

Home.aspx

Home.aspx.vb

```
Imports System
Imports System.Web.UI
Imports System.Data
Imports System.Data.SqlClient
Imports System.Web.UI.WebControls

Partial Class Home
    Inherits Page

    Protected Sub Retrieval(ByVal sender As Object, ByVal e As EventArgs) Handles Me.Load
        Dim cons As String
        cons = "Data source=DESKTOP-JMV907L\SQLEXPRESS; Initial Catalog=SAAS; Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "Select Plans_Name, Software_Name, Software_Level"
        cmd.CommandText &= " from Plans join Plans_Line on Plans.Plans_Id =
Plans_Line.Plans_Id"
        cmd.CommandText &= " join Software on Software.Software_Id=Plans_Line.Software_Id"
        Dim dr As SqlDataReader
        con.Open()
        dr = cmd.ExecuteReader()
        lbltbl.Text = "<table border='1' cellpadding='10' cellspacing='0'>"
        lbltbl.Text &= "<tr><th>Plan Name</th><th>Software Name</th><th>Service
Level</th></tr>"
        Dim currentPlan As String = ""
        Dim softwareList As String = ""
        Dim levelList As String = ""
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While dr.Read()
    If currentPlan = "" Then
        currentPlan = dr("Plans_Name").ToString()
    End If
    If dr("Plans_Name").ToString() = currentPlan Then
        softwareList &= dr("Software_Name").ToString() & "<br/>"
        levelList &= dr("Software_Level").ToString() & "<br/>"
    Else
        lbltbl.Text &= "<tr><td>" & currentPlan & "</td><td>" & softwareList &
"</td><td>" & levelList & "</td></tr>"
        currentPlan = dr("Plans_Name").ToString()
        softwareList = dr("Software_Name").ToString() & "<br/>"
        levelList = dr("Software_Level").ToString() & "<br/>"
    End If
End While
If currentPlan <> "" Then
    lbltbl.Text &= "<tr><td>" & currentPlan & "</td><td>" & softwareList &
"</td><td>" & levelList & "</td></tr>"
End If
lbltbl.Text &= "</table>"
dr.Close()
con.Close()
cmd.Dispose()
Dim con2 As New SqlConnection
con2.ConnectionString = cons
Dim cmd2 As New SqlCommand
cmd2.Connection = con2
cmd2.CommandText = "Select * from Login"
Dim drr As SqlDataReader
con2.Open()
drr = cmd2.ExecuteReader()
lbllogin.Text = "<table border='1' cellpadding='10' cellspacing='0'>"
lbllogin.Text &= " <tr><th>Login ID</th><th>Password</th><th>Role</th></tr>"
While drr.Read()
    lbllogin.Text &= "<tr>" & "<td>" & drr("Login_Id").ToString() & "</td>" & "<td>"
& drr("Password").ToString() & "</td>"
    lbllogin.Text &= "<td>" & drr("Role").ToString() & "</td>" & "</tr>"
End While
lbllogin.Text &= "</table>"
drr.Close()
con2.Close()
cmd2.Dispose()
End Sub

Protected Sub CustReg_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
CustReg.Click
    Response.Redirect("CustRegister.aspx")
End Sub

Protected Sub CustLogin_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
CustLogin.Click
    Response.Redirect("Login.aspx")
End Sub

Protected Sub AdminLogin_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
AdminLogin.Click
    Response.Redirect("AdminLogin.aspx")
End Sub

End Class

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```
<%@ Page Language="VB" MasterPageFile="~/MasterPage.master" AutoEventWireup="false"
CodeFile="Admin.aspx.vb" Inherits="Admin" title="Administrator" %>
```

[illegible]


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        cmd.Dispose()
    End Sub
    Protected Sub viewlogin_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
viewlogin.Click
        Dim cons As String
        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "SELECT Login_Id, Password, Role FROM Login"
        Dim dr As SqlDataReader
        con.Open()
        dr = cmd.ExecuteReader()
        lblLoginTable.Text = "<br/><br/><table border='1' cellpadding='8' cellspacing='0'>"
        lblLoginTable.Text &= "<tr><th>Login ID</th><th>Password</th><th>Role</th></tr>"
        While dr.Read()
            lblLoginTable.Text &= "<tr><td>" & dr("Login_Id") & "</td><td>" & dr("Password")
            & "</td><td>" & dr("Role") & "</td></tr>"
        End While
        lblLoginTable.Text &= "</table>"
        dr.Close()
        con.Close()
        cmd.Dispose()
    End Sub
    Protected Sub editmang_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
editmang.Click
        lblSelectAdminId.Visible = True
        ddlAdminId.Visible = True
        lblAdminColumn.Visible = True
        ddlAdminColumn.Visible = True
        lblAdminNewValue.Visible = True
        txtAdminNewValue.Visible = True
        btnUpdateAdmin.Visible = True
        lblAdminUpdateStatus.Visible = True
        Dim cons As String
        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "SELECT Admin_Id FROM Admin"
        con.Open()
        Dim dr As SqlDataReader
        dr = cmd.ExecuteReader()
        ddlAdminId.Items.Clear()
        While dr.Read()
            ddlAdminId.Items.Add(dr("Admin_Id").ToString())
        End While
        dr.Close()
        con.Close()
    End Sub

    Protected Sub btnUpdateAdmin_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnUpdateAdmin.Click
        Dim adminId As String = ddlAdminId.SelectedValue
        Dim column As String = ddlAdminColumn.SelectedValue
        Dim newValue As String = txtAdminNewValue.Text
        Dim cons As String
        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"

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Dim con As New SqlConnection
con.ConnectionString = cons
Dim cmd As New SqlCommand
cmd.Connection = con
cmd.CommandText = "UPDATE Admin SET " & column & " = '" & newValue & "' WHERE
Admin_Id = '" & adminId & "'"
Try
    con.Open()
    Dim rowsAffected As Integer = cmd.ExecuteNonQuery()
    If rowsAffected > 0 Then
        lblAdminUpdateStatus.Text = "Value Updated Successfully!"
    Else
        lblAdminUpdateStatus.Text = "No Value Updated!"
    End If
Catch ex As Exception
    lblAdminUpdateStatus.Text = "Error: " & ex.Message
Finally
    con.Close()
End Try
End Sub

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Protected Sub editlogin_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
editlogin.Click

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    lblSelectLoginId.Visible = True
    ddlLoginId.Visible = True
    lblLoginColumn.Visible = True
    ddlLoginColumn.Visible = True
    lblLoginNewValue.Visible = True
    txtLoginNewValue.Visible = True
    btnUpdateLogin.Visible = True
    lblLoginUpdateStatus.Visible = True
    Dim cons As String
    cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
    Dim con As New SqlConnection
    con.ConnectionString = cons
    Dim cmd As New SqlCommand
    cmd.Connection = con
    cmd.CommandText = "SELECT Login_Id FROM Login"
    con.Open()
    Dim dr As SqlDataReader
    dr = cmd.ExecuteReader()
    ddlLoginId.Items.Clear()
    While dr.Read()
        ddlLoginId.Items.Add(dr("Login_Id").ToString())
    End While
    dr.Close()
    con.Close()
End Sub

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Protected Sub btnUpdateLogin_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnUpdateLogin.Click

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    Dim loginId As String = ddlLoginId.SelectedValue
    Dim column As String = ddlLoginColumn.SelectedValue
    Dim newValue As String = txtLoginNewValue.Text
    Dim cons As String
    cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
    Dim con As New SqlConnection
    con.ConnectionString = cons
    Dim cmd As New SqlCommand
    cmd.Connection = con

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cmd.CommandText = "UPDATE Login SET " & column & " = '" & newValue & "' WHERE
Login_Id = '" & loginId & "'"
Try
    con.Open()
    Dim rowsAffected As Integer = cmd.ExecuteNonQuery()
    If rowsAffected > 0 Then
        lblLoginUpdateStatus.Text = "Value Updated Successfully!"
    Else
        lblLoginUpdateStatus.Text = "No Value Updated!"
    End If
Catch ex As Exception
    lblLoginUpdateStatus.Text = "Error: " & ex.Message
Finally
    con.Close()
End Try
End Sub
Protected Sub btnAddManager_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnAddManager.Click
    lblAddAdmin.Visible = True
    txtAdminId.Visible = True
    txtAdminEmail.Visible = True
    txtAdminName.Visible = True
    txtAdminCell.Visible = True
    txtAdminCountry.Visible = True
    txtAdminCity.Visible = True
    btnSaveAdmin.Visible = True
    lblAddAdminStatus.Visible = True
End Sub
Protected Sub btnSaveAdmin_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnSaveAdmin.Click
    Dim cons As String
    cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
    Dim con As New SqlConnection(cons)
    Dim cmd As New SqlCommand
    cmd.Connection = con
    cmd.CommandText = "INSERT INTO Admin (Admin_Id, Email, Name, Cell_NO, Country, City)
VALUES ('" &
txtAdminId.Text & "', '" & txtAdminEmail.Text & "', '" & txtAdminName.Text & "', '" &
txtAdminCell.Text & "', '" & txtAdminCountry.Text & "', '" & txtAdminCity.Text & "')"
Try
    con.Open()
    cmd.ExecuteNonQuery()
    lblAddAdminStatus.Text = "New manager added successfully!<br/><br/>"
Catch ex As Exception
    lblAddAdminStatus.Text = "Error: " & ex.Message
Finally
    con.Close()
End Try
End Sub
Protected Sub btnAddLogin_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnAddLogin.Click
    lblAddLogin.Visible = True
    txtLoginIdAdd.Visible = True
    txtPasswordAdd.Visible = True
    txtRoleAdd.Visible = True
    btnSaveLogin.Visible = True
    lblAddLoginStatus.Visible = True
End Sub
Protected Sub btnSaveLogin_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnSaveLogin.Click
    Dim cons As String

