecuteNonQuery()
End Using
End Using
End Sub

```

' 5. VIEW PRODUCTS

```

Protected Sub btnViewProducts_Click(sender As Object, e As EventArgs)
    Using con As New SqlConnection(conStr)
        Dim da As New SqlDataAdapter("SELECT * FROM PRODUCT_T", con)
        Dim dt As New DataTable()
        da.Fill(dt)

        gvProducts.DataSource = dt
        gvProducts.DataBind()
    End Using
End Sub

```

' 6. DELETE PRODUCT + PRICE HISTORY

Protected Sub btnDeleteProduct_Click(sender As Object, e As EventArgs)

Using con As New SqlConnection(conStr)

con.Open()

Dim delHist As String = "DELETE FROM PRICEHISTORY_T WHERE PRODUCTID = @id"

Dim delProd As String = "DELETE FROM PRODUCT_T WHERE PRODUCTID = @id"

Using cmd1 As New SqlCommand(delHist, con)

cmd1.Parameters.AddWithValue("@id", txtDeleteProductID.Text)

cmd1.ExecuteNonQuery()

End Using

Using cmd2 As New SqlCommand(delProd, con)

cmd2.Parameters.AddWithValue("@id", txtDeleteProductID.Text)

cmd2.ExecuteNonQuery()

End Using

End Using

End Sub

' 7. UPDATE PRICE

Protected Sub btnUpdatePrice_Click(sender As Object, e As EventArgs)

Using con As New SqlConnection(conStr)

Dim query As String = "INSERT INTO PRICEHISTORY_T (PRODUCTID, EFFECTIVEDATE, Price) VALUES (@pid, GETDATE(), @price)"

Using cmd As New SqlCommand(query, con)

cmd.Parameters.AddWithValue("@pid", txtUpdateProductID.Text)

cmd.Parameters.AddWithValue("@price", txtNewPrice.Text)

```
        con.Open()

        cmd.ExecuteNonQuery()

    End Using

End Using

End Sub

End Class
```

Admin_User_Manage.aspx

```
<%@ Page Title="Manage_Users" Language="VB" MasterPageFile="~/Site.Master"
AutoEventWireup="false" CodeFile="Admin_User_Manage.aspx.vb"
Inherits="Admin_User_Manage" %>

<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">

    <div class="welcome-section">

        <h2>Welcome, <asp:Literal ID="litUserName" runat="server" />!/</h2>

        <p>You are logged in as Administrator. From here you can manage the entire mess
system.</p>

    </div>

    <div class ="Customize_Admin_Main">

        <h2>Add_new_user :

            <asp:Button runat="server" Text="Add Customer" OnClick="AddCustomer_Click" />

        </h2>

        <h2>

            View_User_List : <asp:Button runat="server" Text="View Customer List"
OnClick="ViewCustomer_Click" />

        </h2>

    </div>

</asp:Content>
```

```

<asp:GridView ID="gvCustomers" runat="server">
    <Columns>
        <asp:BoundField DataField="USERID" HeaderText="USERID" />
        <asp:BoundField DataField="Name" HeaderText="Name" />
        <asp:BoundField DataField="CNIC" HeaderText="CNIC" />
        <asp:BoundField DataField="Username" HeaderText="Username" />
        <asp:BoundField DataField="PhoneNumber" HeaderText="Phone" />
        <asp:BoundField DataField="Address" HeaderText="Address" />
    </Columns>
</asp:GridView>
<h2>Delete User</h2>
<!-- UserID Input -->
<asp:TextBox ID="txtUserId" runat="server" Placeholder="Enter User ID" />
<asp:Button ID="btnConfirmDelete" runat="server" Text="Confirm Deletion"
OnClick="btnConfirmDelete_Click" />
<!-- Confirmation Text -->
<asp:Label ID="lblConfirmation" runat="server" Text="" ForeColor="Red"
Visible="False"></asp:Label>

</div>

</asp:Content>

```

Admin_User_Manage.aspx.vb

Imports System.Data

Imports System.Data.SqlClient

Partial Class Admin_User_Manage

Inherits System.Web.UI.Page

Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load

If Session("UserID") Is Nothing OrElse Session("RoleID") <> 1 Then

Response.Redirect("login.aspx")

End If

If Not IsPostBack Then

If Session("Username") IsNot Nothing Then

litUserName.Text = Session("Username").ToString()

End If

End If

End Sub

Protected Sub AddCustomer_Click(sender As Object, e As EventArgs)

Response.Redirect("register.aspx")

End Sub

Protected Sub ViewCustomer_Click(sender As Object, e As EventArgs)

Dim connectionString As String =

ConfigurationManager.ConnectionStrings("MessSystemConnectionString").ConnectionString

Using con As New SqlConnection(connectionString)

Dim query As String = "SELECT USERID, Name, CNIC, Username, PhoneNumber,
Address FROM REGISTERUSER_T WHERE ROLEID = 2"

