

## Default.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Default.aspx.cs"
Inherits="IADLAB05._default" %>
```

```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title>My WEBSITE</title>
  <style>
    .linkStyle {
      display: inline-block;
      margin: 10px 0;
    }
  </style>
</head>
<body>

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

    <asp:HyperLink ID="lnkTask1Problem" runat="server"
      NavigateUrl="task_05_problem_statement.txt"
      CssClass="linkStyle">
      Task_01 Problem Statement
    </asp:HyperLink>
    <br />

    <asp:HyperLink ID="lnkTask1Report" runat="server"
      NavigateUrl="task_05_Code_Implementation_report.pdf"
      CssClass="linkStyle">
      Task_01 Code Implementation Report
    </asp:HyperLink>
    <br />

    <asp:HyperLink ID="lnkTask1Output" runat="server"
      NavigateUrl="task_05_sample_output.pdf"
      CssClass="linkStyle">
      Task_01 Sample Output
    </asp:HyperLink>
    <br />

    <asp:HyperLink ID="lnkTask1Demo" runat="server"
      NavigateUrl="~/index.aspx"
      CssClass="linkStyle">
      Task_01 Demonstration Page
    </asp:HyperLink>
    <br />

  </form>

</body>
</html>
```

## Default.aspx.cs

```
using System;
```

```

namespace IADLAB05
{
    public partial class _default : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }
    }
}

```

## index.aspx

```

<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Index.aspx.cs"
Inherits="WebApp.Index" %>

```

```

<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
<title>PVFC Management System</title>

<style>
.linkStyle{
display:block;
margin:10px;
font-size:18px;
}
</style>

</head>

<body>

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

<h2>PVFC Project</h2>

<asp:HyperLink ID="lnkCustomer" runat="server"
NavigateUrl="CustomerRegistration.aspx"
CssClass="linkStyle">
Customer Registration
</asp:HyperLink>

<asp:HyperLink ID="lnkProduct" runat="server"
NavigateUrl="ProductUpdate.aspx"
CssClass="linkStyle">
Product Catalog Update
</asp:HyperLink>

<asp:HyperLink ID="HyperLink1" runat="server"
NavigateUrl="ProductSelection.aspx"
CssClass="linkStyle">
Product Selection
</asp:HyperLink>

<asp:HyperLink ID="HyperLink2" runat="server"
NavigateUrl="ProductSearch.aspx"

```

```
CssClass="linkStyle">
Product Search
</asp:HyperLink>

</form>

</body>
</html>
```

## index.aspx.cs

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

namespace WebApp
{
    public partial class Index : Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
        }
    }
}
```

## Customer Registration.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="CustomerRegistration.aspx.cs"
Inherits="PVFC.CustomerRegistration" %>
```

```
<!DOCTYPE html>
<html>
<head runat="server">
    <title>Customer Registration</title>
    <style>
        .btn-back {
            background: #666;
            margin-top: 20px;
        }
    </style>
</head>

<body>
<form id="form1" runat="server">
    <h2>New Customer Registration</h2>

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

    Customer Name:<br />
    <asp:TextBox ID="txtName" runat="server" /><br /><br />

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

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

```

City:<br />
<asp:DropDownList ID="ddlCity" runat="server" AutoPostBack="true"
    OnSelectedIndexChanged="ddlCity_SelectedIndexChanged">
    <asp:ListItem Text="Lahore" Value="54000" />
    <asp:ListItem Text="Karachi" Value="74000" />
    <asp:ListItem Text="Islamabad" Value="44000" />
    <asp:ListItem Text="Rawalpindi" Value="46000" />
</asp:DropDownList><br /><br />

Postal Code:<br />
<asp:TextBox ID="txtPostal" runat="server" ReadOnly="true" /><br /><br />

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

<br /><br />
<asp:Label ID="lblMsg" runat="server" ForeColor="Green" />
<div class="button-group">
    <asp:Button ID="btnBack" runat="server" Text=" Back to Main Page" CssClass="btn btn-
back" OnClick="btnBack_Click" />
</div>
</form>
</body>
</html>

