

Lab 06 Code Implementation

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1 About.aspx

```
<%@ Page Title="About" Language="VB" MasterPageFile="~/Site.Master"
  AutoEventWireup="true" CodeBehind="About.aspx.vb" Inherits="IAD_LAB06.About
  " %>

<asp:Content ID="BodyContent" ContentPlaceHolderID="MainContent" runat="server
">
  <main aria-labelledby="title">
    <h2 id="title"><%: Title %>.</h2>
    <p>Your app description page.</p>
    <p>Use this area to provide additional information.</p>
  </main>
</asp:Content>
```

2 About.aspx.vb

```
Public Class About
  Inherits Page

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

  End Sub
End Class
```

3 Catalog.aspx

```
<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="Catalog.aspx.vb"
  Inherits="IAD_LAB06.PVFC_Lab06.Catalog" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title>PVFC - Catalog Management</title>
  <style>
    body { font-family: Arial, sans-serif; margin: 0; background: #f4f6f8;
      }
    .navbar { background: #1f3a5f; color: #fff; padding: 14px 20px; display
      : flex; justify-content: space-between; align-items: center; }
    .nav-links a { color: #fff; text-decoration: none; margin-right: 16px;
      font-weight: bold; }
    .nav-user { font-size: 14px; }
    .page-container { padding: 25px; }
    .panel { background: #fff; border-radius: 8px; padding: 18px; margin-
      bottom: 18px; box-shadow: 0 2px 8px rgba(0,0,0,.08); }
```



```

        <div class="field">
            <label>Standard Price</label>
            <asp:TextBox ID="txtStandardPrice" runat="server"></asp:
                TextBox>
        </div>
    </div>
    <div class="field" style="margin-bottom: 12px;">
        <label>Product Description</label>
        <asp:TextBox ID="txtProductDescription" runat="server"
            TextMode="MultiLine" Rows="3"></asp:TextBox>
    </div>
    <asp:Button ID="btnAddProduct" runat="server" CssClass="btn" Text
        ="Add Product" OnClick="btnAddProduct_Click" />
</div>

<div class="panel">
    <h3>Update / Delete Product</h3>
    <div class="row">
        <div class="field">
            <label>Product ID</label>
            <asp:TextBox ID="txtEditProductId" runat="server"></asp:
                TextBox>
        </div>
        <div class="field">
            <label>New Product Line ID</label>
            <asp:TextBox ID="txtEditProductLineId" runat="server"></
                asp:TextBox>
        </div>
        <div class="field">
            <label>New Product Finish</label>
            <asp:TextBox ID="txtEditProductFinish" runat="server"></
                asp:TextBox>
        </div>
        <div class="field">
            <label>New Standard Price</label>
            <asp:TextBox ID="txtEditStandardPrice" runat="server"></
                asp:TextBox>
        </div>
    </div>
    <div class="field" style="margin-bottom: 12px;">
        <label>New Product Description</label>
        <asp:TextBox ID="txtEditProductDescription" runat="server"
            TextMode="MultiLine" Rows="3"></asp:TextBox>
    </div>
    <asp:Button ID="btnUpdateProduct" runat="server" CssClass="btn"
        Text="Update Product" OnClick="btnUpdateProduct_Click" />
    <asp:Button ID="btnDeleteProduct" runat="server" CssClass="btn
        btn-danger" Text="Delete Product" OnClick="
            btnDeleteProduct_Click" />
</div>

```

```

        <div class="panel">
            <h3>Product Catalog</h3>
            <asp:GridView ID="gvCatalog" runat="server" Width="100%"
                AutoGenerateColumns="True"></asp:GridView>
        </div>
    </div>
</form>
</body>
</html>

```

4 Catalog.aspx.vb

```

Imports System.Configuration
Imports System.Data
Imports System.Data.SqlClient

Namespace PVFC_Lab06
    Public Class Catalog
        Inherits System.Web.UI.Page

        Private ReadOnly Property ConnectionString As String
            Get
                Return ConfigurationManager.ConnectionStrings("FurnitureDB").
                    ConnectionString
            End Get
        End Property

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

            Dim isAuthenticated As Boolean = False
            If Session("IsAuthenticated") IsNot Nothing Then
                Boolean.TryParse(Convert.ToString(Session("IsAuthenticated")),
                    isAuthenticated)
            End If

            If Not isAuthenticated Then
                Response.Redirect("Login.aspx")
                Return
            End If

            If Session("User-Role") Is Nothing OrElse Session("User-Role").
                ToString().ToLower() <> "admin" Then
                Response.Redirect("Login.aspx?accessDenied=1")
                Return
            End If

            If Not IsPostBack Then

```

```

        Dim userName As String = Convert.ToString(Session("UserName"))
        lblUser.Text = userName
        lblUserNav.Text = userName
        BindCatalogGrid()
    End If
End Sub

Private Sub BindCatalogGrid()
    Using conn As New SqlConnection(ConnectionString)
        Dim cmd As New SqlCommand("SELECT PRODUCT_ID, PRODUCT_LINE_ID,
            PRODUCT_DESCRIPTION, PRODUCT_FINISH, STANDARD_PRICE FROM
            Product_T ORDER BY PRODUCT_ID", conn)
        Dim adapter As New SqlDataAdapter(cmd)
        Dim table As New DataTable()
        adapter.Fill(table)
        gvCatalog.DataSource = table
        gvCatalog.DataBind()
    End Using
End Sub

Protected Sub btnAddProduct_Click(sender As Object, e As EventArgs)
    Handles btnAddProduct.Click
    Dim productLineId As Integer
    Dim standardPrice As Decimal

    If Not Integer.TryParse(txtProductLineId.Text, productLineId) OrElse
        String.IsNullOrEmpty(txtProductDescription.Text) OrElse
        String.IsNullOrEmpty(txtProductFinish.Text) OrElse Not
        Decimal.TryParse(txtStandardPrice.Text, standardPrice) Then
        lblCatalogMessage.ForeColor = Drawing.Color.Red
        lblCatalogMessage.Text = "Enter valid product line, description,
            finish, and standard price."
        Return
    End If

    Using conn As New SqlConnection(ConnectionString)
        conn.Open()
        Dim cmd As New SqlCommand("INSERT INTO Product_T (PRODUCT_LINE_ID
            , PRODUCT_DESCRIPTION, PRODUCT_FINISH, STANDARD_PRICE) VALUES
            (@PRODUCT_LINE_ID, @PRODUCT_DESCRIPTION, @PRODUCT_FINISH,
            @STANDARD_PRICE)", conn)
        cmd.Parameters.AddWithValue("@PRODUCT_LINE_ID", productLineId)
        cmd.Parameters.AddWithValue("@PRODUCT_DESCRIPTION",
            txtProductDescription.Text.Trim())
        cmd.Parameters.AddWithValue("@PRODUCT_FINISH", txtProductFinish.
            Text.Trim())
        cmd.Parameters.AddWithValue("@STANDARD_PRICE", standardPrice)
        cmd.ExecuteNonQuery()
    End Using

    lblCatalogMessage.ForeColor = Drawing.Color.Green