```

Using cmd As New SqlCommand(query, con)

Using adapter As New SqlDataAdapter(cmd)

    Dim dt As New DataTable()

    adapter.Fill(dt)

    gvCustomers.DataSource = dt

    gvCustomers.DataBind()

End Using

End Using

End Using
End Sub

Protected Sub btnConfirmDelete_Click(sender As Object, e As EventArgs)

    ' Get the UserID entered by the admin

    Dim userId As String = txtUserId.Text.Trim()

    If String.IsNullOrEmpty(userId) Then

        lblConfirmation.Text = "Please enter a User ID."

        lblConfirmation.Visible = True

        Return

    End If

    ' Confirm deletion process

    If ConfirmDeletion(userId) Then

        lblConfirmation.Text = "User has been successfully deleted."

        lblConfirmation.ForeColor = System.Drawing.Color.Green

```

```

        lblConfirmation.Visible = True
    Else
        lblConfirmation.Text = "User ID not found or cannot be deleted."
        lblConfirmation.ForeColor = System.Drawing.Color.Red
        lblConfirmation.Visible = True
    End If
End Sub

Private Function ConfirmDeletion(userId As String) As Boolean
    ' Your logic to check if the user exists and is not an admin before deleting

    Dim connectionString As String =
ConfigurationManager.ConnectionStrings("MessSystemConnectionString").ConnectionStri
ng

    Using con As New SqlConnection(connectionString)

        Dim query As String = "DELETE FROM REGISTERUSER_T WHERE USERID = @UserID"

        Using cmd As New SqlCommand(query, con)

            cmd.Parameters.AddWithValue("@UserID", userId)

            con.Open()

            Dim rowsAffected As Integer = cmd.ExecuteNonQuery()

            con.Close()

            If rowsAffected > 0 Then

                Return True

            Else

                Return False

            End If

        End Using

    End Using

```

End Using

End Function

End Class

customer_dashboard.aspx

```
<%@ Page Title="Admin Dashboard" Language="VB" MasterPageFile="~/Site.Master"
AutoEventWireup="false" CodeFile="customer_dashboard.aspx.vb"
Inherits="customer_dashboard" %>
```

```
<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
```

```
<h2>Welcome, <asp:Literal ID="litUserName" runat="server" />!/</h2>
```

```
<p>You are logged in as Customer. Below are your available options:</p>
```

```
<h3>Customer Dashboard</h3>
```

```
<ul>
```

```
<li>
```

```
<strong>VIEW AVAILBLE CREDITS:</strong>
```

```
<a href="User_Credit_View.aspx">VIEW CREDITS</a>
```

```
</li>
```

```
<li>

    <strong>VIEW Menu:</strong>

    <a href="User_View_Menu.aspx">View Menu</a>

</li>

<li>

    <strong>VIEW Billing:</strong>

    <a href="User_View_Bill.aspx">View Bill</a>

</li>

<li>

    <strong>PAY_BILL:</strong>

    <a href="MakePayment.aspx">PAY BILL</a>

</li>

</ul>

</asp:Content>
```

customer_dashboard.aspx.vb

Partial Class customer_dashboard

Inherits System.Web.UI.Page

' i added this because of security featues like no one other than customer can access,,

Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load

 If Session("UserID") Is Nothing OrElse Session("RoleID") <> 2 Then

 Response.Redirect("login.aspx")

 End If

End Sub

End Class

direct_tsql_bill_manage

-- Parameters

DECLARE @UserID INT = 1;

DECLARE @BillMonth VARCHAR(20) = '2025-05';

DECLARE @TaxRate DECIMAL(5,2) = 0.10;

-- Calculate start and end of month

**DECLARE @StartDate DATE = DATEFROMPARTS(LEFT(@BillMonth, 4),
RIGHT(@BillMonth, 2), 1);**

DECLARE @EndDate DATE = EOMONTH(@StartDate);

-- Temporary table to hold item totals

IF OBJECT_ID('tempdb..#BillItems') IS NOT NULL DROP TABLE #BillItems;

SELECT