```

## Customer Registration.aspx.cs

```

using System;
using System.Configuration;
using System.Data.SqlClient;

namespace PVFC
{
    public partial class CustomerRegistration : System.Web.UI.Page
    {
        string connStr =
ConfigurationManager.ConnectionStrings["PVFCConnectionString"].ConnectionString;

        protected void Page_Load(object sender, EventArgs e)
        {
            if (!IsPostBack)
            {
                ddlCity.Items.Insert(0, new System.Web.UI.WebControls.ListItem("Select
City", ""));
            }
        }

        protected void ddlCity_SelectedIndexChanged(object sender, EventArgs e)
        {
            txtPostal.Text = ddlCity.SelectedValue;
        }
        protected void btnBack_Click(object sender, EventArgs e)
        {
            Response.Redirect("index.aspx");
        }
        protected void btnRegister_Click(object sender, EventArgs e)

```

```

    {
        try
        {
            using (SqlConnection con = new SqlConnection(connStr))
            {
                string query = @"INSERT INTO CUSTOMER_t
                (Customer_Id, Customer_Name, Customer_Address,
                Customer_City, Customer_State, Postal_Code)
                VALUES
                (@Id, @Name, @Address, @City, @State, @Postal)";

                using (SqlCommand cmd = new SqlCommand(query, con))
                {
                    cmd.Parameters.AddWithValue("@Id", txtId.Text);
                    cmd.Parameters.AddWithValue("@Name", txtName.Text);
                    cmd.Parameters.AddWithValue("@Address", txtAddress.Text);
                    cmd.Parameters.AddWithValue("@City", ddlCity.SelectedItem.Text);
                    cmd.Parameters.AddWithValue("@State", txtState.Text);
                    cmd.Parameters.AddWithValue("@Postal", txtPostal.Text);

                    con.Open();
                    int rows = cmd.ExecuteNonQuery();

                    lblMsg.Text = rows > 0 ? "Customer Registered Successfully!" :
                    "Registration Failed!";
                }
            }
        }
        catch (Exception ex)
        {
            lblMsg.Text = "Error: " + ex.Message;
        }
    }
}

```

## Product Update.aspx

```

<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="ProductUpdate.aspx.cs"
Inherits="PVFC.ProductUpdate" %>

```

```

<!DOCTYPE html>
<html>
<head runat="server">
    <title>Product Catalog Update</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 20px;
            background-color: #f5f5f5;
        }
        .container {
            max-width: 1000px;
            margin: auto;
            background: white;
            padding: 20px;
            border: 1px solid #ddd;
            border-radius: 10px;
        }
    </style>