```

```

        lblCatalogMessage.Text = "Product added successfully."
        BindCatalogGrid()
    End Sub

Protected Sub btnUpdateProduct_Click(sender As Object, e As EventArgs)
    Handles btnUpdateProduct.Click
    Dim productId As Integer
    Dim productLineId As Integer
    Dim standardPrice As Decimal

    If Not Integer.TryParse(txtEditProductId.Text, productId) OrElse Not
        Integer.TryParse(txtEditProductLineId.Text, productLineId)
        OrElse String.IsNullOrEmpty(txtEditProductDescription.Text)
        OrElse String.IsNullOrEmpty(txtEditProductFinish.Text)
        OrElse Not Decimal.TryParse(txtEditStandardPrice.Text,
            standardPrice) Then
        lblCatalogMessage.ForeColor = Drawing.Color.Red
        lblCatalogMessage.Text = "Enter valid product update values."
        Return
    End If

    Using conn As New SqlConnection(ConnectionString)
        conn.Open()
        Dim cmd As New SqlCommand("UPDATE Product_T SET PRODUCT_LINE_ID =
            @PRODUCT_LINE_ID, PRODUCT_DESCRIPTION = @PRODUCT_DESCRIPTION
            , PRODUCT_FINISH = @PRODUCT_FINISH, STANDARD_PRICE =
            @STANDARD_PRICE WHERE PRODUCT_ID = @PRODUCT_ID", conn)
        cmd.Parameters.AddWithValue("@PRODUCT_LINE_ID", productLineId)
        cmd.Parameters.AddWithValue("@PRODUCT_DESCRIPTION",
            txtEditProductDescription.Text.Trim())
        cmd.Parameters.AddWithValue("@PRODUCT_FINISH",
            txtEditProductFinish.Text.Trim())
        cmd.Parameters.AddWithValue("@STANDARD_PRICE", standardPrice)
        cmd.Parameters.AddWithValue("@PRODUCT_ID", productId)
        Dim rows As Integer = cmd.ExecuteNonQuery()

        If rows = 0 Then
            lblCatalogMessage.ForeColor = Drawing.Color.Red
            lblCatalogMessage.Text = "No product found for that Product
                ID."
            Return
        End If
    End Using

    lblCatalogMessage.ForeColor = Drawing.Color.Green
    lblCatalogMessage.Text = "Product updated successfully."
    BindCatalogGrid()
End Sub

Protected Sub btnDeleteProduct_Click(sender As Object, e As EventArgs)
    Handles btnDeleteProduct.Click

```

```

Dim productId As Integer

If Not Integer.TryParse(txtEditProductId.Text, productId) Then
    lblCatalogMessage.ForeColor = Drawing.Color.Red
    lblCatalogMessage.Text = "Enter a valid Product ID to delete."
    Return
End If

Using conn As New SqlConnection(ConnectionString)
    conn.Open()
    Dim cmd As New SqlCommand("DELETE FROM Product_T WHERE PRODUCT_ID
        = @PRODUCT_ID", conn)
    cmd.Parameters.AddWithValue("@PRODUCT_ID", productId)
    Dim rows As Integer = cmd.ExecuteNonQuery()

    If rows = 0 Then
        lblCatalogMessage.ForeColor = Drawing.Color.Red
        lblCatalogMessage.Text = "No product found for that Product
            ID."
        Return
    End If
End Using

lblCatalogMessage.ForeColor = Drawing.Color.Green
lblCatalogMessage.Text = "Product deleted successfully."
BindCatalogGrid()
End Sub

Protected Sub btnLogout_Click(sender As Object, e As EventArgs) Handles
    btnLogout.Click
    Session.Clear()
    Session.Abandon()
    Response.Redirect("Login.aspx")
End Sub
End Class
End Namespace

```

5 Contact.aspx

```

<%@ Page Title="Contact" Language="VB" MasterPageFile="~/Site.Master"
    AutoEventWireup="true" CodeBehind="Contact.aspx.vb" Inherits="IAD_LAB06.
    Contact" %>

<asp:Content ID="BodyContent" ContentPlaceHolderID="MainContent" runat="server
">
    <main aria-labelledby="title">
        <h2 id="title"><%= Title %></h2>
        <p>Your contact page.</p>
    </main>

```

```

<address>
  One Microsoft Way<br />
  Redmond, WA 98052-6399<br />
  <abbr title="Phone">P:</abbr>
  425.555.0100
</address>

<address>
  <strong>Support:</strong><a href="mailto:Support@example.com">
    Support@example.com</a><br />
  <strong>Marketing:</strong><a href="mailto:Marketing@example.com">
    Marketing@example.com</a>
</address>
</main>
</asp:Content>

```

6 Contact.aspx.vb

```

Public Class Contact
  Inherits Page

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

  End Sub
End Class