```

    ol.PRODUCTID,
    SUM(ol.QUANTITY) AS TotalQuantity,
    ph.Price,
    SUM(ol.QUANTITY * ph.Price) AS LineTotal
INTO #BillItems
FROM ORDERS_T o
JOIN ORDERLINE_T ol ON o.ORDERID = ol.ORDERID
JOIN (
    SELECT ph1.PRODUCTID, ph1.Price, ph1.EFFECTIVEDATE
    FROM PRICEHISTORY_T ph1
    WHERE ph1.EFFECTIVEDATE <= @EndDate
    AND NOT EXISTS (
        SELECT 1 FROM PRICEHISTORY_T ph2
        WHERE ph2.PRODUCTID = ph1.PRODUCTID
        AND ph2.EFFECTIVEDATE <= @EndDate
        AND ph2.EFFECTIVEDATE > ph1.EFFECTIVEDATE
    )
) ph ON ol.PRODUCTID = ph.PRODUCTID
WHERE o.USERID = @UserID
AND o.ORDERDATE BETWEEN @StartDate AND @EndDate
GROUP BY ol.PRODUCTID, ph.Price;

```

-- Total calculation

```

DECLARE @SubTotal DECIMAL(10,2) = (SELECT SUM(LineTotal) FROM #BillItems);
DECLARE @Tax DECIMAL(10,2) = @SubTotal * @TaxRate;
DECLARE @TotalAmount DECIMAL(10,2) = @SubTotal + @Tax;

```

-- Insert into BILL_T

INSERT INTO BILL_T (USERID, BILLPRICE, TAX, [MONTH], STATUS)

VALUES (@UserID, @TotalAmount, @Tax, @BillMonth, 'Unpaid');

-- Feedback

PRINT '✅ Monthly bill generated for user ' + CAST(@UserID AS VARCHAR) + ' for ' +
@BillMonth;

direct_tsql_order_update

-- =====

-- DIRECT T-SQL TO UPDATE EXISTING ORDERS WHEN SELECTING PRODUCTS

-- =====

DECLARE @UserID INT = 5;

DECLARE @ProductID INT = 3;

DECLARE @Quantity INT = 2;

DECLARE @UseExistingOrder BIT = 0;

DECLARE @ExistingOrderID INT = NULL;

BEGIN TRANSACTION;

DECLARE @OrderID INT;

```
DECLARE @ErrorMessage NVARCHAR(500);
```

```
DECLARE @CurrentPrice DECIMAL(10,2);
```

```
BEGIN TRY
```

```
-- STEP 1: GET CURRENT PRODUCT PRICE
```

```
SELECT TOP 1 @CurrentPrice = Price
```

```
FROM PRICEHISTORY_T
```

```
WHERE ProductID = @ProductID
```

```
ORDER BY EffectiveDate DESC;
```

```
IF @CurrentPrice IS NULL
```

```
BEGIN
```

```
    SET @ErrorMessage = 'Error: No price found for product ID ' + CAST(@ProductID AS  
    NVARCHAR);
```

```
    RAISERROR(@ErrorMessage, 16, 1);
```

```
END
```

```
-- STEP 2: CREATE OR SELECT ORDER
```

```
IF @UseExistingOrder = 1 AND @ExistingOrderID IS NOT NULL
```

```
BEGIN
```

```
    IF NOT EXISTS (SELECT 1 FROM ORDERS_T WHERE OrderID = @ExistingOrderID AND  
    UserID = @UserID)
```

```
    BEGIN
```

```
        SET @ErrorMessage = 'Error: Order #' + CAST(@ExistingOrderID AS NVARCHAR) +  
        ' does not exist or does not belong to this user';
```

```
        RAISERROR(@ErrorMessage, 16, 1);
```

```
    END
```

```
    SET @OrderID = @ExistingOrderID;
END
ELSE
BEGIN
    INSERT INTO ORDERS_T (UserID, OrderDate)
    VALUES (@UserID, GETDATE());

    SET @OrderID = SCOPE_IDENTITY();
END

-- STEP 3: ADD PRODUCT TO ORDER
DECLARE @ExistingOrderLineID INT;

SELECT @ExistingOrderLineID = OrderLineID
FROM ORDERLINE_T
WHERE OrderID = @OrderID AND ProductID = @ProductID;

IF @ExistingOrderLineID IS NULL
BEGIN
    INSERT INTO ORDERLINE_T (OrderID, ProductID, Quantity)
    VALUES (@OrderID, @ProductID, @Quantity);
END
ELSE
BEGIN
    UPDATE ORDERLINE_T
```