```

```
h2 {
  color: #333;
  border-bottom: 2px solid #4CAF50;
  padding-bottom: 10px;
}
.select-product {
  background: #f9f9f9;
  padding: 20px;
  border: 1px solid #ddd;
  margin-bottom: 20px;
  border-radius: 8px;
}
.select-product label {
  font-weight: bold;
  display: block;
  margin-bottom: 5px;
}
.select-product select {
  width: 100%;
  padding: 10px;
  margin: 10px 0;
  border: 1px solid #ccc;
  border-radius: 4px;
  font-size: 14px;
}
.update-form {
  margin-top: 20px;
  padding: 20px;
  border: 1px solid #ddd;
  background: #fafafa;
  border-radius: 8px;
}
.update-form h3 {
  margin-top: 0;
  color: #4CAF50;
}
.update-form label {
  display: inline-block;
  width: 120px;
  font-weight: bold;
}
.update-form input, .update-form select {
  padding: 8px;
  margin: 5px 0 15px 0;
  width: 250px;
  border: 1px solid #ccc;
  border-radius: 4px;
}
.btn {
  padding: 8px 20px;
  margin: 5px;
  cursor: pointer;
  border: none;
  color: white;
  border-radius: 4px;
}
.btn-update {
  background: #4CAF50;
}
.btn-update:hover {
  background: #45a049;
}
```

```

}
.btn-select {
    background: #FF9800;
}
.btn-select:hover {
    background: #e68900;
}
.btn-back {
    background: #D2691E;
}
.btn-back:hover {
    background: #8B4513;
}
.button-group {
    text-align: center;
    margin-top: 20px;
    padding-top: 20px;
    border-top: 1px solid #ddd;
}
.success {
    background: #e8f5e9;
    border: 1px solid #4CAF50;
    color: #2e7d32;
    padding: 10px;
    margin: 10px 0;
}
.error {
    background: #ffebee;
    border: 1px solid #f44336;
    color: #c62828;
    padding: 10px;
    margin: 10px 0;
}
.info {
    background: #e3f2fd;
    border: 1px solid #2196F3;
    color: #1565c0;
    padding: 10px;
    margin: 10px 0;
}
}
</style>
</head>
<body>
    <form id="form1" runat="server">
        <div class="container">
            <h2>Product Catalog Management</h2>

            <div class="select-product">
                <h3>Select Product to Update</h3>
                <label>Choose Product:</label>
                <asp:DropDownList ID="ddlProducts" runat="server" AutoPostBack="true"
                    OnSelectedIndexChanged="ddlProducts_SelectedIndexChanged"
                    Width="100%">
                    <asp:ListItem Text="-- Select a Product --" Value="" />
                </asp:DropDownList>
            </div>

            <div class="update-form" id="updateForm">
                <h3>Update Product Details</h3>

                <label>Product ID:</label>

```

```

        <asp:TextBox ID="txtProductId" runat="server" ReadOnly="true"
BackColor="#f0f0f0" />
        <br />

        <label>Category:</label>
        <asp:DropDownList ID="ddlProductLine" runat="server">
            <asp:ListItem Text="-- Select Category --" Value="" />
            <asp:ListItem Text="Cherry Tree" Value="1" />
            <asp:ListItem Text="Scandinavia" Value="2" />
            <asp:ListItem Text="Country Look" Value="3" />
        </asp:DropDownList>
        <br />

        <label>Product Name:</label>
        <asp:TextBox ID="txtDescription" runat="server" />
        <br />

        <label>Finish:</label>
        <asp:TextBox ID="txtFinish" runat="server" />
        <br />

        <label>Price (<math>\$</math>):</label>
        <asp:TextBox ID="txtPrice" runat="server" />
        <br />

        <br />
        <asp:Button ID="btnUpdate" runat="server" Text="Update Product"
            CssClass="btn btn-update" OnClick="btnUpdate_Click" />
    </div>

    <asp:Label ID="lblMsg" runat="server" />

    <div class="button-group">
        <asp:Button ID="btnBackToMain" runat="server" Text="← Back to Main Page"
            CssClass="btn btn-back" OnClick="btnBackToMain_Click" />
    </div>
</div>
</form>
</body>
</html>

```

## Product\_Update.aspx.cs

```

using System;
using System.Configuration;
using System.Data;
using System.Data.SqlClient;

namespace PVFC
{
    public partial class ProductUpdate : System.Web.UI.Page
    {
        string connStr =
ConfigurationManager.ConnectionStrings["PVFCConnectionString"].ConnectionString;

        protected void Page_Load(object sender, EventArgs e)
        {
            if (!IsPostBack)
            {