```

7 Default.aspx

```

<%@ Page Title="Home Page" Language="VB" MasterPageFile="~/Site.Master"
  AutoEventWireup="true" CodeBehind="Default.aspx.vb" Inherits="IAD_LAB06.
  _Default" %>

<asp:Content ID="BodyContent" ContentPlaceHolderID="MainContent" runat="server
">
  <div style="text-align: center; font-family: Arial; margin-top: 25px;">
    <h1>Pine Valley Furniture Portal</h1>
    <p>Welcome, <asp:Label ID="lblUser" runat="server" Font-Bold="True"></
    asp:Label>.</p>
    <p>Select a task:</p>
    <table align="center" border="1" cellpadding="20" style="border-
    collapse: collapse; background: #fff;">
      <tr>
        <td>
          <h3>Customers</h3>

```

```

        <asp:HyperLink ID="lnkRegisterCustomer" runat="server"
            NavigateUrl="~/Register.aspx">Register New Customer</asp:
            HyperLink>

        <h3 style="margin-top: 18px;">Inventory</h3>
        <asp:HyperLink ID="lnkSearchProducts" runat="server"
            NavigateUrl="~/Search.aspx">Search Products</asp:HyperLink
        >
    </td>
    <td>
        <h3>Orders</h3>
        <asp:HyperLink ID="lnkPlaceOrder" runat="server" NavigateUrl
            ="~/Orders.aspx">Place New Order</asp:HyperLink>

        <asp:Panel ID="pnlAdmin" runat="server" style="margin-top: 18
            px;">
            <h3>Admin</h3>
            <asp:HyperLink ID="lnkAdminCatalog" runat="server"
                NavigateUrl="~/Catalog.aspx">Update Catalog</asp:
                HyperLink>
        </asp:Panel>
    </td>
</tr>
</table>
<div style="margin-top: 20px;">
    <asp:Button ID="btnLogout" runat="server" Text="Logout" OnClick="
        btnLogout_Click" CssClass="btn btn-danger" />
</div>
</div>
</asp:Content>

```

8 Default.aspx.vb

```

Public Class _Default
    Inherits Page

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

        Dim isAuthenticated As Boolean = False
        If Session("IsAuthenticated") IsNot Nothing Then
            Boolean.TryParse(Convert.ToString(Session("IsAuthenticated")),
                isAuthenticated)
        End If

        If Not isAuthenticated OrElse Session("User-Role") Is Nothing Then
            Response.Redirect("Login.aspx")
            Return
        End If
    End Sub
End Class

```

```

End If

If Not IsPostBack Then
    Dim localA As Integer
    Integer.TryParse(Convert.ToString(Session("a")), localA)

    lblUser.Text = Convert.ToString(Session("UserName"))
    pnlAdmin.Visible = String.Equals(Convert.ToString(Session("User-Role
        ")), "admin", StringComparison.OrdinalIgnoreCase)
End If
End Sub

Protected Sub btnLogout_Click(sender As Object, e As EventArgs) Handles
    btnLogout.Click
    Session.Clear()
    Session.Abandon()
    Response.Redirect("Login.aspx")
End Sub
End Class

```

9 Login.aspx

```

<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="Login.aspx.vb"
    Inherits="IAD_LAB06.PVFC_Lab06.Login" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>PVFC - Login</title>
    <style>
        body { font-family: Arial, sans-serif; margin: 50px; background-color:
            #f4f4f4; }
        .login-container { background: white; padding: 20px; border-radius: 8px
            ; width: 300px; box-shadow: 0px 0px 10px 0px #ccc; }
        .form-group { margin-bottom: 15px; }
        .form-group label { display: block; margin-bottom: 5px; }
    </style>
</head>
<body>
    <form id="form1" runat="server">
        <div class="login-container">
            <h2>PVFC Login</h2>
            <div class="form-group">
                <label>Username:</label>
                <asp:TextBox ID="txtUsername" runat="server" Width="100%"></asp:
                    TextBox>
            </div>
            <div class="form-group">
                <label>Password:</label>

```

```

        <asp:TextBox ID="txtPassword" runat="server" TextMode="Password"
            Width="100%"></asp:TextBox>
    </div>
    <asp:Button ID="btnLogin" runat="server" Text="Login" OnClick="
        btnLogin_Click" BackColor="#007BFF" ForeColor="White" BorderStyle
            ="None" Padding="10" Width="100%" />
    <br /><br />
    <asp:Label ID="lblMessage" runat="server" ForeColor="Red"></asp:
        Label>

    <div style="margin-top: 12px; font-size: 14px;">
        New user? <a href="UserRegister.aspx">Register here</a>
    </div>
</div>
</form>
</body>
</html>

```

10 Login.aspx.vb

```

Imports System.Data.SqlClient
Imports System.Configuration

Namespace PVFC_Lab06
    Public Class Login
        Inherits System.Web.UI.Page

        Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.
            EventArgs) Handles Me.Load
            ' Clear session if the user navigates back to the login page
            If Not IsPostBack Then
                Session.Clear()
                lblMessage.Text = String.Empty

                If String.Equals(Request.QueryString("accessDenied"), "1") Then
                    lblMessage.Text = "Access denied. You do not have permission
                        to view that page."
                ElseIf String.Equals(Request.QueryString("registered"), "1") Then
                    lblMessage.ForeColor = Drawing.Color.Green
                    lblMessage.Text = "Registration successful. Please login."
                End If
            End If
        End Sub

        Protected Sub btnLogin_Click(sender As Object, e As EventArgs) Handles
            btnLogin.Click
            Dim connString As String = ConfigurationManager.ConnectionStrings("
                FurnitureDB").ConnectionString

```

```

Using conn As New SqlConnection(connString)
    Try
        conn.Open()
        Dim cmd As New SqlCommand("SELECT * FROM Users WHERE Username
            = @Username AND User_Password = @Password", conn)
        cmd.Parameters.AddWithValue("@Username", txtUsername.Text)
        cmd.Parameters.AddWithValue("@Password", txtPassword.Text)

        Dim reader As SqlDataReader = cmd.ExecuteReader()

        If reader.Read() Then
            Session("IsAuthenticated") = True
            Session("UserId") = reader("UserId").ToString()
            Session("UserName") = txtUsername.Text
            Session("User-Role") = reader("User_Role").ToString()
            Session("a") = 5

            reader.Close()

            Response.Redirect("Default.aspx")
        Else
            lblMessage.Text = "Invalid username or password."
        End If

        Catch ex As Exception
            lblMessage.Text = "Error: " & ex.Message
        End Try
    End Using
End Sub
End Class
End Namespace