```

SET Quantity = Quantity + @Quantity

WHERE OrderLineID = @ExistingOrderLineID;

END

COMMIT TRANSACTION;

-- RETRIEVE UPDATED ORDER INFORMATION

DECLARE @ProductName NVARCHAR(255);

SELECT @ProductName = ProductName FROM PRODUCT_T WHERE ProductID =
@ProductID;

SELECT

'Added ' + CAST(@Quantity AS NVARCHAR) + ' ' + @ProductName +

' to Order #' + CAST(@OrderID AS NVARCHAR) AS ConfirmationMessage;

-- Show order item details with latest prices

;WITH LatestPrices AS (

SELECT

    ph.ProductID,

    ph.Price

FROM PRICEHISTORY_T ph

INNER JOIN (

    SELECT ProductID, MAX(EffectiveDate) AS MaxDate

    FROM PRICEHISTORY_T

    GROUP BY ProductID

) maxph ON ph.ProductID = maxph.ProductID AND ph.EffectiveDate = maxph.MaxDate

```

)

SELECT

 p.ProductName,

 ol.Quantity,

 lp.Price AS UnitPrice,

 ol.Quantity * lp.Price AS ExtendedPrice

FROM

 ORDERLINE_T ol

INNER JOIN PRODUCT_T p ON ol.ProductID = p.ProductID

INNER JOIN LatestPrices lp ON ol.ProductID = lp.ProductID

WHERE

 ol.OrderID = @OrderID

ORDER BY

 p.ProductName;

-- Return order totals

;WITH OrderItemPrices AS (

 SELECT

 ol.OrderID,

 ol.Quantity,

 lp.Price AS UnitPrice,

 ol.Quantity * lp.Price AS ExtendedPrice

FROM

 ORDERLINE_T ol

INNER JOIN (

 SELECT

```

        ph.ProductID,
        ph.Price
    FROM PRICEHISTORY_T ph
    INNER JOIN (
        SELECT ProductID, MAX(EffectiveDate) AS MaxDate
        FROM PRICEHISTORY_T
        GROUP BY ProductID
    ) maxph ON ph.ProductID = maxph.ProductID AND ph.EffectiveDate =
maxph.MaxDate
    ) lp ON ol.ProductID = lp.ProductID
    WHERE
        ol.OrderID = @OrderID
    )
    SELECT
        SUM(ExtendedPrice) AS Subtotal,
        SUM(ExtendedPrice) * 0.085 AS Tax,
        SUM(ExtendedPrice) * 1.085 AS Total
    FROM
        OrderItemPrices;

END TRY
BEGIN CATCH
    IF @@TRANCOUNT > 0
        ROLLBACK TRANSACTION;

    SELECT

```

```
'ERROR: ' + ERROR_MESSAGE() AS ErrorMessage,  
ERROR_NUMBER() AS ErrorNumber,  
ERROR_LINE() AS ErrorLine;  
END CATCH;
```

login.aspx

```
<%@Page Title="login" Language="VB" MasterPageFile="~/Site.Master"  
AutoEventWireup="false" CodeFile="login.aspx.vb" Inherits="login" %>  
  
<asp:Content ID="Content2" ContentPlaceHolderID="MainContent" runat="server">  
    <h2>Login</h2>  
    <asp:ValidationSummary ID="ValidationSummary1" runat="server" ForeColor="Red" />  
    <table>  
        <tr>  
            <td>Username:</td>  
            <td><asp:TextBox ID="txtUsername" runat="server" /></td>  
        </tr>  
        <tr>  
            <td>Password:</td>  
            <td><asp:TextBox ID="txtPassword" runat="server" TextMode="Password" /></td>  
        </tr>  
        <tr>  
            <td colspan="2">  
                <asp:Button ID="btnLogin" runat="server" Text="Login" OnClick="btnLogin_Click"  
            />  
        </td>  
    </table>  
</asp:Content>
```

```

        </td>

    </tr>

    <tr>

        <td colspan="2">

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

        </td>

    </tr>

</table>

</asp:Content>

```

login.aspx.vb

Imports System.Data.SqlClient

Partial Class login

Inherits System.Web.UI.Page

Protected Sub btnLogin_Click(sender As Object, e As EventArgs) Handles btnLogin.Click

Dim username As String = txtUsername.Text.Trim()

Dim password As String = txtPassword.Text.Trim()

Dim connectionString As String =
 ConfigurationManager.ConnectionStrings("MessSystemConnectionString").ConnectionStri
 ng

Using con As New SqlConnection(connectionString)