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```

        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
        Dim con As New SqlConnection(cons)
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "INSERT INTO Login (Login_Id, Password, Role) VALUES ('" &
txtLoginIdAdd.Text & "', '" & txtPasswordAdd.Text & "', '" & txtRoleAdd.Text & "')"
        Try
            con.Open()
            cmd.ExecuteNonQuery()
            lblAddLoginStatus.Text = "Login credentials added successfully!"
        Catch ex As Exception
            lblAddLoginStatus.Text = "Error: " & ex.Message
        Finally
            con.Close()
        End Try
    End Sub

End Class

```

AdminLogin.aspx

```

<%@ Page Language="VB" MasterPageFile="~/MasterPage.master" AutoEventWireup="false"
CodeFile="AdminLogin.aspx.vb" Inherits="AdminLogin" title="Administrator Login" %>

<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
    <h2>Administrator Login</h2>
    <h3>Choose your role: </h3>
    <asp:RadioButtonList ID="rblRoles" runat="server">
<asp:ListItem Text="Administrator" />
<asp:ListItem Text="Customer Subscription Manager" />
<asp:ListItem Text="Subscription Billing Manager" />
        <asp:ListItem Text="Customer Payment Manager" />
    </asp:RadioButtonList><br />
    <asp:RequiredFieldValidator ID="rfvRoles" runat="server" ControlToValidate="rblRoles"
ErrorMessage="Please select a role"
    ForeColor="Red" />
    <h3>Enter your login credentials: </h3>
    <div class="form_group">
        <label class="form_label">Admin ID:</label>
        <asp:TextBox ID="txtAId" runat="server"></asp:TextBox>
        <asp:RequiredFieldValidator ID="rfvAId" runat="server" ControlToValidate="txtAId"
ErrorMessage="Admin ID is required!" ForeColor="Red"/>
    </div>
    <div class="form_group">
        <label class="form_label">Password:</label>
        <asp:TextBox ID="txtpassword" runat="server" TextMode="Password"></asp:TextBox>
        <asp:RequiredFieldValidator ID="rfvPassword" runat="server"
ControlToValidate="txtpassword" ErrorMessage="Password is required!" ForeColor="Red"
/>
    </div>
    <asp:Button ID="btnlogin" runat="server" Text="Login" />
    <asp:Label ID="lblMessage" runat="server" ForeColor="Red"></asp:Label>
</asp:Content>

```

AdminLogin.aspx.vb

```
Imports System
Imports System.Data
Imports System.Data.SqlClient
Imports System.Web.UI

Partial Class AdminLogin
    Inherits Page

    Protected Sub Page_Load(ByVal sender As Object, ByVal e As EventArgs) Handles Me.Load
        If Not IsPostBack Then
            If Request.Cookies("Admin_Id") IsNot Nothing Then
                txtAId.Text = Request.Cookies("Admin_Id").Value
            End If
        End If
    End Sub

    Protected Sub btnlogin_Click(ByVal sender As Object, ByVal e As EventArgs) Handles btnlogin.Click
        Dim cons As String
        cons = "Data source=DESKTOP-JMV907L\SQLEXPRESS; Initial Catalog=SAAS; Integrated Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "SELECT COUNT(*) FROM Login WHERE Login_Id = '" & txtAId.Text
        cmd.CommandText &= "' And Password = '" & txtpassword.Text & "' And Role = '" &
        rblRoles.Text & "'"
        Try
            con.Open()
            Dim count As Integer
            count = cmd.ExecuteScalar()
            If count > 0 Then
                Dim Cookie As New HttpCookie("Admin_Id")
                Cookie.Value = txtAId.Text
                Response.Cookies.Add(Cookie)
                lblMessage.Text = "Login Successful!"
                ViewState.Clear()
                If rblRoles.Text = "Administrator" Then
                    Response.Redirect("Admin.aspx")
                ElseIf rblRoles.Text = "Customer Subscription Manager" Then
                    Response.Redirect("CSM.aspx")
                ElseIf rblRoles.Text = "Subscription Billing Manager" Then
                    Response.Redirect("SBM.aspx")
                ElseIf rblRoles.Text = "Customer Payment Manager" Then
                    Response.Redirect("CPM.aspx")
                End If
            Else
                lblMessage.Text = "Invalid Credentials!"
            End If
        Catch ex As Exception
            lblMessage.Text = "Error: " & ex.Message
        Finally
            con.Close()
            cmd.Dispose()
        End Try
    End Sub
End Class
```

```
<%@ Page Language="VB" MasterPageFile="~/MasterPage.master" AutoEventWireup="false"
CodeFile="CPM.aspx.vb" Inherits="CPM" title="Customer Payment Manager" %>
```

[illegible]

CPM.aspx.vb

```
Imports System
Imports System.Data
Imports System.Data.SqlClient
Imports System.Web.UI

Partial Class CPM
    Inherits Page
    Protected Sub btnViewPayments_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnViewPayments.Click
        Dim cons As String
        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "SELECT Payment_Id, Subscription_Id, Method_Id, Amount, Cell_NO,
Account_No, Payment_Timestamp FROM Payment"
        con.Open()
        Dim dr As SqlDataReader
        dr = cmd.ExecuteReader()
        lblPaymentTable.Text = "<br/><br/><table border='1' cellpadding='8' cellspacing='0'>"
        lblPaymentTable.Text &= "<tr><th>Payment ID</th><th>Subscription Id</th><th>Method
Id</th><th>Amount</th><th>Cell No</th><th>Account No</th><th>Payment Date</th></tr>"
        While dr.Read()
            lblPaymentTable.Text &= "<tr><td>" & dr("Payment_Id") & "</td><td>" &
dr("Subscription_Id") & "</td><td>" & dr("Method_Id") & "</td><td>" &
            lblPaymentTable.Text &= "<td>" & dr("Amount") & "</td><td>" & dr("Cell_NO") &
"</td><td>" & dr("Account_No") & "</td><td>" & dr("Payment_Timestamp") & "</td></tr>"
        End While
        lblPaymentTable.Text &= "</table>"
        dr.Close()
        con.Close()
    End Sub
    Protected Sub btnEditPayments_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnEditPayments.Click
        lblSelectPaymentId.Visible = True
        ddlPaymentId.Visible = True
        lblPaymentColumn.Visible = True
        ddlPaymentColumn.Visible = True
        lblPaymentNewValue.Visible = True
        txtPaymentNewValue.Visible = True
        btnUpdatePayment.Visible = True
        lblPaymentUpdateStatus.Visible = True
        Dim cons As String
        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "SELECT Payment_Id FROM Payment"
        con.Open()
        Dim dr As SqlDataReader
        dr = cmd.ExecuteReader()
        ddlPaymentId.Items.Clear()
        While dr.Read()
            ddlPaymentId.Items.Add(dr("Payment_Id").ToString())
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        End While
        dr.Close()
        con.Close()
    End Sub
    Protected Sub btnUpdatePayment_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
        btnUpdatePayment.Click
        Dim paymentId As String = ddlPaymentId.SelectedValue
        Dim column As String = ddlPaymentColumn.SelectedValue
        Dim newValue As String = txtPaymentNewValue.Text
        Dim cons As String
        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "UPDATE Payment SET " & column & " = '" & newValue & "' WHERE
Payment_Id = '" & paymentId & "'"
        con.Open()
        Try
            Dim rowsAffected As Integer = cmd.ExecuteNonQuery()
            If rowsAffected > 0 Then
                lblPaymentUpdateStatus.Text = "Value Updated Successfully!"
            Else
                lblPaymentUpdateStatus.Text = "No Value Updated!"
            End If
        Catch ex As Exception
            lblPaymentUpdateStatus.Text = "Error: " & ex.Message
        Finally
            con.Close()
        End Try
    End Sub
    Protected Sub btnViewMethods_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
        btnViewMethods.Click
        Dim cons As String
        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "SELECT Method_Id, Method_Name FROM Method"
        con.Open()
        Dim dr As SqlDataReader
        dr = cmd.ExecuteReader()
        lblMethodTable.Text = "<br/><br/><table border='1' cellpadding='8' cellspacing='0'>"
        lblMethodTable.Text &= "<tr><th>Method ID</th><th>Method Name</th></tr>"
        While dr.Read()
            lblMethodTable.Text &= "<tr><td>" & dr("Method_Id") & "</td><td>" &
dr("Method_Name") & "</td></tr>"
        End While
        lblMethodTable.Text &= "</table>"
        dr.Close()
        con.Close()
    End Sub
    Protected Sub btnEditMethods_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
        btnEditMethods.Click
        lblSelectMethodId.Visible = True
        ddlMethodId.Visible = True
        lblMethodColumn.Visible = True
        ddlMethodColumn.Visible = True
        lblMethodNewValue.Visible = True
        txtMethodNewValue.Visible = True