```

```

        LoadProductNames();
    }
}

private void LoadProductNames()
{
    try
    {
        using (SqlConnection con = new SqlConnection(connStr))
        {
            string query = @"SELECT Product_Id, Product_Description
                            FROM PRODUCT_t
                            ORDER BY Product_Description";

            SqlCommand cmd = new SqlCommand(query, con);
            con.Open();
            SqlDataReader dr = cmd.ExecuteReader();

            ddlProducts.Items.Clear();
            ddlProducts.Items.Add(new System.Web.UI.WebControls.ListItem("--
Select a Product --", ""));

            while (dr.Read())
            {
                ddlProducts.Items.Add(new System.Web.UI.WebControls.ListItem(
                    dr["Product_Description"].ToString(),
                    dr["Product_Id"].ToString()));
            }
            dr.Close();
        }
    }
    catch (Exception ex)
    {
        ShowMessage("Error loading products: " + ex.Message, "error");
    }
}

protected void ddlProducts_SelectedIndexChanged(object sender, EventArgs e)
{
    if (!string.IsNullOrEmpty(ddlProducts.SelectedValue))
    {
        int productId = Convert.ToInt32(ddlProducts.SelectedValue);
        LoadProductDetails(productId);
        ShowMessage("Product selected. You can now update the details.",
"info");
    }
    else
    {
        ClearForm();
    }
}

private void LoadProductDetails(int productId)
{
    try
    {
        using (SqlConnection con = new SqlConnection(connStr))
        {

```

```

string query = @"SELECT
                Product_Id,
                Product_Description,
                Product_Finish,
                Standard_Price,
                Product_Line_Id
            FROM PRODUCT_t
            WHERE Product_Id = @pid";

SqlCommand cmd = new SqlCommand(query, con);
cmd.Parameters.AddWithValue("@pid", productId);

con.Open();
SqlDataReader dr = cmd.ExecuteReader();

if (dr.Read())
{
    txtProductId.Text = dr["Product_Id"].ToString();
    txtDescription.Text = dr["Product_Description"].ToString();
    txtFinish.Text = dr["Product_Finish"].ToString();
    txtPrice.Text = dr["Standard_Price"].ToString();

    string lineId = dr["Product_Line_Id"] != DBNull.Value ?
dr["Product_Line_Id"].ToString() : "";
    if (!string.IsNullOrEmpty(lineId))
        ddlProductLine.SelectedValue = lineId;
    else
        ddlProductLine.SelectedIndex = 0;
}
dr.Close();
}
}
catch (Exception ex)
{
    ShowMessage("Error loading product details: " + ex.Message, "error");
}
}

protected void btnUpdate_Click(object sender, EventArgs e)
{
    if (string.IsNullOrEmpty(txtProductId.Text))
    {
        ShowMessage("Please select a product to update first!", "error");
        return;
    }

    try
    {
        using (SqlConnection con = new SqlConnection(connStr))
        {
            string query = @"UPDATE PRODUCT_t
                            SET Product_Line_Id = @LineId,
                                Product_Description = @Desc,
                                Product_Finish = @Finish,
                                Standard_Price = @Price
                            WHERE Product_Id = @Pid";

            using (SqlCommand cmd = new SqlCommand(query, con))
            {
                cmd.Parameters.AddWithValue("@Pid", txtProductId.Text);

```



```

        else if (type == "error")
        {
            lblMsg.CssClass = "error";
        }
        else
        {
            lblMsg.CssClass = "info";
        }
    }
}
}
}

```

## Product Selection.aspx

```

<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="ProductSelection.aspx.cs"
Inherits="PVFC.ProductSelection" %>

```

```

<!DOCTYPE html>
<html>
<head runat="server">
    <title>Product Selection</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            background-color: #f2f2f2;
        }
        .container {
            width: 1000px;
            margin: 40px auto;
            padding: 25px;
            background-color: white;
            border: 1px solid #ccc;
        }
        h2 {
            text-align: center;
            margin-bottom: 20px;
            color: #333;
            border-bottom: 2px solid #4CAF50;
            padding-bottom: 10px;
        }
        h3 {
            color: #4CAF50;
            margin: 20px 0 10px 0;
        }
        .product-table {
            margin-top: 20px;
            margin-bottom: 30px;
            width: 100%;
            border-collapse: collapse;
        }
        .product-table th {
            background: #4CAF50;
            color: white;
            padding: 10px;
            text-align: left;
            border: 1px solid #ddd;
        }
        .product-table td {
            border: 1px solid #ddd;
            padding: 8px;
            text-align: left;
        }
    </style>