```
Dim query As String = "SELECT USERID, ROLEID FROM REGISTERUSER_T WHERE  
Username = @Username AND Password = @Password"
```

```
Using cmd As New SqlCommand(query, con)
```

```
cmd.Parameters.AddWithValue("@Username", username)
```

```
cmd.Parameters.AddWithValue("@Password", password)
```

```
con.Open()
```

```
Dim reader As SqlDataReader = cmd.ExecuteReader()
```

```
If reader.HasRows Then
```

```
reader.Read()
```

```
Dim roleID As Integer = Convert.ToInt32(reader("ROLEID"))
```

```
Dim userID As Integer = Convert.ToInt32(reader("USERID"))
```

```
Session("UserID") = userID
```

```
Session("RoleID") = roleID
```

```
Session("Username") = username
```

```
If roleID = 1 Then
```

```
Response.Redirect("admin_dashboard.aspx")
```

```
ElseIf roleID = 2 Then
```

```
Response.Redirect("customer_dashboard.aspx")
```

```
Else
```

```
lblMessage.Text = "Unknown role."
```

```
End If
```

```
Else
```

```
        lblMessage.Text = "Invalid username or password."

    End If

    con.Close()

    End Using

    End Using

    End Sub

End Class
```

MakePayment.aspx

```
<%@ Page Title="Make a Payment" Language="VB" MasterPageFile="~/Site.Master"
AutoEventWireup="false" CodeFile="MakePayment.aspx.vb" Inherits="MakePayment"
%>
```

```
<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
```

```
    <div style="width: 600px; margin: 0 auto;">
```

```
        <h2>Pay Your Bill</h2>
```

```
        <asp:Label ID="lblBillID" runat="server" Text="Bill ID: " />
```

```
        <asp:TextBox ID="txtBillID" runat="server" CssClass="form-control" />
```

```
    <br />
```

```
    <asp:Label ID="lblAmount" runat="server" Text="Payment Amount: " />
```

```
    <asp:TextBox ID="txtAmount" runat="server" CssClass="form-control" />
```


<asp:Button ID="btnPay" runat="server" Text="Make Payment" CssClass="btn btn-primary" OnClick="btnPay_Click" />

<asp:Label ID="lblMessage" runat="server" ForeColor="Green" Font-Bold="True" />

</div>

</asp:Content>

MakePayment.aspx.vb

Imports System.Data.SqlClient

Partial Class MakePayment

Inherits System.Web.UI.Page

Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load

If Session("UserID") Is Nothing OrElse Session("RoleID") <> 2 Then

Response.Redirect("login.aspx")

End If

End Sub

Protected Sub btnPay_Click(sender As Object, e As EventArgs)

Dim userId As Integer = Convert.ToInt32(Session("UserID"))

```
Dim billId As Integer = Convert.ToInt32(txtBillID.Text.Trim())
```

```
Dim amountPaid As Decimal = Convert.ToDecimal(txtAmount.Text.Trim())
```

```
Dim connStr As String =  
ConfigurationManager.ConnectionStrings("MessSystemConnectionString").ConnectionStri  
ng
```

```
Using conn As New SqlConnection(connStr)
```

```
    conn.Open()
```

```
    ' 1. Get Bill Info
```

```
    Dim cmdGetBill As New SqlCommand("SELECT BILLPRICE, TAX FROM BILL_T  
WHERE BILLID = @BillID AND USERID = @UserID", conn)
```

```
    cmdGetBill.Parameters.AddWithValue("@BillID", billId)
```

```
    cmdGetBill.Parameters.AddWithValue("@UserID", userId)
```

```
    Dim reader As SqlDataReader = cmdGetBill.ExecuteReader()
```

```
    Dim billPrice As Decimal = 0
```

```
    Dim tax As Decimal = 0
```

```
    If reader.Read() Then
```

```
        billPrice = If(IsDBNull(reader("BILLPRICE")), 0,  
Convert.ToDecimal(reader("BILLPRICE")))
```

```
        tax = If(IsDBNull(reader("TAX")), 0, Convert.ToDecimal(reader("TAX")))
```