```

11 Orders.aspx

```

<%@ Page Language="vb" AutoEventWireup="true" %>
<%@ Import Namespace="System.Configuration" %>
<%@ Import Namespace="System.Data.SqlClient" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>PVFC - Place Order</title>
    <style>
        body { font-family: Arial, sans-serif; margin: 0; background: #f4f6f8;
            }
        .navbar { background: #14532d; color: #fff; padding: 14px 20px; display
            : flex; justify-content: space-between; align-items: center; }
        .nav-links a { color: #fff; text-decoration: none; margin-right: 16px;
            font-weight: bold; }
    </style>

```



```

        <asp:TextBox ID="txtOrderQuantity" runat="server"></asp:
            TextBox>
    </div>
</div>
    <asp:Button ID="btnPlaceOrder" runat="server" CssClass="btn" Text
        ="Place Order" OnClick="btnPlaceOrder_Click" />
</div>
</div>
</form>

<script runat="server">
    Private ReadOnly Property ConnectionString As String
        Get
            Return ConfigurationManager.ConnectionStrings("FurnitureDB").
                ConnectionString
        End Get
    End Property

    Protected Sub Page_Load(sender As Object, e As EventArgs)
        IAD_LAB06.SessionGuard.ApplyNoCache(Me)

        Dim isAuthenticated As Boolean = False
        If Session("IsAuthenticated") IsNot Nothing Then
            Boolean.TryParse(Convert.ToString(Session("IsAuthenticated")),
                isAuthenticated)
        End If

        If Not isAuthenticated OrElse Session("User-Role") Is Nothing Then
            Response.Redirect("Login.aspx")
            Return
        End If

        If Not IsPostBack Then
            lblUserNav.Text = Convert.ToString(Session("UserName"))
            BindOrderDropDowns()
        End If
    End Sub

    Private Sub BindOrderDropDowns()
        Using conn As New SqlConnection(ConnectionString)
            conn.Open()

            Dim customerCmd As New SqlCommand("SELECT CUSTOMER_ID,
                CUSTOMER_NAME FROM customer_T ORDER BY CUSTOMER_NAME", conn)
            Using customerReader As SqlDataReader = customerCmd.ExecuteReader
                ()
                ddlOrderCustomer.DataSource = customerReader
                ddlOrderCustomer.DataTextField = "CUSTOMER_NAME"
                ddlOrderCustomer.DataValueField = "CUSTOMER_ID"
                ddlOrderCustomer.DataBind()
            End Using
        End Using
    End Sub

```

```

        Dim productCmd As New SqlCommand("SELECT PRODUCT_ID,
        PRODUCT_DESCRIPTION FROM Product_T ORDER BY
        PRODUCT_DESCRIPTION", conn)
        Using productReader As SqlDataReader = productCmd.ExecuteReader()
            ddlOrderProduct.DataSource = productReader
            ddlOrderProduct.DataTextField = "PRODUCT_DESCRIPTION"
            ddlOrderProduct.DataValueField = "PRODUCT_ID"
            ddlOrderProduct.DataBind()
        End Using
    End Using
End Sub

Protected Sub btnPlaceOrder_Click(sender As Object, e As EventArgs)
    Dim customerId As Integer
    Dim productId As Integer
    Dim quantity As Integer

    If Not Integer.TryParse(ddlOrderCustomer.SelectedValue, customerId)
        OrElse Not Integer.TryParse(ddlOrderProduct.SelectedValue,
        productId) OrElse Not Integer.TryParse(txtOrderQuantity.Text,
        quantity) OrElse quantity <= 0 Then
        lblOrderMessage.ForeColor = Drawing.Color.Red
        lblOrderMessage.Text = "Enter valid customer, product, and order
        quantity."
    Return
    End If

    Using conn As New SqlConnection(ConnectionString)
        conn.Open()
        Using txn As SqlTransaction = conn.BeginTransaction()
            Try
                Dim orderIdCmd As New SqlCommand("SELECT ISNULL(MAX(
                ORDER_ID), 0) + 1 FROM Order_T", conn, txn)
                Dim orderId As Integer = Convert.ToInt32(orderIdCmd.
                ExecuteScalar())

                Dim orderCmd As New SqlCommand("INSERT INTO Order_T (
                ORDER_ID, CUSTOMER_ID, ORDER_DATE) VALUES (@ORDER_ID,
                @CUSTOMER_ID, @ORDER_DATE)", conn, txn)
                orderCmd.Parameters.AddWithValue("@ORDER_ID", orderId)
                orderCmd.Parameters.AddWithValue("@CUSTOMER_ID",
                customerId)
                orderCmd.Parameters.AddWithValue("@ORDER_DATE", DateTime.
                Now)
                orderCmd.ExecuteNonQuery()

                Dim orderLineCmd As New SqlCommand("INSERT INTO
                Order_Line_T (ORDER_ID, PRODUCT_ID, ORDERED_QUANTITY)
                VALUES (@ORDER_ID, @PRODUCT_ID, @ORDERED_QUANTITY)",
                conn, txn)
            Catch
            End Try
        End Using
    End Using
End Sub

```

```

        orderLineCmd.Parameters.AddWithValue("@ORDER_ID", orderId)
        orderLineCmd.Parameters.AddWithValue("@PRODUCT_ID",
            productId)
        orderLineCmd.Parameters.AddWithValue("@ORDERED_QUANTITY",
            quantity)
        orderLineCmd.ExecuteNonQuery()

        txn.Commit()
        lblOrderMessage.ForeColor = Drawing.Color.Green
        lblOrderMessage.Text = "Order placed successfully."
    Catch ex As Exception
        txn.Rollback()
        lblOrderMessage.ForeColor = Drawing.Color.Red
        lblOrderMessage.Text = ex.Message
    End Try
End Using
End Using
End Sub

Protected Sub btnLogout_Click(sender As Object, e As EventArgs)
    Session.Clear()
    Session.Abandon()
    Response.Redirect("Login.aspx")
End Sub
</script>
</body>
</html>