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        btnUpdateMethod.Visible = True
        lblMethodUpdateStatus.Visible = True
        Dim cons As String
        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "SELECT Method_Id FROM Method"
        con.Open()
        Dim dr As SqlDataReader
        dr = cmd.ExecuteReader()
        ddlMethodId.Items.Clear()
        While dr.Read()
            ddlMethodId.Items.Add(dr("Method_Id").ToString())
        End While
        dr.Close()
        con.Close()
    End Sub
    Protected Sub btnUpdateMethod_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnUpdateMethod.Click
        Dim methodId As String = ddlMethodId.SelectedValue
        Dim column As String = ddlMethodColumn.SelectedValue
        Dim newValue As String = txtMethodNewValue.Text
        Dim cons As String
        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "UPDATE Method SET " & column & " = '" & newValue & "' WHERE
Method_Id = '" & methodId & "'"
        con.Open()
        Try
            Dim rowsAffected As Integer = cmd.ExecuteNonQuery()
            If rowsAffected > 0 Then
                lblMethodUpdateStatus.Text = "Value Updated Successfully!"
            Else
                lblMethodUpdateStatus.Text = "No Value Updated!"
            End If
        Catch ex As Exception
            lblMethodUpdateStatus.Text = "Error: " & ex.Message
        Finally
            con.Close()
        End Try
    End Sub
End Class

```

CSM.aspx

```

<%@ Page Language="VB" MasterPageFile="~/MasterPage.master" AutoEventWireup="false"
CodeFile="CSM.aspx.vb" Inherits="CSM" Title="Customer Subscription Manager" %>

<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
    <h1>Customer Subscription Manager Dashboard</h1>

    <p>Choose a task:</p>
    <asp:Button ID="btnViewCustomers" runat="server" Text="View Customers" />

```



```

Protected Sub btnViewCustomers_Click(ByVal sender As Object, ByVal e As EventArgs)
Handles btnViewCustomers.Click
    Dim cons As String
    cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
    Dim con As New SqlConnection
    con.ConnectionString = cons
    Dim cmd As New SqlCommand
    cmd.Connection = con
    cmd.CommandText = "SELECT Customer_Id, Email, Name, Cell_NO, Country, City FROM
Customer"
    con.Open()
    Dim dr As SqlDataReader
    dr = cmd.ExecuteReader()
    lblCustomerTable.Text = "<br/><br/><table border='1' cellpadding='8'
cellspacing='0'>"
    lblCustomerTable.Text &= "<tr><th>Customer Id</th><th>Email</th><th>Name</th><th>Cell
No</th><th>Country</th><th>City</th></tr>"
    While dr.Read()
        lblCustomerTable.Text &= "<tr><td>" & dr("Customer_Id") & "</td><td>" &
dr("Email") & "</td><td>" & dr("Name") & "</td>"
        lblCustomerTable.Text &= "<td>" & dr("Cell_NO") & "</td><td>" & dr("Country") &
"</td><td>" & dr("City") & "</td></tr>"
    End While
    lblCustomerTable.Text &= "</table>"
    dr.Close()
    con.Close()
End Sub

Protected Sub btnEditCustomers_Click(ByVal sender As Object, ByVal e As EventArgs)
Handles btnEditCustomers.Click
    lblSelectCustomerId.Visible = True
    ddlCustomerId.Visible = True
    lblCustomerColumn.Visible = True
    ddlCustomerColumn.Visible = True
    lblCustomerNewValue.Visible = True
    txtCustomerNewValue.Visible = True
    btnUpdateCustomer.Visible = True
    lblCustomerUpdateStatus.Visible = True
    Dim cons As String = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial
Catalog=SAAS;Integrated Security=True"
    Dim con As New SqlConnection
    con.ConnectionString = cons
    Dim cmd As New SqlCommand
    cmd.Connection = con
    cmd.CommandText = "SELECT Customer_Id FROM Customer"
    con.Open()
    Dim dr As SqlDataReader
    dr = cmd.ExecuteReader()
    ddlCustomerId.Items.Clear()
    While dr.Read()
        ddlCustomerId.Items.Add(dr("Customer_Id").ToString())
    End While
    dr.Close()
    con.Close()
End Sub

Protected Sub btnUpdateCustomer_Click(ByVal sender As Object, ByVal e As EventArgs)
Handles btnUpdateCustomer.Click
    Dim customerId As String = ddlCustomerId.SelectedValue
    Dim column As String = ddlCustomerColumn.SelectedValue
    Dim newValue As String = txtCustomerNewValue.Text
    Dim cons As String
    cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"

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Dim con As New SqlConnection
con.ConnectionString = cons
Dim cmd As New SqlCommand
cmd.Connection = con
cmd.CommandText = "UPDATE Customer SET " & column & " = '" & newValue & "' WHERE
Customer_Id = '" & customerId & "'"
con.Open()
Try
    Dim rowsAffected As Integer = cmd.ExecuteNonQuery()
    If rowsAffected > 0 Then
        lblCustomerUpdateStatus.Text = "Value Updated Successfully!"
    Else
        lblCustomerUpdateStatus.Text = "No Value Updated!"
    End If
Catch ex As Exception
    lblCustomerUpdateStatus.Text = "Error: " & ex.Message
Finally
    con.Close()
End Try
End Sub
Protected Sub btnViewSubscriptions_Click(ByVal sender As Object, ByVal e As EventArgs)
Handles btnViewSubscriptions.Click
    Dim cons As String
    cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
    Dim con As New SqlConnection
    con.ConnectionString = cons
    Dim cmd As New SqlCommand
    cmd.Connection = con
    cmd.CommandText = "SELECT Subscription_Id, Customer_Id, Plans_Id, Duration_Months,
Start_Date, Percent_Discount, Amount_ToBe_Paid, Paid_Status FROM Subscription"
    con.Open()
    Dim dr As SqlDataReader
    dr = cmd.ExecuteReader()
    lblSubscriptionTable.Text = "<br/><br/><table border='1' cellpadding='8'
cellspacing='0'>"
    lblSubscriptionTable.Text &= "<tr><th>Subscription Id</th><th>Customer
Id</th><th>Plan</th><th>Duration</th><th>Start
Date</th><th>Discount</th><th>Amount</th><th>Status</th></tr>"
    While dr.Read()
        lblSubscriptionTable.Text &= "<tr><td>" & dr("Subscription_Id") & "</td><td>" &
dr("Customer_Id") & "</td><td>" & dr("Plans_Id") & "</td>"
        lblSubscriptionTable.Text &= "<td>" & dr("Duration_Months") & "</td><td>" &
dr("Start_Date") & "</td><td>" & dr("Percent_Discount") & "</td>"
        lblSubscriptionTable.Text &= "<td>" & dr("Amount_ToBe_Paid") & "</td><td>" &
dr("Paid_Status") & "</td></tr>"
    End While
    lblSubscriptionTable.Text &= "</table>"
    dr.Close()
    con.Close()
End Sub
Protected Sub btnEditSubscriptions_Click(ByVal sender As Object, ByVal e As EventArgs)
Handles btnEditSubscriptions.Click
    lblSelectSubscriptionId.Visible = True
    ddlSubscriptionId.Visible = True
    lblSubscriptionColumn.Visible = True
    ddlSubscriptionColumn.Visible = True
    lblSubscriptionNewValue.Visible = True
    txtSubscriptionNewValue.Visible = True
    btnUpdateSubscription.Visible = True
    lblSubscriptionUpdateStatus.Visible = True
    Dim cons As String

```

```

        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "SELECT Subscription_Id FROM Subscription"
        con.Open()
        Dim dr As SqlDataReader
        dr = cmd.ExecuteReader()
        ddlSubscriptionId.Items.Clear()
        While dr.Read()
            ddlSubscriptionId.Items.Add(dr("Subscription_Id").ToString())
        End While
        dr.Close()
        con.Close()
    End Sub
    Protected Sub btnUpdateSubscription_Click(ByVal sender As Object, ByVal e As EventArgs)
Handles btnUpdateSubscription.Click
        Dim subId As String = ddlSubscriptionId.SelectedValue
        Dim column As String = ddlSubscriptionColumn.SelectedValue
        Dim newValue As String = txtSubscriptionNewValue.Text
        Dim cons As String
        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "UPDATE Subscription SET " & column & " = '" & newValue & "' WHERE
Subscription_Id = '" & subId & "'"
        con.Open()
        Try
            Dim rowsAffected As Integer = cmd.ExecuteNonQuery()
            If rowsAffected > 0 Then
                lblSubscriptionUpdateStatus.Text = "Value Updated Successfully!"
            Else
                lblSubscriptionUpdateStatus.Text = "No Value Updated!"
            End If
        Catch ex As Exception
            lblSubscriptionUpdateStatus.Text = "Error: " & ex.Message
        Finally
            con.Close()
        End Try
    End Sub
End Class

```

CustRegister.aspx

```

<%@ Page Language="VB" MasterPageFile="~/MasterPage.master" AutoEventWireup="false"
CodeFile="CustRegister.aspx.vb" Inherits="Register" title="Cutomer Registration" %>

```

```

<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
    <h2>Customer Registration</h2>
    <div class="form_group">
        <label class="form_label">Email:</label>
        <asp:TextBox ID="txtEmail" runat="server"></asp:TextBox>
    