```
    Else
```

```
        lblMessage.ForeColor = Drawing.Color.Red
```

```
        lblMessage.Text = "Bill not found or does not belong to you."
```

reader.Close()

Exit Sub

End If

reader.Close()

Dim totalDue As Decimal = billPrice + tax

' 2. Insert Payment

Dim cmdInsert As New SqlCommand("INSERT INTO PAYMENT_T (BILLID, PAIDAMOUNT, PAYMENTDATE) VALUES (@BillID, @Amount, GETDATE())", conn)

cmdInsert.Parameters.AddWithValue("@BillID", billId)

cmdInsert.Parameters.AddWithValue("@Amount", amountPaid)

cmdInsert.ExecuteNonQuery()

' 3. Update Bill Status

If amountPaid = totalDue Then

UpdateBillStatus(conn, billId, "Paid")

ElseIf amountPaid < totalDue Then

UpdateBillStatus(conn, billId, "Partial")

Else

Dim extra As Decimal = amountPaid - totalDue

UpdateBillStatus(conn, billId, "Paid")

' Handle credits

Dim checkCreditsCmd As New SqlCommand("SELECT COUNT(*) FROM USER_CREDITS WHERE USER_ID = @UserID", conn)

checkCreditsCmd.Parameters.AddWithValue("@UserID", userId)

```
Dim exists As Boolean = Convert.ToInt32(checkCreditsCmd.ExecuteScalar()) > 0
```

```
If exists Then
```

```
    Dim updateCredits As New SqlCommand("UPDATE USER_CREDITS SET CREDITS  
= CREDITS + @Extra WHERE USER_ID = @UserID", conn)
```

```
    updateCredits.Parameters.AddWithValue("@Extra", extra)
```

```
    updateCredits.Parameters.AddWithValue("@UserID", userId)
```

```
    updateCredits.ExecuteNonQuery()
```

```
Else
```

```
    Dim insertCredits As New SqlCommand("INSERT INTO USER_CREDITS (USER_ID,  
CREDITS) VALUES (@UserID, @Extra)", conn)
```

```
    insertCredits.Parameters.AddWithValue("@Extra", extra)
```

```
    insertCredits.Parameters.AddWithValue("@UserID", userId)
```

```
    insertCredits.ExecuteNonQuery()
```

```
End If
```

```
End If
```

```
lblMessage.ForeColor = Drawing.Color.Green
```

```
lblMessage.Text = "Payment processed successfully."
```

```
End Using
```

```
End Sub
```

```
Private Sub UpdateBillStatus(conn As SqlConnection, billId As Integer, status As String)
```

```
    Dim cmd As New SqlCommand("UPDATE BILL_T SET STATUS = @Status WHERE BILLID  
= @BillID", conn)
```

```
    cmd.Parameters.AddWithValue("@Status", status)
```

```
    cmd.Parameters.AddWithValue("@BillID", billId)
```

```
cmd.ExecuteNonQuery()  
  
End Sub  
  
End Class
```

register.aspx

```
<%@Page Title="register" Language="VB" MasterPageFile="~/Site.Master"  
AutoEventWireup="false" CodeFile="register.aspx.vb" Inherits="register" %>  
  
<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">  
  
    <style>  
        .table_format{  
            text-align: center;  
            margin-bottom: 20px;  
            align-content:center  
        }  
    </style>  
  
    <h2>CUSTOMER Registration</h2>  
  
    <asp:ValidationSummary ID="ValidationSummary1" runat="server" ForeColor="Red" />  
  
    <div class ="table_format">  
  
        <table>  
  
            <tr>  
  
                <td>Name:</td>  
  
                <td><asp:TextBox ID="txtName" runat="server" /></td>
```

```
</tr>

<tr>

    <td>CNIC:</td>

    <td><asp:TextBox ID="txtCNIC" runat="server" /></td>

</tr>

<tr>

    <td>Username:</td>

    <td><asp:TextBox ID="txtUsername" runat="server" /></td>

</tr>

<tr>

    <td>Password:</td>

    <td><asp:TextBox ID="txtPassword" runat="server" TextMode="Password" /></td>

</tr>

<tr>

    <td>Phone Number:</td>

    <td><asp:TextBox ID="txtPhone" runat="server" /></td>

</tr>

<tr>

    <td>Address:</td>

    <td><asp:TextBox ID="txtAddress" runat="server" TextMode="MultiLine" /></td>

</tr>

<tr>

    <td colspan="2">

        <asp:Button ID="btnRegister" runat="server" Text="Register"
OnClick="btnRegister_Click" />