```

12 Products.aspx

```

<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="Products.aspx.vb"
    Inherits="IAD_LAB06.PVFC_Lab06.Products" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>PVFC - Employee Portal</title>
    <style>
        body { font-family: Arial, sans-serif; margin: 0; background: #f4f6f8;
            }
        .navbar { background: #14532d; color: #fff; padding: 14px 20px; display
            : flex; justify-content: space-between; align-items: center; }
        .nav-links a { color: #fff; text-decoration: none; margin-right: 16px;
            font-weight: bold; }
        .page-container { padding: 25px; }
        .panel { background: #fff; border-radius: 8px; padding: 18px; margin-
            bottom: 18px; box-shadow: 0 2px 8px rgba(0,0,0,.08); }
        .row { display: flex; gap: 14px; margin-bottom: 12px; }
        .field { flex: 1; }
        .field label { display: block; margin-bottom: 5px; font-size: 14px; }
    </style>

```



```

<div class="panel" id="registerCustomer">
  <h3>Register Customer</h3>
  <div class="row">
    <div class="field">
      <label>Customer Name</label>
      <asp:TextBox ID="txtCustomerName" runat="server"></asp:
        TextBox>
    </div>
    <div class="field">
      <label>Address</label>
      <asp:TextBox ID="txtCustomerAddress" runat="server"></asp:
        TextBox>
    </div>
    <div class="field">
      <label>City</label>
      <asp:TextBox ID="txtCustomerCity" runat="server"></asp:
        TextBox>
    </div>
  </div>
  <div class="row">
    <div class="field">
      <label>State</label>
      <asp:TextBox ID="txtCustomerState" runat="server"></asp:
        TextBox>
    </div>
    <div class="field">
      <label>Postal Code</label>
      <asp:TextBox ID="txtPostalCode" runat="server"></asp:
        TextBox>
    </div>
  </div>
  <asp:Button ID="btnRegisterCustomer" runat="server" CssClass="btn
    " Text="Register Customer" OnClick="btnRegisterCustomer_Click
    " />
</div>

<div class="panel" id="placeOrder">
  <h3>Place Order</h3>
  <div class="row">
    <div class="field">
      <label>Select Customer</label>
      <asp:DropDownList ID="ddlOrderCustomer" runat="server"></
        asp:DropDownList>
    </div>
    <div class="field">
      <label>Select Product</label>
      <asp:DropDownList ID="ddlOrderProduct" runat="server"></
        asp:DropDownList>
    </div>
    <div class="field">
      <label>Quantity</label>

```

```

        <asp:TextBox ID="txtOrderQuantity" runat="server"></asp:
            TextBox>
    </div>
</div>
    <asp:Button ID="btnPlaceOrder" runat="server" CssClass="btn" Text
        ="Place Order" OnClick="btnPlaceOrder_Click" />
</div>
</div>
</form>
</body>
</html>

```

13 Products.aspx.vb

```

Imports System.Configuration
Imports System.Data
Imports System.Data.SqlClient

Namespace PVFC_Lab06
    Public Class Products
        Inherits System.Web.UI.Page

        Private ReadOnly Property ConnectionString As String
            Get
                Return ConfigurationManager.ConnectionStrings("FurnitureDB").
                    ConnectionString
            End Get
        End Property

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

            Dim isAuthenticated As Boolean = False
            If Session("IsAuthenticated") IsNot Nothing Then
                Boolean.TryParse(Convert.ToString(Session("IsAuthenticated")),
                    isAuthenticated)
            End If

            If Not isAuthenticated OrElse Session("User-Role") Is Nothing Then
                Response.Redirect("Login.aspx")
                Return
            End If

            Response.Redirect("Search.aspx")
            Return

            If Not IsPostBack Then
                Dim userName As String = Convert.ToString(Session("UserName"))

```

```

        lblUser.Text = userName
        lblUserNav.Text = userName
        BindProductsGrid(String.Empty)
        BindOrderDropDowns()
    End If
End Sub

Private Sub BindProductsGrid(searchKeyword As String)
    Using conn As New SqlConnection(ConnectionString)
        Dim sql As String = "SELECT PRODUCT_ID, PRODUCT_LINE_ID,
            PRODUCT_DESCRIPTION, PRODUCT_FINISH, STANDARD_PRICE FROM
            Product_T"

        If Not String.IsNullOrEmpty(searchKeyword) Then
            sql &= " WHERE PRODUCT_DESCRIPTION LIKE @Search OR
                PRODUCT_FINISH LIKE @Search"
        End If

        sql &= " ORDER BY PRODUCT_DESCRIPTION"

        Dim cmd As New SqlCommand(sql, conn)
        If Not String.IsNullOrEmpty(searchKeyword) Then
            cmd.Parameters.AddWithValue("@Search", "%" & searchKeyword.
                Trim() & "%")
        End If

        Dim adapter As New SqlDataAdapter(cmd)
        Dim table As New DataTable()
        adapter.Fill(table)
        gvProducts.DataSource = table
        gvProducts.DataBind()
    End Using
End Sub

Private Sub BindOrderDropDowns()
    Using conn As New SqlConnection(ConnectionString)
        conn.Open()

        Dim customerCmd As New SqlCommand("SELECT CUSTOMER_ID,
            CUSTOMER_NAME FROM customer_T ORDER BY CUSTOMER_NAME", conn)
        Using customerReader As SqlDataReader = customerCmd.ExecuteReader
            ()
            ddlOrderCustomer.DataSource = customerReader
            ddlOrderCustomer.DataTextField = "CUSTOMER_NAME"
            ddlOrderCustomer.DataValueField = "CUSTOMER_ID"
            ddlOrderCustomer.DataBind()
        End Using

        Dim productCmd As New SqlCommand("SELECT PRODUCT_ID,
            PRODUCT_DESCRIPTION FROM Product_T ORDER BY
            PRODUCT_DESCRIPTION", conn)