```

```
}
.product-table tr:hover {
  background-color: #f5f5f5;
  cursor: pointer;
}
.order-form {
  background: #f9f9f9;
  padding: 20px;
  border: 1px solid #ddd;
  margin-top: 20px;
}
.order-form label {
  display: inline-block;
  width: 100px;
  font-weight: bold;
}
.order-form input {
  padding: 8px;
  margin: 5px 0 15px 0;
  width: 200px;
  border: 1px solid #ccc;
  border-radius: 4px;
}
.btn {
  padding: 8px 20px;
  margin: 5px;
  cursor: pointer;
  border: none;
  border-radius: 4px;
  color: white;
}
.btn-add {
  background: #4CAF50;
}
.btn-add:hover {
  background: #45a049;
}
.btn-refresh {
  background: #2196F3;
}
.btn-refresh:hover {
  background: #0b7dda;
}
.btn-back {
  background: #666;
  margin-top: 20px;
}
.btn-back:hover {
  background: #555;
}
.btn-select {
  background: #FF9800;
  padding: 5px 10px;
  font-size: 12px;
}
.btn-select:hover {
  background: #e68900;
}
.button-group {
  text-align: center;
  margin-top: 20px;
}
```

```

        padding-top: 20px;
        border-top: 1px solid #ddd;
    }
    .message {
        padding: 10px;
        margin: 10px 0;
        border-radius: 4px;
    }
    .success {
        background: #e8f5e9;
        border: 1px solid #4CAF50;
        color: #2e7d32;
    }
    .error {
        background: #ffebee;
        border: 1px solid #f44336;
        color: #c62828;
    }
    .info {
        background: #e3f2fd;
        border: 1px solid #2196F3;
        color: #1565c0;
    }
    .selected-product {
        background-color: #e8f5e9;
    }
</style>
<script type="text/javascript">
    function selectProduct(productId, productName) {
        document.getElementById('<%= txtProductId.ClientID %>').value = productId;
        document.getElementById('<%= txtProductNameDisplay.ClientID %>').value =
productName;
        document.getElementById('<%= txtProductId.ClientID
%>').style.backgroundColor = '#e8f5e9';
    }
</script>
</head>
<body>
    <form id="form1" runat="server">
        <div class="container">
            <h2> Product Selection for Order</h2>

            <div style="margin-bottom: 15px;">
                <asp:Button ID="btnRefresh" runat="server" Text="Refresh Product List"
                    CssClass="btn btn-refresh" OnClick="btnRefresh_Click" />
            </div>

            <h3>Available Products</h3>
            <asp:GridView ID="gvProducts" runat="server" AutoGenerateColumns="False"
                Width="100%" CssClass="product-table"
                OnRowCommand="gvProducts_RowCommand">
                <Columns>
                    <asp:BoundField DataField="Product_Id" HeaderText="ID" />
                    <asp:BoundField DataField="Product_Description" HeaderText="Product
Name" />
                    <asp:BoundField DataField="Product_Finish" HeaderText="Finish" />
                    <asp:BoundField DataField="Standard_Price" HeaderText="Price ($)"
                DataFormatString="{0:C2}" />
                    <asp:ButtonField ButtonType="Button" Text="Select"
                CommandName="SelectProduct"
                    HeaderText="Action" ItemStyle-HorizontalAlign="Center" />
                </Columns>
            </asp:GridView>
        </div>
    </form>
</body>
</html>