```

```

        <asp:RequiredFieldValidator ID="rfvEmail" runat="server" ControlToValidate="txtEmail"
ErrorMessage="Email is required!" ForeColor="Red"
/>
        <asp:RegularExpressionValidator ID="revEmail" runat="server" ControlToValidate="txtEmail"
ValidationExpression="^[^@]+@[^@]+$"
ErrorMessage="Email must contain a single '@' symbol." ForeColor="Red"
/>
    </div>
    <div class="form_group">
        <label class="form_label">Password:</label>
        <asp:TextBox ID="txtpassword" runat="server" TextMode="Password"></asp:TextBox>
        <asp:RequiredFieldValidator ID="rfvPassword" runat="server"
ControlToValidate="txtpassword" ErrorMessage="Password is required!" ForeColor="Red"
/>
        <asp:RegularExpressionValidator ID="revPassword" runat="server"
ControlToValidate="txtpassword" ValidationExpression="^(?=.*[a-z])(?=.*[A-Z])(?=.*\d){6,}$"
ErrorMessage="Password must be at least 6 characters long and contain at least one
lowercase letter, one uppercase letter, and one digit."
ForeColor="Red" />
    </div>
    <div class="form_group">
        <label class="form_label">Name:</label>
        <asp:TextBox ID="txtName" runat="server"></asp:TextBox>
        <asp:RequiredFieldValidator ID="rfvName" runat="server" ControlToValidate="txtName"
ErrorMessage="Name is required!" ForeColor="Red"
/>
    </div>
    <div class="form_group">
        <label class="form_label">Cell No:</label>
        <asp:TextBox ID="txtCellNo" runat="server"></asp:TextBox>
        <asp:RequiredFieldValidator ID="rfvCellNo" runat="server"
ControlToValidate="txtCellNo" ErrorMessage="Cell number is required!" ForeColor="Red"
/>
    </div>
    <div class="form_group">
        <label class="form_label">Country Code (2 Letters):</label>
        <asp:TextBox ID="txtCountry" runat="server"></asp:TextBox>
    </div>
    <div class="form_group">
        <label class="form_label">City:</label>
        <asp:TextBox ID="txtCity" runat="server"></asp:TextBox>
    </div>
    <asp:Button ID="btnRegister" runat="server" Text="Register" />
    <asp:Label ID="lblMessage" runat="server" ForeColor="Red"></asp:Label><br /><br />
    <asp:Button ID="home" runat="server" Text="Back to Home Page" CausesValidation="False"/>
</asp:Content>

```

CustRegister.aspx.vb

```

Imports System
Imports System.Data
Imports System.Data.SqlClient
Imports System.Web.UI

```

```

Partial Class Register
    Inherits Page

```

```

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

```

```

        If Not IsPostBack Then
            If Request.Cookies("Email") IsNot Nothing Then txtEmail.Text =
Request.Cookies("Email").Value
            If Request.Cookies("Name") IsNot Nothing Then txtName.Text =
Request.Cookies("Name").Value
            If Request.Cookies("Cell_NO") IsNot Nothing Then txtCellNo.Text =
Request.Cookies("Cell_NO").Value
            If Request.Cookies("Country") IsNot Nothing Then txtCountry.Text =
Request.Cookies("Country").Value
            If Request.Cookies("City") IsNot Nothing Then txtCity.Text =
Request.Cookies("City").Value
        End If
    End Sub

    Protected Sub btnRegister_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnRegister.Click
        Dim newCustomerId As String = ""
        Dim conss As String
        conss = "Data source=DESKTOP-JMV907L\SQLEXPRESS; Initial Catalog=SAAS; Integrated
Security=True"
        Dim connn As New SqlConnection
        connn.ConnectionString = conss
        Dim cmdd As New SqlCommand
        cmdd.Connection = connn
        cmdd.CommandText = "SELECT TOP 1 Customer_Id FROM Customer ORDER BY Customer_Id DESC"

        Try
            connn.Open()
            Dim lastId As Object = cmdd.ExecuteScalar()
            If lastId IsNot Nothing Then
                Dim numericPart As Integer = Integer.Parse(lastId.ToString().Substring(1))
                newCustomerId = "C" & (numericPart + 1).ToString("D3")
            Else
                newCustomerId = "C000"
            End If
            connn.Close()
        Catch ex As Exception
            lblMessage.Text = "Error generating Customer ID: " & ex.Message
        Return
        End Try
        Dim c1 As New HttpCookie("Customer_Id")
        c1.Value = newCustomerId
        Response.Cookies.Add(c1)
        Dim c2 As New HttpCookie("Email")
        c2.Value = txtEmail.Text
        Response.Cookies.Add(c2)
        Dim c3 As New HttpCookie("Name")
        c3.Value = txtName.Text
        Response.Cookies.Add(c3)
        Dim c4 As New HttpCookie("Cell_NO")
        c4.Value = txtCellNo.Text
        Response.Cookies.Add(c4)
        Dim c5 As New HttpCookie("Country")
        c5.Value = txtCountry.Text
        Response.Cookies.Add(c5)
        Dim c6 As New HttpCookie("City")
        c6.Value = txtCity.Text
        Response.Cookies.Add(c6)
        Dim cons As String
        cons = "Data source=DESKTOP-JMV907L\SQLEXPRESS; Initial Catalog=SAAS; Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons

```

```

Dim cmd As New SqlCommand
cmd.Connection = con
cmd.CommandText = "INSERT INTO Customer (Customer_Id, Email, Name, Cell_NO, Country,
City) "
cmd.CommandText &= "VALUES ('" & newCustomerId & "', '" & txtEmail.Text & "', '" &
txtName.Text & "', '"
cmd.CommandText &= txtCellNo.Text & "', '" & txtCountry.Text & "', '" & txtCity.Text
& "'"
Dim cmd2 As New SqlCommand
cmd2.Connection = con
cmd2.CommandText = " INSERT INTO Login (Login_Id, Password, Role)"
cmd2.CommandText &= " VALUES ('" & newCustomerId & "', '" & txtpassword.Text & "', '"
& "Customer')"
Try
    con.Open()
    Dim rowsAffected As Integer
    rowsAffected = cmd.ExecuteNonQuery()
    cmd2.ExecuteNonQuery()
    If rowsAffected > 0 Then
        lblMessage.Text = "Registration Successful!"
        ViewState.Clear()
        Response.Redirect("Dashboard.aspx")
    Else
        lblMessage.Text = "Registration Unsuccessful!"
    End If
Catch ex As Exception
    lblMessage.Text = "Error: " & ex.Message
Finally
    con.Close()
    cmd.Dispose()
    cmd2.Dispose()
End Try
End Sub
Protected Sub home_Click(ByVal sender As Object, ByVal e As EventArgs) Handles home.Click
    Response.Redirect("Home.aspx")
End Sub
End Class

```

Dashboard.aspx

```

<%@ Page Language="VB" MasterPageFile="~/MasterPage.master" AutoEventWireup="false"
CodeFile="Dashboard.aspx.vb" Inherits="Dashboard" title="Customer Dashboard" %>

```

```

<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
    <h1>Customer Dashboard</h1>
    <asp:Label ID="lblGeneratedId" runat="server"></asp:Label><br /><br />
    <p>Following are your active subscription at this time: <br /></p>
    <asp:Label ID="lbltbl" runat="server"></asp:Label><br /><br />
    <asp:Button ID="viewplan" runat="server" Text="View Plans" /> <br /><br />
    <asp:Button ID="subscribeplan" runat="server" Text="Subscribe to a Plan" /><br /><br />
    <asp:Button ID="mysub" runat="server" Text="My Subscriptions" /> <br /><br />
    <asp:Button ID="makepay" runat="server" Text="Make Payment" /> <br /><br />
    <asp:Button ID="payhistory" runat="server" Text="Payment History" />
</asp:Content>

```

Dashboard.aspx.vb

```
Imports System
Imports System.Web.UI
Imports System.Data
Imports System.Data.SqlClient
Imports System.Web.UI.WebControls

Partial Class Dashboard
    Inherits Page

    Protected Sub Retrieval(ByVal sender As Object, ByVal e As EventArgs) Handles Me.Load
        Dim CId As String
        If Request.Cookies("Customer_Id") IsNot Nothing Then
            CId = Request.Cookies("Customer_Id").Value
        End If
        lblGeneratedId.Text = "Customer ID: " & CId
        Dim cons As String
        cons = "Data source=DESKTOP-JMV907L\SQLEXPRESS; Initial Catalog=SAAS; Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "SELECT S.Subscription_Id, P.Plans_Name, SW.Software_Name,
S.Amount_ToBe_Paid, S.Paid_Status "
        cmd.CommandText &= "From Subscription S JOIN Plans P ON S.Plans_Id = P.Plans_Id JOIN
Plans_Line PL ON "
        cmd.CommandText &= "PL.Plans_Id = P.Plans_Id Join Software SW ON PL.Software_Id =
SW.Software_Id WHERE"
        cmd.CommandText &= " DateAdd(MONTH, S.Duration_Months, S.Start_Date) > CAST(GETDATE()
AS DATE) AND "
        cmd.CommandText &= "S.Customer_Id = '" & CId & "'"
        Dim dr As SqlDataReader
        con.Open()
        dr = cmd.ExecuteReader()
        Dim count As Integer
        count = 0
        lbltbl.Text = "<table border='1' cellpadding='8' cellspacing='0'>"
        lbltbl.Text &= "<tr><th>Subscription Id</th><th>Plan Name</th><th>Software
Name</th><th>Amount To Be Paid</th></tr>"
        Dim currentSubId As String = ""
        Dim currentPlan As String = ""
        Dim currentAmount As String = ""
        Dim softwareList As String = ""
        While dr.Read()
            If currentSubId = "" Then
                currentSubId = dr("Subscription_Id").ToString()
                currentPlan = dr("Plans_Name").ToString()
                currentAmount = dr("Amount_ToBe_Paid").ToString()
            End If
            If dr("Subscription_Id").ToString() = currentSubId Then
                softwareList &= dr("Software_Name").ToString() & "<br/>"
            Else
                lbltbl.Text &= "<tr><td>" & currentSubId & "</td><td>" & currentPlan &
"</td><td>" & softwareList & "</td><td>" & currentAmount & "</td></tr>"
                currentSubId = dr("Subscription_Id").ToString()
                currentPlan = dr("Plans_Name").ToString()
                currentAmount = dr("Amount_ToBe_Paid").ToString()
                softwareList = dr("Software_Name").ToString() & "<br/>"
            End If
            count = count + 1
        End While
        lbltbl.Text &= "</table>"
    End Sub
End Class
```