```

```

        Using productReader As SqlDataReader = productCmd.ExecuteReader()
            ddlOrderProduct.DataSource = productReader
            ddlOrderProduct.DataTextField = "PRODUCT_DESCRIPTION"
            ddlOrderProduct.DataValueField = "PRODUCT_ID"
            ddlOrderProduct.DataBind()
        End Using
    End Using
End Sub

Protected Sub btnSearchProducts_Click(sender As Object, e As EventArgs)
    Handles btnSearchProducts.Click
    BindProductsGrid(txtSearchKeyword.Text)
End Sub

Protected Sub btnRegisterCustomer_Click(sender As Object, e As
    EventArgs) Handles btnRegisterCustomer.Click
    If String.IsNullOrEmpty(txtCustomerName.Text) OrElse String.
        IsNullOrEmpty(txtCustomerAddress.Text) OrElse String.
        IsNullOrEmpty(txtCustomerCity.Text) OrElse String.
        IsNullOrEmpty(txtCustomerState.Text) OrElse String.
        IsNullOrEmpty(txtPostalCode.Text) Then
        lblEmployeeMessage.ForeColor = Drawing.Color.Red
        lblEmployeeMessage.Text = "Enter all customer details."
        Return
    End If

    Using conn As New SqlConnection(ConnectionString)
        conn.Open()
        Dim cmd As New SqlCommand("INSERT INTO customer_T (CUSTOMER_NAME,
            CUSTOMER_ADDRESS, CUSTOMER_CITY, CUSTOMER_STATE, POSTAL_CODE
        ) VALUES (@CUSTOMER_NAME, @CUSTOMER_ADDRESS, @CUSTOMER_CITY,
            @CUSTOMER_STATE, @POSTAL_CODE)", conn)
        cmd.Parameters.AddWithValue("@CUSTOMER_NAME", txtCustomerName.
            Text.Trim())
        cmd.Parameters.AddWithValue("@CUSTOMER_ADDRESS",
            txtCustomerAddress.Text.Trim())
        cmd.Parameters.AddWithValue("@CUSTOMER_CITY", txtCustomerCity.
            Text.Trim())
        cmd.Parameters.AddWithValue("@CUSTOMER_STATE", txtCustomerState.
            Text.Trim())
        cmd.Parameters.AddWithValue("@POSTAL_CODE", txtPostalCode.Text.
            Trim())
        cmd.ExecuteNonQuery()
    End Using

    lblEmployeeMessage.ForeColor = Drawing.Color.Green
    lblEmployeeMessage.Text = "Customer registered successfully."
    BindOrderDropDowns()
End Sub

```

```

Protected Sub btnPlaceOrder_Click(sender As Object, e As EventArgs)
    Handles btnPlaceOrder.Click
    Dim customerId As Integer
    Dim productId As Integer
    Dim quantity As Integer

    If Not Integer.TryParse(ddlOrderCustomer.SelectedValue, customerId)
        OrElse Not Integer.TryParse(ddlOrderProduct.SelectedValue,
            productId) OrElse Not Integer.TryParse(txtOrderQuantity.Text,
            quantity) OrElse quantity <= 0 Then
        lblEmployeeMessage.ForeColor = Drawing.Color.Red
        lblEmployeeMessage.Text = "Enter valid customer, product, and
            order quantity."
        Return
    End If

    Using conn As New SqlConnection(ConnectionString)
        conn.Open()
        Using txn As SqlTransaction = conn.BeginTransaction()
            Try
                Dim orderIdCmd As New SqlCommand("SELECT ISNULL(MAX(
                    ORDER_ID), 0) + 1 FROM Order_T", conn, txn)
                Dim orderId As Integer = Convert.ToInt32(orderIdCmd.
                    ExecuteScalar())

                Dim orderCmd As New SqlCommand("INSERT INTO Order_T (
                    ORDER_ID, CUSTOMER_ID, ORDER_DATE) VALUES (@ORDER_ID,
                    @CUSTOMER_ID, @ORDER_DATE)", conn, txn)
                orderCmd.Parameters.AddWithValue("@ORDER_ID", orderId)
                orderCmd.Parameters.AddWithValue("@CUSTOMER_ID",
                    customerId)
                orderCmd.Parameters.AddWithValue("@ORDER_DATE", DateTime.
                    Now)
                orderCmd.ExecuteNonQuery()

                Dim orderLineCmd As New SqlCommand("INSERT INTO
                    Order_Line_T (ORDER_ID, PRODUCT_ID, ORDERED_QUANTITY)
                    VALUES (@ORDER_ID, @PRODUCT_ID, @ORDERED_QUANTITY)",
                    conn, txn)
                orderLineCmd.Parameters.AddWithValue("@ORDER_ID", orderId)
                orderLineCmd.Parameters.AddWithValue("@PRODUCT_ID",
                    productId)
                orderLineCmd.Parameters.AddWithValue("@ORDERED_QUANTITY",
                    quantity)
                orderLineCmd.ExecuteNonQuery()

                txn.Commit()
                lblEmployeeMessage.ForeColor = Drawing.Color.Green
                lblEmployeeMessage.Text = "Order placed successfully."
            Catch ex As Exception
                txn.Rollback()
            End Try
        End Using
    End Using
End Sub

```

```

        lblEmployeeMessage.ForeColor = Drawing.Color.Red
        lblEmployeeMessage.Text = ex.Message
    End Try
End Using
End Using

    BindProductsGrid(String.Empty)
End Sub

Protected Sub btnLogout_Click(sender As Object, e As EventArgs) Handles
    btnLogout.Click
    Session.Clear()
    Session.Abandon()
    Response.Redirect("Login.aspx")
End Sub
End Class
End Namespace