    </td>

</tr>
```

```
        </tr>
    </table>
</div>
</asp:Content>
```

register.aspx.vb

Imports System.Data.SqlClient

Partial Class register

Inherits System.Web.UI.Page

Protected Sub btnRegister_Click(sender As Object, e As EventArgs) Handles
btnRegister.Click

Dim name As String = txtName.Text.Trim()

Dim cnic As String = txtCNIC.Text.Trim()

Dim username As String = txtUsername.Text.Trim()

Dim password As String = txtPassword.Text.Trim()

Dim phone As String = txtPhone.Text.Trim()

Dim address As String = txtAddress.Text.Trim()

If name = "" OrElse cnic = "" OrElse username = "" OrElse password = "" Then

Exit Sub

End If

```
Dim connectionString As String =  
ConfigurationManager.ConnectionStrings("MessSystemConnectionString").ConnectionStri  
ng
```

```
Using con As New SqlConnection(connectionString)
```

```
Dim query As String = "INSERT INTO REGISTERUSER_T (Name, CNIC, Username,  
Password, PhoneNumber, Address , ROLEID) " &
```

```
"VALUES (@Name, @CNIC, @Username, @Password, @Phone, @Address  
, @ROLEID)"
```

```
Using cmd As New SqlCommand(query, con)
```

```
cmd.Parameters.AddWithValue("@Name", name)
```

```
cmd.Parameters.AddWithValue("@CNIC", cnic)
```

```
cmd.Parameters.AddWithValue("@Username", username)
```

```
cmd.Parameters.AddWithValue("@Password", password)
```

```
cmd.Parameters.AddWithValue("@Phone", phone)
```

```
cmd.Parameters.AddWithValue("@Address", address)
```

```
'I AM ADDING DEFAULT ROLEID FOR CUSTOMER AS 2 BECAUSE WE ARE  
ALLOWING ONLY CUSTOMER REGISTRATION
```

```
cmd.Parameters.AddWithValue("@ROLEID", 2)
```

```
con.Open()
```

```
cmd.ExecuteNonQuery()
```

```
con.Close()
```

```
End Using
```

```
End Using
```

```
Response.Redirect("login.aspx")
```

End Sub

End Class

User_Credit_View.aspx

```
<%@ Page Title="CUSTOMER CREDITS VIEW" Language="VB"
MasterPageFile="~/Site.Master" AutoEventWireup="false"
CodeFile="User_Credit_View.aspx.vb" Inherits="User_Credit_View" %>

<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">

    <div style="width: 400px; margin: 0 auto;">

        <h1>credits view</h1>

        <asp:GridView ID="gvCredits" runat="server" AutoGenerateColumns="True"
></asp:GridView>

        <asp:Button ID="btnGoToDashboard" runat="server" Text="Go to Customer
Dashboard" OnClick="btnGoToDashboard_Click" />

    </div>

</asp:Content>
```

User_Credit_View.aspx.vb

```
Imports System.Data

Imports System.Data.SqlClient

Partial Class User_Credit_View

    Inherits System.Web.UI.Page
```

' i added this because of security features like no one other than customer can access,,

Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load

 If Not IsPostBack Then

 LoadUserCredits()

 End If

 If Session("UserID") Is Nothing OrElse Session("RoleID") <> 2 Then

 Response.Redirect("login.aspx")

 End If

End Sub

Protected Sub btnGoToDashboard_Click(sender As Object, e As EventArgs)

 Response.Redirect("customer_dashboard.aspx")

End Sub

Private Sub LoadUserCredits()

 ' Example: Get UserId from session

 Dim userId As Integer = Convert.ToInt32(Session("UserID"))

 Dim connectionString As String =
ConfigurationManager.ConnectionStrings("MessSystemConnectionString").ConnectionStri
ng

 Dim query As String = "SELECT CREDITS FROM USER_CREDITS WHERE USER_ID =
@UserId"

 Using con As New SqlConnection(connectionString)

```

Using cmd As New SqlCommand(query, con)

    cmd.Parameters.AddWithValue("@UserId", userId)

    Dim adapter As New SqlDataAdapter(cmd)

    Dim dt As New DataTable()

    adapter.Fill(dt)

    gvCredits.DataSource = dt

    gvCredits.DataBind()

End Using

End Using

End Sub

```

```
End Class
```

User_View_Bill.aspx

```

<%@ Page Title="CUSTOMER View Bill" Language="VB" MasterPageFile="~/Site.Master"
AutoEventWireup="false" CodeFile="User_View_Bill.aspx.vb" Inherits="User_View_Bill" %>

```