```

        End If
    End While
    If currentSubId <> "" Then
        count = count + 1
        lbltbl.Text &= "<tr><td>" & currentSubId & "</td><td>" & currentPlan &
"</td><td>" & softwareList & "</td><td>" & currentAmount & "</td></tr>"
    End If
    lbltbl.Text &= "</table>"
    If count = 0 Then
        lbltbl.Text = "No Active Subscriptions!"
    End If
    dr.Close()
    con.Close()
    cmd.Dispose()
End Sub

Protected Sub viewplan_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
viewplan.Click
    Response.Redirect("ViewPlans.aspx")
End Sub
Protected Sub subscribepan_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
subscribepan.Click
    Response.Redirect("Subscribe.aspx")
End Sub
Protected Sub mysub_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
mysub.Click
    Response.Redirect("MySubscriptions.aspx")
End Sub
Protected Sub makepay_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
makepay.Click
    Response.Redirect("MakePayment.aspx")
End Sub
Protected Sub payhistory_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
payhistory.Click
    Response.Redirect("PaymentHistory.aspx")
End Sub
End Class

```

Login.aspx

```

<%@ Page Language="VB" MasterPageFile="~/MasterPage.master" AutoEventWireup="false"
CodeFile="Login.aspx.vb" Inherits="Login" title="Login" %>

<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
    <h2>Customer Login</h2>
    <h3>Enter your login credentials: </h3>
    <div class="form_group">
        <label class="form_label">Customer ID:</label>
        <asp:TextBox ID="txtCId" runat="server"></asp:TextBox>
        <asp:RequiredFieldValidator ID="rfvCId" runat="server" ControlToValidate="txtCId"
ErrorMessage="Customer ID is required!" ForeColor="Red"/>
    </div>
    <div class="form_group">
        <label class="form_label">Password:</label>
        <asp:TextBox ID="txtpassword" runat="server" TextMode="Password"></asp:TextBox>
        <asp:RequiredFieldValidator ID="rfvPassword" runat="server"
ControlToValidate="txtpassword" ErrorMessage="Password is required!" ForeColor="Red"
/>
    </div>

```

```

    <asp:Button ID="btnlogin" runat="server" Text="Login" />
    <asp:Label ID="lblMessage" runat="server" ForeColor="Red"></asp:Label>
    <br /><br /><p>If you are not a registered customer, click the button below to register
yourself.</p>
    <asp:Button ID="btnRegister" runat="server" Text="Register"
CausesValidation="False"/>

</asp:Content>

```

Login.aspx.vb

```

Imports System
Imports System.Data
Imports System.Data.SqlClient
Imports System.Web.UI

```

```

Partial Class Login
    Inherits Page

```

```

    Protected Sub Page_Load(ByVal sender As Object, ByVal e As EventArgs) Handles Me.Load
        If Not IsPostBack Then
            If Request.Cookies("Customer_Id") IsNot Nothing Then
                txtCid.Text = Request.Cookies("Customer_Id").Value
            End If
        End If
    End Sub

```

```

    Protected Sub btnlogin_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnlogin.Click

```

```

        Dim cons As String
        cons = "Data source=DESKTOP-JMV907L\SQLEXPRESS; Initial Catalog=SAAS; Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "SELECT COUNT(*) FROM Login WHERE Login_Id = '" & txtCid.Text
        cmd.CommandText &= "' And Password = '" & txtpassword.Text & "' And Role =
'Customer'"
        Try
            con.Open()
            Dim count As Integer
            count = cmd.ExecuteScalar()
            If count > 0 Then
                Dim Cookie As New HttpCookie("Customer_Id")
                Cookie.Value = txtCid.Text
                Response.Cookies.Add(Cookie)
                lblMessage.Text = "Login Successful!"
                ViewState.Clear()
                Response.Redirect("Dashboard.aspx")
            Else
                lblMessage.Text = "Invalid Credentials!"
            End If
        Catch ex As Exception
            lblMessage.Text = "Error: " & ex.Message
        Finally
            con.Close()
            cmd.Dispose()
        End Try

```

```

End Sub
Protected Sub btnRegister_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnRegister.Click
    Response.Redirect("CustRegister.aspx")
End Sub

End Class

```

MakePayment.aspx

```

<%@ Page Language="VB" MasterPageFile="~/MasterPage.master" AutoEventWireup="false"
CodeFile="MakePayment.aspx.vb" Inherits="MakePayment" title="Payment" %>

<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
    <h2>Fill in the Details:</h2>
    <div class="form_group">
        <label class="form_label">Select Subscription to Pay for:</label><br />
        <asp:DropDownList class="ddl" ID="ddlSubscriptions" runat="server">
        </asp:DropDownList>
        <asp:RequiredFieldValidator ID="rfvddl" runat="server"
ControlToValidate="ddlSubscriptions"
ErrorMessage="Select a Subscription!" ForeColor="Red" />
    </div>
    <div class="form_group">
        <label class="form_label">Amount to Pay:</label>
        <asp:Label ID="lblAmount" runat="server" Text="" ></asp:Label>
    </div>
    <div class="form_group">
        <label class="form_label">Select Payment Method:</label><br />
        <asp:DropDownList class="ddl" ID="ddlPaymentMethod" runat="server" >
        </asp:DropDownList>
        <asp:RequiredFieldValidator ID="rfvpayment" runat="server"
ControlToValidate="ddlPaymentMethod"
ErrorMessage="Select a Payment Method!" ForeColor="Red" />
    </div>
    <div class="form_group">
        <label class="form_label">Cell No:</label>
        <asp:TextBox ID="txtCellNo" runat="server"></asp:TextBox>
        <asp:RequiredFieldValidator ID="rfvCell" runat="server" ControlToValidate="txtCellNo"
ErrorMessage="Cell number is required!" ForeColor="Red" />
    </div>
    <div class="form_group">
        <label class="form_label">Account Number:</label>
        <asp:TextBox ID="txtAccountNo" runat="server"></asp:TextBox>
        <asp:RequiredFieldValidator ID="rfvAccount" runat="server"
ControlToValidate="txtAccountNo"
ErrorMessage="Account number is required!" ForeColor="Red" />
    </div><br />
    <asp:Button ID="btnpay" runat="server" Text="Pay Now" />
    <asp:Label ID="lblMessage" runat="server" ForeColor="Red"></asp:Label><br /><br />
    <asp:Button ID="payhistory" runat="server" Text="Payment History"
CausesValidation="False"/><br /><br />
    <asp:Button ID="dash" runat="server" Text="Back to Dashboard"
CausesValidation="False"/><br /><br />
</asp:Content>

```

MakePayment.aspx.vb

```
Imports System
Imports System.Web.UI
Imports System.Data
Imports System.Data.SqlClient
Imports System.Web.UI.WebControls

Partial Class MakePayment
    Inherits Page

    Protected Sub Page_Load(ByVal sender As Object, ByVal e As EventArgs) Handles Me.Load
        If Not IsPostBack Then
            Dim CId As String
            If Request.Cookies("Customer_Id") IsNot Nothing Then
                CId = Request.Cookies("Customer_Id").Value
            End If
            Dim cons As String
            cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
            Dim con As New SqlConnection
            con.ConnectionString = cons
            Dim cmd As New SqlCommand
            cmd.Connection = con
            cmd.CommandText = "SELECT Subscription_Id, Plans_Name, Amount_ToBe_Paid FROM
Subscription S "
            cmd.CommandText &= "JOIN Plans P ON S.Plans_Id = P.Plans_Id " & "WHERE
S.Customer_Id = '" & CId & "' AND S.Paid_Status = 'No'"
            con.Open()
            Dim dr As SqlDataReader
            dr = cmd.ExecuteReader()
            Dim count As Integer = 0
            ddlSubscriptions.Items.Clear()
            While dr.Read()
                count += 1
                ddlSubscriptions.Items.Add(New ListItem(dr("Plans_Name").ToString(),
dr("Subscription_Id").ToString()))
            End While
            If count = 0 Then
                ddlSubscriptions.Items.Add(New ListItem("No Subscriptions Available", ""))
            End If
            dr.Close()
            cmd.CommandText = "SELECT Method_Id, Method_Name FROM Method"
            dr = cmd.ExecuteReader()
            While dr.Read()
                ddlPaymentMethod.Items.Add(New ListItem(dr("Method_Name").ToString(),
dr("Method_Id").ToString()))
            End While
            dr.Close()
            con.Close()
        End If
    End Sub

    Protected Sub ddlSubscriptions_SelectedIndexChanged(ByVal sender As Object, ByVal e As
EventArgs) Handles ddlSubscriptions.SelectedIndexChanged
        If ddlSubscriptions.SelectedIndex > -1 Then
            Dim cons As String
            cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
            Dim con As New SqlConnection
            con.ConnectionString = cons
```

```

Dim cmd As New SqlCommand
cmd.Connection = con
cmd.CommandText = "SELECT Amount_ToBe_Paid FROM Subscription WHERE
Subscription_Id = '" & ddlSubscriptions.SelectedValue & "'"
con.Open()
Dim amount As Object = cmd.ExecuteScalar()
If amount IsNot Nothing Then
    lblAmount.Text = "Amount to Pay: " & amount.ToString()
End If
con.Close()
Else
    lblMessage.Text = "Please select a subscription."
End If
End Sub
Protected Sub btnpay_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnpay.Click
    If Page.IsValid Then
        Dim newPaymentId As String = ""
        Dim cons As String
        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
        Dim connn As New SqlConnection
        connn.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = connn
        cmd.CommandText = "SELECT TOP 1 Payment_Id FROM Payment ORDER BY Payment_Id
DESC"