```

14 Register.aspx

```

<%@ Page Language="vb" AutoEventWireup="true" %>
<%@ Import Namespace="System.Configuration" %>
<%@ Import Namespace="System.Data.SqlClient" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>PVFC - Register Customer</title>
    <style>
        body { font-family: Arial, sans-serif; margin: 0; background: #f4f6f8;
        }
        .navbar { background: #14532d; color: #fff; padding: 14px 20px; display
        : flex; justify-content: space-between; align-items: center; }
        .nav-links a { color: #fff; text-decoration: none; margin-right: 16px;
        font-weight: bold; }
        .page-container { padding: 25px; }
        .panel { background: #fff; border-radius: 8px; padding: 18px; margin-
        bottom: 18px; box-shadow: 0 2px 8px rgba(0,0,0,.08); }
        .row { display: flex; gap: 14px; margin-bottom: 12px; }
        .field { flex: 1; }
        .field label { display: block; margin-bottom: 5px; font-size: 14px; }
        .field input { width: 100%; padding: 8px; box-sizing: border-box; }
        .btn { background: #007bff; border: none; color: #fff; padding: 9px 16
        px; cursor: pointer; border-radius: 4px; }
    </style>
</head>
<body>
    <form id="form1" runat="server">
        <div class="navbar">
            <div class="nav-links">

```



```

        <asp:Button ID="btnRegisterCustomer" runat="server" CssClass="btn
            " Text="Register Customer" OnClick="btnRegisterCustomer_Click
            " />
    </div>
</div>
</form>

<script runat="server">
    Private ReadOnly Property ConnectionString As String
        Get
            Return ConfigurationManager.ConnectionStrings("FurnitureDB").
                ConnectionString
        End Get
    End Property

    Protected Sub Page_Load(sender As Object, e As EventArgs)
        IAD_LAB06.SessionGuard.ApplyNoCache(Me)

        Dim isAuthenticated As Boolean = False
        If Session("IsAuthenticated") IsNot Nothing Then
            Boolean.TryParse(Convert.ToString(Session("IsAuthenticated")),
                isAuthenticated)
        End If

        If Not isAuthenticated OrElse Session("User-Role") Is Nothing Then
            Response.Redirect("Login.aspx")
            Return
        End If

        If Not IsPostBack Then
            lblUserNav.Text = Convert.ToString(Session("UserName"))
        End If
    End Sub

    Protected Sub btnRegisterCustomer_Click(sender As Object, e As
        EventArgs)
        If String.IsNullOrEmpty(txtCustomerName.Text) OrElse String.
            IsNullOrEmpty(txtCustomerAddress.Text) OrElse String.
            IsNullOrEmpty(txtCustomerCity.Text) OrElse String.
            IsNullOrEmpty(txtCustomerState.Text) OrElse String.
            IsNullOrEmpty(txtPostalCode.Text) Then
            lblRegisterMessage.ForeColor = Drawing.Color.Red
            lblRegisterMessage.Text = "Enter all customer details."
            Return
        End If

        Using conn As New SqlConnection(ConnectionString)
            conn.Open()
            Dim cmd As New SqlCommand("INSERT INTO customer_T (CUSTOMER_NAME,
                CUSTOMER_ADDRESS, CUSTOMER_CITY, CUSTOMER_STATE, POSTAL_CODE
                ) VALUES (@CUSTOMER_NAME, @CUSTOMER_ADDRESS, @CUSTOMER_CITY,

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```

        @CUSTOMER_STATE, @POSTAL_CODE)", conn)
cmd.Parameters.AddWithValue("@CUSTOMER_NAME", txtCustomerName.
    Text.Trim())
cmd.Parameters.AddWithValue("@CUSTOMER_ADDRESS",
    txtCustomerAddress.Text.Trim())
cmd.Parameters.AddWithValue("@CUSTOMER_CITY", txtCustomerCity.
    Text.Trim())
cmd.Parameters.AddWithValue("@CUSTOMER_STATE", txtCustomerState.
    Text.Trim())
cmd.Parameters.AddWithValue("@POSTAL_CODE", txtPostalCode.Text.
    Trim())
cmd.ExecuteNonQuery()
End Using

lblRegisterMessage.ForeColor = Drawing.Color.Green
lblRegisterMessage.Text = "Customer registered successfully."
End Sub

Protected Sub btnLogout_Click(sender As Object, e As EventArgs)
    Session.Clear()
    Session.Abandon()
    Response.Redirect("Login.aspx")
End Sub
</script>
</body>
</html>

```

15 Search.aspx

```

<%@ Page Language="vb" AutoEventWireup="true" %>
<%@ Import Namespace="System.Configuration" %>
<%@ Import Namespace="System.Data" %>
<%@ Import Namespace="System.Data.SqlClient" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>PVFC - Search Products</title>
    <style>
        body { font-family: Arial, sans-serif; margin: 0; background: #f4f6f8;
        }
        .navbar { background: #14532d; color: #fff; padding: 14px 20px; display
            : flex; justify-content: space-between; align-items: center; }
        .nav-links a { color: #fff; text-decoration: none; margin-right: 16px;
            font-weight: bold; }
        .page-container { padding: 25px; }
        .panel { background: #fff; border-radius: 8px; padding: 18px; margin-
            bottom: 18px; box-shadow: 0 2px 8px rgba(0,0,0,.08); }
        .row { display: flex; gap: 14px; margin-bottom: 12px; }
        .field { flex: 1; }
    </style>

```



```

        <asp:GridView ID="gvProducts" runat="server" Width="100%"
            AutoGenerateColumns="True"></asp:GridView>
    </div>
</div>
</form>

<script runat="server">
    Private ReadOnly Property ConnectionString As String
        Get
            Return ConfigurationManager.ConnectionStrings("FurnitureDB").
                ConnectionString
        End Get
    End Property

    Protected Sub Page_Load(sender As Object, e As EventArgs)
        IAD_LAB06.SessionGuard.ApplyNoCache(Me)

        Dim isAuthenticated As Boolean = False
        If Session("IsAuthenticated") IsNot Nothing Then
            Boolean.TryParse(Convert.ToString(Session("IsAuthenticated")),
                isAuthenticated)
        End If

        If Not isAuthenticated OrElse Session("User-Role") Is Nothing Then
            Response.Redirect("Login.aspx")
            Return
        End If

        If Not IsPostBack Then
            lblUserNav.Text = Convert.ToString(Session("UserName"))
        End If
    End Sub

    Protected Sub btnSearch_Click(sender As Object, e As EventArgs)
        Dim searchName As String = txtSearchName.Text.Trim()
        Dim searchFinish As String = txtSearchFinish.Text.Trim()

        If String.IsNullOrEmpty(searchName) AndAlso String.
            IsNullOrEmpty(searchFinish) Then
            lblSearchMessage.ForeColor = Drawing.Color.Red
            lblSearchMessage.Text = "Enter at least one search field."
            gvProducts.DataSource = Nothing
            gvProducts.DataBind()
            Return
        End If

        Using conn As New SqlConnection(ConnectionString)
            Dim cmd As New SqlCommand("SELECT PRODUCT_ID, PRODUCT_LINE_ID,
                PRODUCT_DESCRIPTION, PRODUCT_FINISH, STANDARD_PRICE FROM
                Product_T WHERE (@Name = '' OR PRODUCT_DESCRIPTION LIKE '%' +
                @Name + '%') AND (@Finish = '' OR PRODUCT_FINISH LIKE '%' +