```
<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
```

```
    <div style="width: 600px; margin: 0 auto;">
```

```
        <h1>My Monthly Bills</h1>
```

```
        <!-- Display Grid of Bills -->
```

```

        <asp:GridView ID="gvBills" runat="server" AutoGenerateColumns="False"
        CssClass="table table-bordered">

```

```
            <Columns>
```

```

        <asp:BoundField DataField="BILLID" HeaderText="Bill ID" />
        <asp:BoundField DataField="BILLPRICE" HeaderText="Amount" />
        <asp:BoundField DataField="STATUS" HeaderText="Status" />
        <asp:BoundField DataField="MONTH" HeaderText="Month" />
    </Columns>
</asp:GridView>

<br />

    <asp:Button ID="btnGoToDashboard" runat="server" Text="Go to Customer
Dashboard" OnClick="btnGoToDashboard_Click" />

</div>
</asp:Content>

```

User_View_Bill.aspx.vb

Imports System.Data

Imports System.Data.SqlClient

Partial Class User_View_Bill

Inherits System.Web.UI.Page

Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load

' Only allow logged-in customers

If Session("UserID") Is Nothing OrElse Session("RoleID") <> 2 Then

Response.Redirect("login.aspx")

End If

If Not IsPostBack Then

 LoadBills()

End If

End Sub

Private Sub LoadBills()

 Dim userId As Integer = Convert.ToInt32(Session("UserID"))

 Dim connectionString As String =
System.Configuration.ConfigurationManager.ConnectionStrings("MessSystemConnection
String").ConnectionString

 Dim query As String = "SELECT BILLID, BILLPRICE, STATUS, MONTH FROM BILL_T
WHERE USERID = @UserID ORDER BY BILLID DESC"

 Using conn As New SqlConnection(connectionString)

 Using cmd As New SqlCommand(query, conn)

 cmd.Parameters.AddWithValue("@UserID", userId)

 conn.Open()

 Dim reader As SqlDataReader = cmd.ExecuteReader()

 gvBills.DataSource = reader

 gvBills.DataBind()

 End Using

 End Using

End Sub

Protected Sub btnGoToDashboard_Click(sender As Object, e As EventArgs)

 Response.Redirect("customer_dashboard.aspx")

End Sub

End Class

User_View_Menu.aspx

```
<%@ Page Title="CUSTOMER menu VIEW" Language="VB" MasterPageFile="~/Site.Master"
AutoEventWireup="false" CodeFile="User_View_Menu.aspx.vb"
Inherits="User_View_Menu" %>
```

```
<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
```

```
    <div style="width: 400px; margin: 0 auto;">
```

```
        <h1>MENU view</h1>
```

```
        <asp:GridView ID="gvMenu" runat="server" AutoGenerateColumns="True"
```

```
            GridLines="Both" CellPadding="6" Font-Size="Medium"
```

```
            HeaderStyle-BackColor="#444" HeaderStyle-ForeColor="White"
```

```
            AlternatingRowStyle-BackColor="#f9f9f9"
```

```
            BorderStyle="Solid" BorderWidth="1px" />
```

```
        <asp:Button ID="btnGoToDashboard" runat="server" Text="Go to Customer
Dashboard" OnClick="btnGoToDashboard_Click" />
```

```
    </div>
```

```
</asp:Content>
```

User_View_Menu.aspx.vb

```
Imports System.Data
```

Imports System.Data.SqlClient

Partial Class User_View_Menu

Inherits System.Web.UI.Page

' i added this because of security feautres like no one other than customer can access,,

Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load

 If Not IsPostBack Then

 LoadMenuGrid()

 End If

 If Session("UserID") Is Nothing OrElse Session("RoleID") <> 2 Then

 Response.Redirect("login.aspx")

 End If

End Sub

Protected Sub btnGoToDashboard_Click(sender As Object, e As EventArgs)

 Response.Redirect("customer_dashboard.aspx")

End Sub

Private Sub LoadMenuGrid()

 Dim connectionString As String =

ConfigurationManager.ConnectionStrings("MessSystemConnectionString").ConnectionStri
ng

 Using conn As New SqlConnection(connectionString)

```
conn.Open()

Dim cmd As New SqlCommand("SELECT * FROM MENU_VIEW ORDER BY MenuDate
DESC", conn)

Dim reader As SqlDataReader = cmd.ExecuteReader()

gvMenu.DataSource = reader

gvMenu.DataBind()

reader.Close()

End Using

End Sub

End Class
```