        Try
            connn.Open()
            Dim lastId As Object = cmd.ExecuteScalar()
            If lastId IsNot Nothing Then
                Dim numericPart As Integer =
Integer.Parse(lastId.ToString().Substring(1))
                newPaymentId = "P" & (numericPart + 1).ToString("D3")
            Else
                newPaymentId = "P000"
            End If
            connn.Close()
        Catch ex As Exception
            lblMessage.Text = "Error generating Payment ID: " & ex.Message
            Return
        End Try
        Dim cons As String
        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "SELECT Subscription_Id, Amount_ToBe_Paid FROM Subscription "
        cmd.CommandText &= "WHERE Subscription_Id = '" & ddlSubscriptions.SelectedValue &
""

        con.Open()
        Dim dr As SqlDataReader
        dr = cmd.ExecuteReader()
        If dr.Read() Then
            cmd.CommandText = "INSERT INTO Payment (Payment_Id, Subscription_Id,
Method_Id, Cell_NO, Amount, Account_No) "
            cmd.CommandText &= "VALUES ('" & newPaymentId & "', '" &
dr("Subscription_Id").ToString()
            cmd.CommandText &= "', '" & ddlPaymentMethod.SelectedValue & "', '"
            cmd.CommandText &= txtCellNo.Text & "', '"

```

```

        cmd.CommandText &= dr("Amount_ToBe_Paid").ToString() & ", ' " &
txtAccountNo.Text & "'"
    End If
    dr.Close()
    cmd.ExecuteNonQuery()
    con.Close()
    lblMessage.Text = "Payment successful. Payment ID: " & newPaymentId
End If
End Sub
Protected Sub dash_Click(ByVal sender As Object, ByVal e As EventArgs) Handles dash.Click
    Response.Redirect("Dashboard.aspx")
End Sub
Protected Sub payhistory_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
payhistory.Click
    Response.Redirect("PaymentHistory.aspx")
End Sub
End Class

```

MySubscriptions.aspx

```

<%@ Page Language="VB" MasterPageFile="~/MasterPage.master" AutoEventWireup="false"
CodeFile="MySubscriptions.aspx.vb" Inherits="MySubscriptions" title="Subscribed Plans" %>

<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
    <h2>Following plans have been subscribed:<br /></h2>
    <asp:Label ID="lbltbl" runat="server"></asp:Label><br />
    <br />
    <asp:Button ID="makepay" runat="server" Text="Make Payment" /><br /><br />
    <asp:Button ID="payhistory" runat="server" Text="Payment History" /><br /><br />
    <asp:Button ID="dash" runat="server" Text="Back to Dashboard" /><br /><br />
</asp:Content>

```

MySubscriptions.aspx.vb

```

Imports System
Imports System.Web.UI
Imports System.Data
Imports System.Data.SqlClient
Imports System.Web.UI.WebControls

Partial Class MySubscriptions
    Inherits Page

    Protected Sub Retrieval(ByVal sender As Object, ByVal e As EventArgs) Handles Me.Load
        Dim CId As String
        If Request.Cookies("Customer_Id") IsNot Nothing Then
            CId = Request.Cookies("Customer_Id").Value
        End If
        Dim cons As String
        cons = "Data source=DESKTOP-JMV907L\SQLEXPRESS; Initial Catalog=SAAS; Integrated
Security=True"
    End Sub

```

```

Dim con As New SqlConnection
con.ConnectionString = cons
Dim cmd As New SqlCommand
cmd.Connection = con
cmd.CommandText = "select Subscription_Id, Plans_Name, Software_Name,
Amount_ToBe_Paid, Paid_Status from Subscription S"
cmd.CommandText &= " join Plans P on S.Plans_Id=P.Plans_Id join Plans_Line PL ON
PL.Plans_Id = P.Plans_Id"
cmd.CommandText &= " join Software on PL.Software_Id = Software.Software_Id where
Customer_Id = '" & CId & "'"
Dim dr As SqlDataReader
con.Open()
dr = cmd.ExecuteReader()
Dim count As Integer
count = 0
lbltbl.Text = "<table border='1' cellpadding='8' cellspacing='0'>"
lbltbl.Text &= "<tr><th>Subscription Id</th><th>Plan Name</th><th>Software
Name</th><th>Amount To Be Paid</th><th>Paid Status</th></tr>"
Dim currentSubId As String = ""
Dim currentPlan As String = ""
Dim currentAmount As String = ""
Dim currentStatus As String = ""
Dim softwareList As String = ""
While dr.Read()
    If currentSubId = "" Then
        currentSubId = dr("Subscription_Id").ToString()
        currentPlan = dr("Plans_Name").ToString()
        currentAmount = dr("Amount_ToBe_Paid").ToString()
        currentStatus = dr("Paid_Status").ToString()
    End If
    If dr("Subscription_Id").ToString() = currentSubId Then
        softwareList &= dr("Software_Name").ToString() & "<br/>"
    Else
        lbltbl.Text &= "<tr><td>" & currentSubId & "</td><td>" & currentPlan &
"</td><td>" & softwareList & "</td><td>" & currentAmount & "</td><td>" & currentStatus &
"</td></tr>"
        currentSubId = dr("Subscription_Id").ToString()
        currentPlan = dr("Plans_Name").ToString()
        currentAmount = dr("Amount_ToBe_Paid").ToString()
        currentStatus = dr("Paid_Status").ToString()
        softwareList = dr("Software_Name").ToString() & "<br/>"
        count = count + 1
    End If
End While
If currentSubId <> "" Then
    count = count + 1
    lbltbl.Text &= "<tr><td>" & currentSubId & "</td><td>" & currentPlan &
"</td><td>" & softwareList & "</td><td>" & currentAmount & "</td><td>" & currentStatus &
"</td></tr>"
End If
lbltbl.Text &= "</table>"

If count = 0 Then
    lbltbl.Text = "No Plans Subscribed!"
End If
dr.Close()
con.Close()
cmd.Dispose()
End Sub

Protected Sub makepay_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
makepay.Click
    Response.Redirect("MakePayment.aspx")

```

```

End Sub
Protected Sub dash_Click(ByVal sender As Object, ByVal e As EventArgs) Handles dash.Click
    Response.Redirect("Dashboard.aspx")
End Sub
Protected Sub payhistory_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
payhistory.Click
    Response.Redirect("PaymentHistory.aspx")
End Sub
End Class

```

PaymentHistory.aspx

```

<%@ Page Language="VB" MasterPageFile="~/MasterPage.master" AutoEventWireup="false"
CodeFile="PaymentHistory.aspx.vb" Inherits="PaymentHistory" title="Payment History" %>

<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
    <h2>Following is the log of your past payments:<br /></h2>
    <asp:Label ID="tbl" runat="server"></asp:Label><br />
    <br />
    <asp:Button ID="dash" runat="server" Text="Back to Dashboard" /><br /><br />
</asp:Content>

```

PaymentHistory.aspx.vb

```

Imports System
Imports System.Web.UI
Imports System.Data
Imports System.Data.SqlClient
Imports System.Web.UI.WebControls

Partial Class PaymentHistory
    Inherits Page

    Protected Sub Retrieval(ByVal sender As Object, ByVal e As EventArgs) Handles Me.Load
        Dim CId As String
        If Request.Cookies("Customer_Id") IsNot Nothing Then
            CId = Request.Cookies("Customer_Id").Value
        End If
        Dim cons As String
        cons = "Data source=DESKTOP-JMV907L\SQLEXPRESS; Initial Catalog=SAAS; Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "select Payment_Id, S.Subscription_Id, Plans_Name, Method_Name,
Account_No, Amount, Payment_Timestamp"
        cmd.CommandText &= " from Payment P join Subscription S On
P.Subscription_Id=S.Subscription_Id join Method M On "
        cmd.CommandText &= " M.Method_Id=P.Method_Id join Plans Pl On S.Plans_Id=Pl.Plans_Id
where Customer_Id =' " & CId & "' "
        Dim dr As SqlDataReader
        con.Open()
        dr = cmd.ExecuteReader()
        tbl.Text = "<table border='1' cellpadding='20' cellspacing='0'>"

```



```

        While dr.Read()
            lblPlanTable.Text &= "<tr><td>" & dr("Plans_Id") & "</td><td>" & dr("Plans_Name")
            & "</td><td>" & dr("Price_per_month") & "</td></tr>"
        End While
        lblPlanTable.Text &= "</table>"
        dr.Close()
        con.Close()
    End Sub

    Protected Sub btnEditPlans_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
        btnEditPlans.Click
        lblSelectPlanId.Visible = True
        ddlPlanId.Visible = True
        lblPlanColumn.Visible = True
        ddlPlanColumn.Visible = True
        lblPlanNewValue.Visible = True
        txtPlanNewValue.Visible = True
        btnUpdatePlan.Visible = True
        lblPlanUpdateStatus.Visible = True
        Dim cons As String
        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "SELECT Plans_Id FROM Plans"
        con.Open()
        Dim dr As SqlDataReader
        dr = cmd.ExecuteReader()
        ddlPlanId.Items.Clear()
        While dr.Read()
            ddlPlanId.Items.Add(dr("Plans_Id").ToString())
        End While
        dr.Close()
        con.Close()
    End Sub