```

```

        @Finish + '%'') ORDER BY PRODUCT_DESCRIPTION", conn)
cmd.Parameters.AddWithValue("@Name", searchName)
cmd.Parameters.AddWithValue("@Finish", searchFinish)

Dim adapter As New SqlDataAdapter(cmd)
Dim table As New DataTable()
adapter.Fill(table)
gvProducts.DataSource = table
gvProducts.DataBind()

If table.Rows.Count = 0 Then
    lblSearchMessage.ForeColor = Drawing.Color.Red
    lblSearchMessage.Text = "No matching products found."
Else
    lblSearchMessage.ForeColor = Drawing.Color.Green
    lblSearchMessage.Text = table.Rows.Count.ToString() & "
        product(s) found."
End If
End Using
End Sub

Protected Sub btnLogout_Click(sender As Object, e As EventArgs)
    Session.Clear()
    Session.Abandon()
    Response.Redirect("Login.aspx")
End Sub
</script>
</body>
</html>

```

16 UserRegister.aspx

```

<%@ Page Language="vb" AutoEventWireup="true" %>
<%@ Import Namespace="System.Configuration" %>
<%@ Import Namespace="System.Data.SqlClient" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>PVFC - User Registration</title>
    <style>
        body { font-family: Arial, sans-serif; margin: 50px; background-color:
            #f4f4f4; }
        .register-container { background: white; padding: 20px; border-radius:
            8px; width: 360px; box-shadow: 0px 0px 10px 0px #ccc; }
        .form-group { margin-bottom: 15px; }
        .form-group label { display: block; margin-bottom: 5px; }
        .form-group input, .form-group select { width: 100%; padding: 8px; box-
            sizing: border-box; }
    </style>

```

```

</head>
<body>
  <form id="form1" runat="server">
    <div class="register-container">
      <h2>User Registration</h2>

      <div class="form-group">
        <label>Username:</label>
        <asp:TextBox ID="txtUsername" runat="server"></asp:TextBox>
      </div>

      <div class="form-group">
        <label>Password:</label>
        <asp:TextBox ID="txtPassword" runat="server" TextMode="Password"
          "></asp:TextBox>
      </div>

      <div class="form-group">
        <label>Confirm Password:</label>
        <asp:TextBox ID="txtConfirmPassword" runat="server" TextMode="
          Password"></asp:TextBox>
      </div>

      <div class="form-group">
        <label>Role:</label>
        <asp:DropDownList ID="ddlRole" runat="server">
          <asp:ListItem Text="employee" Value="employee"></asp:ListItem
            >
          <asp:ListItem Text="admin" Value="admin"></asp:ListItem>
        </asp:DropDownList>
      </div>

      <asp:Button ID="btnRegister" runat="server" Text="Register User"
        OnClick="btnRegister_Click" BackColor="#007BFF" ForeColor="White"
        BorderStyle="None" Width="100%" />
      <br /><br />
      <asp:Label ID="lblMessage" runat="server" ForeColor="Red"></asp:
        Label>

      <div style="margin-top: 12px; font-size: 14px;">
        Already registered? <a href="Login.aspx">Back to Login</a>
      </div>
    </div>
  </form>

  <script runat="server">
    Private ReadOnly Property ConnectionString As String
    Get
      Return ConfigurationManager.ConnectionStrings("FurnitureDB").
        ConnectionString
    End Get
  </script>

```

```

End Property

Protected Sub btnRegister_Click(sender As Object, e As EventArgs)
    Dim username As String = txtUsername.Text.Trim()
    Dim password As String = txtPassword.Text
    Dim confirmPassword As String = txtConfirmPassword.Text
    Dim role As String = ddlRole.SelectedValue

    If String.IsNullOrEmpty(username) OrElse String.
        IsNullOrEmpty(password) Then
        lblMessage.ForeColor = Drawing.Color.Red
        lblMessage.Text = "Username and password are required."
        Return
    End If

    If Not String.Equals(password, confirmPassword) Then
        lblMessage.ForeColor = Drawing.Color.Red
        lblMessage.Text = "Password and confirm password do not match."
        Return
    End If

    Using conn As New SqlConnection(ConnectionString)
        conn.Open()

        Dim checkCmd As New SqlCommand("SELECT COUNT(1) FROM Users WHERE
            Username = @Username", conn)
        checkCmd.Parameters.AddWithValue("@Username", username)
        Dim existing As Integer = Convert.ToInt32(checkCmd.ExecuteScalar
            ())

        If existing > 0 Then
            lblMessage.ForeColor = Drawing.Color.Red
            lblMessage.Text = "Username already exists. Choose another
                username."
            Return
        End If

        Dim insertCmd As New SqlCommand("INSERT INTO Users (Username,
            User_Password, User_Role) VALUES (@Username, @User_Password,
            @User_Role)", conn)
        insertCmd.Parameters.AddWithValue("@Username", username)
        insertCmd.Parameters.AddWithValue("@User_Password", password)
        insertCmd.Parameters.AddWithValue("@User_Role", role)
        insertCmd.ExecuteNonQuery()
    End Using

    Response.Redirect("Login.aspx?registered=1")
End Sub
</script>
</body>
</html>

```