    Protected Sub btnUpdatePlan_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
        btnUpdatePlan.Click
        Dim planId As String = ddlPlanId.SelectedValue
        Dim column As String = ddlPlanColumn.SelectedValue
        Dim newValue As String = txtPlanNewValue.Text
        Dim cons As String
        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "UPDATE Plans SET " & column & " = '" & newValue & "' WHERE Plan_Id
= '" & planId & "'"
        con.Open()
        Try
            Dim rowsAffected As Integer = cmd.ExecuteNonQuery()
            If rowsAffected > 0 Then
                lblPlanUpdateStatus.Text = "Value Updated Successfully!"
            Else
                lblPlanUpdateStatus.Text = "No Value Updated!"
            End If
        Catch ex As Exception
            lblPlanUpdateStatus.Text = "Error: " & ex.Message
        Finally
            con.Close()
        End Try
    End Sub

```

```

End Sub
Protected Sub btnViewPlanLines_Click(ByVal sender As Object, ByVal e As EventArgs)
Handles btnViewPlanLines.Click
    Dim cons As String
    cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
    Dim con As New SqlConnection
    con.ConnectionString = cons
    Dim cmd As New SqlCommand
    cmd.Connection = con
    cmd.CommandText = "SELECT Plans_Id, Software_Id, Software_Level FROM Plans_Line"
    con.Open()
    Dim dr As SqlDataReader
    dr = cmd.ExecuteReader()
    lblPlanLineTable.Text = "<br/><br/><table border='1' cellpadding='8'
cellspacing='0'>"
    lblPlanLineTable.Text &= "<tr><th>Plan Id</th><th>Software Id</th><th>Software
Level</th></tr>"
    While dr.Read()
        lblPlanLineTable.Text &= "<tr><td>" & dr("Plans_Id") & "</td><td>" &
dr("Software_Id") & "</td><td>" & dr("Software_Level") & "</td></tr>"
    End While
    lblPlanLineTable.Text &= "</table>"
    dr.Close()
    con.Close()
End Sub
Protected Sub btnEditPlanLines_Click(ByVal sender As Object, ByVal e As EventArgs)
Handles btnEditPlanLines.Click
    lblSelectPlanLineId.Visible = True
    ddlPlanLineId.Visible = True
    lblPlanLineColumn.Visible = True
    ddlPlanLineColumn.Visible = True
    lblPlanLineNewValue.Visible = True
    txtPlanLineNewValue.Visible = True
    btnUpdatePlanLine.Visible = True
    lblPlanLineUpdateStatus.Visible = True
    Dim cons As String
    cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
    Dim con As New SqlConnection
    con.ConnectionString = cons
    Dim cmd As New SqlCommand
    cmd.Connection = con
    cmd.CommandText = "SELECT Plans_Id FROM Plans_Line"
    con.Open()
    Dim dr As SqlDataReader = cmd.ExecuteReader()
    ddlPlanLineId.Items.Clear()
    While dr.Read()
        ddlPlanLineId.Items.Add(dr("Plans_Id").ToString())
    End While
    dr.Close()
    con.Close()
End Sub
Protected Sub btnUpdatePlanLine_Click(ByVal sender As Object, ByVal e As EventArgs)
Handles btnUpdatePlanLine.Click
    Dim planLineId As String = ddlPlanLineId.SelectedValue
    Dim column As String = ddlPlanLineColumn.SelectedValue
    Dim newValue As String = txtPlanLineNewValue.Text
    Dim cons As String
    cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
    Dim con As New SqlConnection
    con.ConnectionString = cons

```

```

Dim cmd As New SqlCommand
cmd.Connection = con
cmd.CommandText = "UPDATE Plans_Line SET " & column & " = '" & newValue & "' WHERE
Plans_Id = '" & planLineId & "'"
con.Open()
Try
    Dim rowsAffected As Integer = cmd.ExecuteNonQuery()
    If rowsAffected > 0 Then
        lblPlanLineUpdateStatus.Text = "Value Updated Successfully!"
    Else
        lblPlanLineUpdateStatus.Text = "No Value Updated!"
    End If
Catch ex As Exception
    lblPlanLineUpdateStatus.Text = "Error: " & ex.Message
Finally
    con.Close()
End Try
End Sub
Protected Sub btnViewSoftware_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnViewSoftware.Click
    Dim cons As String
    cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
    Dim con As New SqlConnection
    con.ConnectionString = cons
    Dim cmd As New SqlCommand
    cmd.Connection = con
    cmd.CommandText = "SELECT Software_Id, Software_Name FROM Software"
    con.Open()
    Dim dr As SqlDataReader
    dr = cmd.ExecuteReader()
    lblSoftwareTable.Text = "<br/><br/><table border='1' cellpadding='8'
cellspacing='0'>"
    lblSoftwareTable.Text &= "<tr><th>Software Id</th><th>Software Name</th></tr>"
    While dr.Read()
        lblSoftwareTable.Text &= "<tr><td>" & dr("Software_Id") & "</td><td>" &
dr("Software_Name") & "</td></tr>"
    End While
    lblSoftwareTable.Text &= "</table>"
    dr.Close()
    con.Close()
End Sub
Protected Sub btnEditSoftware_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnEditSoftware.Click
    lblSelectSoftwareId.Visible = True
    ddlSoftwareId.Visible = True
    lblSoftwareColumn.Visible = True
    ddlSoftwareColumn.Visible = True
    lblSoftwareNewValue.Visible = True
    txtSoftwareNewValue.Visible = True
    btnUpdateSoftware.Visible = True
    lblSoftwareUpdateStatus.Visible = True
    Dim cons As String
    cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
    Dim con As New SqlConnection
    con.ConnectionString = cons
    Dim cmd As New SqlCommand
    cmd.Connection = con
    cmd.CommandText = "SELECT Software_Id FROM Software"
    con.Open()
    Dim dr As SqlDataReader
    dr = cmd.ExecuteReader()

```

```

        ddlSoftwareId.Items.Clear()
        While dr.Read()
            ddlSoftwareId.Items.Add(dr("Software_Id").ToString())
        End While
        dr.Close()
        con.Close()
    End Sub
    Protected Sub btnUpdateSoftware_Click(ByVal sender As Object, ByVal e As EventArgs)
Handles btnUpdateSoftware.Click
        Dim softwareId As String = ddlSoftwareId.SelectedValue
        Dim column As String = ddlSoftwareColumn.SelectedValue
        Dim newValue As String = txtSoftwareNewValue.Text
        Dim cons As String
        cons = "Data Source=DESKTOP-JMV907L\SQLEXPRESS;Initial Catalog=SAAS;Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "UPDATE Software SET " & column & " = '" & newValue & "' WHERE
Software_Id = '" & softwareId & "'"
        con.Open()
        Try
            Dim rowsAffected As Integer = cmd.ExecuteNonQuery()
            If rowsAffected > 0 Then
                lblSoftwareUpdateStatus.Text = "Value Updated Successfully!"
            Else
                lblSoftwareUpdateStatus.Text = "No Value Updated!"
            End If
        Catch ex As Exception
            lblSoftwareUpdateStatus.Text = "Error: " & ex.Message
        Finally
            con.Close()
        End Try
    End Sub
End Class

```

Subscribe.aspx

```

<%@ Page Language="VB" MasterPageFile="~/MasterPage.master" AutoEventWireup="false"
CodeFile="Subscribe.aspx.vb" Inherits="Subscribe" title="Subscribe a Plan" %>

<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
    <h2>Fill in the Details:</h2>
    <div class="form_group">
        <label class="form_label">Select Plan to Subscribe:</label><br />
        <asp:DropDownList class="ddl" ID="ddlPlans" runat="server">
        </asp:DropDownList>
        <asp:RequiredFieldValidator ID="rfvddl" runat="server" ControlToValidate="ddlPlans"
ErrorMessage="Select a Subscription!" ForeColor="Red" />
    </div>
    <div class="form_group">
        <label class="form_label">Duration (Months):</label>
        <asp:TextBox ID="txtDuration" runat="server"></asp:TextBox>
        <asp:RequiredFieldValidator ID="rfvDuration" runat="server"
ControlToValidate="txtDuration"
ErrorMessage="Duration is required!" ForeColor="Red" />
    </div>

```

```

<div class="form_group">
    <label class="form_label">Amount to Pay:</label>
    <asp:Label ID="lblAmount" runat="server" Text="" ></asp:Label>
</div><br /><br />
<asp:Button ID="btnSubscribe" runat="server" Text="Subscribe Now" />
<asp:Label ID="lblMessage" runat="server" ForeColor="Red"></asp:Label><br /><br />
<asp:Button ID="mysub" runat="server" Text="My Subscriptions" CausesValidation="False"/>
<br /><br />
<asp:Button ID="makepay" runat="server" Text="Make Payment" CausesValidation="False" />
<br /><br />
<asp:Button ID="payhistory" runat="server" Text="Payment History"
CausesValidation="False"/><br /><br />
<asp:Button ID="dash" runat="server" Text="Back to Dashboard"
CausesValidation="False"/><br /><br />
</asp:Content>

```

Subscribe.aspx.vb

```

Imports System
Imports System.Web.UI
Imports System.Data
Imports System.Data.SqlClient
Imports System.Web.UI.WebControls

Partial Class Subscribe
    Inherits Page
    Protected Sub Page_Load(ByVal sender As Object, ByVal e As EventArgs) Handles Me.Load
        If Not IsPostBack Then
            Dim cons As String
            cons = "Data source=DESKTOP-JMV907L\SQLEXPRESS; Initial Catalog=SAAS; Integrated
Security=True"
            Dim con As New SqlConnection
            con.ConnectionString = cons
            Dim cmd As New SqlCommand
            cmd.Connection = con
            cmd.CommandText = "SELECT Plans_Id, Plans_Name FROM Plans"
            con.Open()
            Dim dr As SqlDataReader
            dr = cmd.ExecuteReader()
            ddlPlans.Items.Clear()
            While dr.Read()
                ddlPlans.Items.Add(New ListItem(dr("Plans_Name").ToString(),
dr("Plans_Id").ToString()))
            End While
            dr.Close()
            con.Close()
        End If
    End Sub
    Protected Sub btnSubscribe_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnSubscribe.Click
        Dim newSubscriptionId As String = ""
        Dim conss As String
        conss = "Data source=DESKTOP-JMV907L\SQLEXPRESS; Initial Catalog=SAAS; Integrated
Security=True"
        Dim connn As New SqlConnection
        connn.ConnectionString = conss
        Dim cmddd As New SqlCommand
        cmddd.Connection = connn

```

```

cmd.CommandText = "SELECT TOP 1 Subscription_Id FROM Subscription ORDER BY
Subscription_Id DESC"

Try
    conn.Open()
    Dim lastId As Object = cmd.ExecuteScalar()
    If lastId IsNot Nothing Then
        Dim numericPart As Integer = Integer.Parse(lastId.ToString().Substring(2))
        newSubscriptionId = "SB" & (numericPart + 1).ToString("D3")
    Else
        newSubscriptionId = "SB000"
    End If
    conn.Close()
Catch ex As Exception
    lblMessage.Text = "Error generating Subscription ID: " & ex.Message
    Return
End Try
Dim planId As String = ddlPlans.SelectedValue
Dim duration As Integer = txtDuration.Text
Dim CId As String
If Request.Cookies("Customer_Id") IsNot Nothing Then
    CId = Request.Cookies("Customer_Id").Value
End If
Dim cons As String = "Data source=DESKTOP-JMV907L\SQLEXPRESS; Initial Catalog=SAAS;
Integrated Security=True"
Dim con As New SqlConnection
con.ConnectionString = cons
Dim cmd As New SqlCommand
cmd.Connection = con
cmd.CommandText = "SELECT Price_per_month FROM Plans WHERE Plans_Id = '" & planId &
'''
con.Open()
Dim price As Decimal = cmd.ExecuteScalar()
Dim discount As Decimal = 0.1D
Dim totalAmount As Decimal = price * duration
Dim discountedAmount As Decimal = totalAmount * (1 - discount)
lblAmount.Text = "Amount to Pay: " & discountedAmount.ToString()
cmd.CommandText = "INSERT INTO Subscription (Subscription_Id, Customer_Id, Plans_Id,
Duration_Months, Percent_Discount, Amount_ToBe_Paid) "
cmd.CommandText &= "VALUES ('" & newSubscriptionId & "', '" & CId & "', '" & planId &
'", '" & duration & "', '"
cmd.CommandText &= (discount * 100).ToString() & "', '" & discountedAmount.ToString()
& "')"
Try
    cmd.ExecuteNonQuery()
    lblMessage.Text = "Successfully Subscribed to the Plan!      Plan Id: " &
newSubscriptionId
Catch ex As Exception
    lblMessage.Text = "Error: " & ex.Message
End Try
con.Close()
End Sub
Protected Sub dash_Click(ByVal sender As Object, ByVal e As EventArgs) Handles dash.Click
    Response.Redirect("Dashboard.aspx")
End Sub
Protected Sub mysub_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
mysub.Click
    Response.Redirect("MySubscriptions.aspx")
End Sub
Protected Sub makepay_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
makepay.Click
    Response.Redirect("MakePayment.aspx")
End Sub

```

```

Protected Sub payhistory_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
payhistory.Click
    Response.Redirect("PaymentHistory.aspx")
End Sub
End Class

```

ViewPlans.aspx

```

<%@ Page Language="VB" MasterPageFile="~/MasterPage.master" AutoEventWireup="false"
CodeFile="ViewPlans.aspx.vb" Inherits="ViewPlans" title="View Plans" %>

<asp:Content ID="Content1" ContentPlaceHolderID="MainContent" runat="server">
    <h2>Following plans are being offered:<br /></h2>
    <asp:Label ID="tbl" runat="server"></asp:Label><br />
    <br />
    <asp:Button ID="subscribeplan" runat="server" Text="Subscribe to a Plan" /><br /><br />
    <asp:Button ID="dash" runat="server" Text="Back to Dashboard" /><br /><br />
</asp:Content>

```

ViewPlans.aspx.vb

```

Imports System
Imports System.Web.UI
Imports System.Data
Imports System.Data.SqlClient
Imports System.Web.UI.WebControls

Partial Class ViewPlans
    Inherits Page

    Protected Sub Retrieval(ByVal sender As Object, ByVal e As EventArgs) Handles Me.Load
        Dim cons As String
        cons = "Data source=DESKTOP-JMV907L\SQLEXPRESS; Initial Catalog=SAAS; Integrated
Security=True"
        Dim con As New SqlConnection
        con.ConnectionString = cons
        Dim cmd As New SqlCommand
        cmd.Connection = con
        cmd.CommandText = "Select Plans_Name, Software_Name, Software_Level"
        cmd.CommandText &= " from Plans join Plans_Line on Plans.Plans_Id =
Plans_Line.Plans_Id"
        cmd.CommandText &= " join Software on Software.Software_Id=Plans_Line.Software_Id"
        Dim dr As SqlDataReader
        con.Open()
        dr = cmd.ExecuteReader()
        tbl.Text = "<table border='1' cellpadding='10' cellspacing='0'>"
        tbl.Text &= "<tr><th>Plan Name</th><th>Software Name</th><th>Service Level</th></tr>"
        Dim currentPlan As String = ""
        Dim softwareList As String = ""
    End Sub
End Class

```

```

Dim levelList As String = ""
While dr.Read()
    If currentPlan = "" Then
        currentPlan = dr("Plans_Name").ToString()
    End If
    If dr("Plans_Name").ToString() = currentPlan Then
        softwareList &= dr("Software_Name").ToString() & "<br/>"
        levelList &= dr("Software_Level").ToString() & "<br/>"
    Else
        tbl.Text &= "<tr><td>" & currentPlan & "</td><td>" & softwareList &
"</td><td>" & levelList & "</td></tr>"
        currentPlan = dr("Plans_Name").ToString()
        softwareList = dr("Software_Name").ToString() & "<br/>"
        levelList = dr("Software_Level").ToString() & "<br/>"
    End If
End While
If currentPlan <> "" Then
    tbl.Text &= "<tr><td>" & currentPlan & "</td><td>" & softwareList & "</td><td>" &
levelList & "</td></tr>"
End If
tbl.Text &= "</table>"
dr.Close()
con.Close()
cmd.Dispose()
End Sub
Protected Sub subscribepan_Click(ByVal sender As Object, ByVal e As EventArgs) Handles
subscribepan.Click
    Response.Redirect("Subscribe.aspx")
End Sub

Protected Sub dash_Click(ByVal sender As Object, ByVal e As EventArgs) Handles dash.Click
    Response.Redirect("Dashboard.aspx")
End Sub

```

End Class

MasterPage.master

```

<%@ Master Language="VB" AutoEventWireup="false" CodeFile="MasterPage.master.vb"
Inherits="MasterPage" %>

<!DOCTYPE html>
<html>
<head runat="server">
    <title>SaaS SUBSCRIPTION PLATFORM</title>
<link rel="stylesheet" href="styles.css?v=6" />
</head>
<body>
    <form id="form1" runat="server">
        <div class="header">
            <h1>SaaS SUBSCRIPTION PLATFORM</h1>
        </div>

        <div class="navbar">
            <a href="Home.aspx">Home Page</a>
            <a href="Login.aspx">Customer Services</a>
            <a href="AdminLogin.aspx">Administrative Tasks</a>
        </div>
    </form>
</body>
</html>

```

```
        <div class="maincontent">
        <asp:ContentPlaceHolder ID="MainContent" runat="server" />
        </div>
    </form>
</body>
</html>
```

MasterPage.master.vb

```
Partial Class MasterPage
    Inherits System.Web.UI.MasterPage
End Class
```

styles.css

```
body {
    font-family: Arial, sans-serif;
    margin: 0;
    padding: 0;
}

.header {
    background-color: #333366;
    color: white;
    padding: 12px;
    text-align: center;
}

.navbar {
    background-color: #505050;
    padding: 10px;
    text-align: center;
}

.navbar a {
    padding: 10px 20px;
    display: inline-block;
    text-decoration: none;
    color: white;
}

.navbar a:hover {
    background-color: transparent;
    text-decoration: underline;
}

.maincontent {
    margin: 20px;
}
```

```
.form_group {
    margin-bottom: 15px;
}

.form_label {
    font-weight: bold;
    display: block;
}
button, input[type="submit"], input[type="button"] {
    height: 30px;
}

.ddl{
    height: 25px;
}
```

Web.config

```
<?xml version="1.0"?>
<configuration>
  <!--
    For a description of web.config changes see
    http://go.microsoft.com/fwlink/?LinkId=235367.

    The following attributes can be set on the <httpRuntime> tag.
  -->
  <system.web>
    <httpRuntime targetFramework="4.8.1" />
  </system.web>
  <system.web>
    <compilation debug="false" targetFramework="4.8.1"/>
    <pages controlRenderingCompatibilityVersion="4.0"/>
  </system.web>
  <connectionStrings>
    <add name="MyConn"
          connectionString="Data Source=SAAS_PLATFORM.mssql.somee.com;Initial
Catalog=SAAS_PLATFORM;User
ID=IqraMehmood_SQLLogin_1;Password=aoctyvcl5r;TrustServerCertificate=True; "
          providerName="System.Data.SqlClient" />
  </connectionStrings>
</configuration>
```