```

```

        </Columns>
        <HeaderStyle BackColor="#4CAF50" ForeColor="White" />
        <AlternatingRowStyle BackColor="#f9f9f9" />
    </asp:GridView>

    <div class="order-form">
        <h3> Add Product to Order</h3>

        <label>Order ID:</label>
        <asp:TextBox ID="txtOrderId" runat="server" placeholder="Enter Order ID"
/>

        <br />

        <label>Product ID:</label>
        <asp:TextBox ID="txtProductId" runat="server" ReadOnly="true"
BackColor="#f0f0f0" />
        <br />

        <label>Product Name:</label>
        <asp:TextBox ID="txtProductNameDisplay" runat="server" ReadOnly="true"
BackColor="#f0f0f0" />
        <br />

        <label>Quantity:</label>
        <asp:TextBox ID="txtQuantity" runat="server" Text="1" />
        <br />

        <br />
        <asp:Button ID="btnAdd" runat="server" Text="Add to Order" CssClass="btn
btn-add" OnClick="btnAdd_Click" />
    </div>

    <asp:Label ID="lblMsg" runat="server" />

    <div class="button-group">
        <asp:Button ID="btnBack" runat="server" Text=" Back to Main Page"
CssClass="btn btn-back" OnClick="btnBack_Click" />
    </div>
</div>
</form>
</body>
</html>

```

## Product Selection.aspx.cs

```

using System;
using System.Configuration;
using System.Data;
using System.Data.SqlClient;

namespace PVFC
{
    public partial class ProductSelection : System.Web.UI.Page
    {
        string connStr =
ConfigurationManager.ConnectionStrings["PVFCConnectionString"].ConnectionString;

        protected void Page_Load(object sender, EventArgs e)
        {

```

```

        if (!IsPostBack)
        {
            LoadAllProducts();
        }
    }

    protected void btnRefresh_Click(object sender, EventArgs e)
    {
        LoadAllProducts();
        ShowMessage("Product list refreshed!", "info");
    }

    protected void btnBack_Click(object sender, EventArgs e)
    {
        Response.Redirect("index.aspx");
    }

    protected void gvProducts_RowCommand(object sender,
System.Web.UI.WebControls.GridViewCommandEventArgs e)
    {
        if (e.CommandName == "SelectProduct")
        {
            int index = Convert.ToInt32(e.CommandArgument);
            System.Web.UI.WebControls.GridViewRow row = gvProducts.Rows[index];

            txtProductId.Text = row.Cells[0].Text;
            txtProductNameDisplay.Text = row.Cells[1].Text;

            ShowMessage("Product selected! Enter Order ID and Quantity to add to
order.", "info");
        }
    }

    protected void btnAdd_Click(object sender, EventArgs e)
    {
        if (string.IsNullOrEmpty(txtOrderId.Text))
        {
            ShowMessage("Order ID is required!", "error");
            return;
        }

        if (string.IsNullOrEmpty(txtProductId.Text))
        {
            ShowMessage("Please select a product first!", "error");
            return;
        }

        if (string.IsNullOrEmpty(txtQuantity.Text))
        {
            ShowMessage("Quantity is required!", "error");
            return;
        }

        try
        {
            int orderId = int.Parse(txtOrderId.Text);

```

```

int productId = int.Parse(txtProductId.Text);
int quantity = int.Parse(txtQuantity.Text);

if (quantity <= 0)
{
    ShowMessage("Quantity must be greater than 0!", "error");
    return;
}

using (SqlConnection con = new SqlConnection(connStr))
{
    con.Open();

    string checkOrderQuery = "SELECT COUNT(*) FROM Orders_t WHERE
Order_Id = @oid";
    SqlCommand checkOrderCmd = new SqlCommand(checkOrderQuery, con);
    checkOrderCmd.Parameters.AddWithValue("@oid", orderId);
    int orderExists = (int)checkOrderCmd.ExecuteScalar();

    if (orderExists == 0)
    {
        ShowMessage("Order ID '" + orderId + "' does not exist! Please
create the order first.", "error");
        return;
    }

    string checkDuplicateQuery = @"SELECT COUNT(*) FROM Order_line_t
WHERE Order_Id = @oid AND Product_Id
= @pid";
    SqlCommand checkDuplicateCmd = new SqlCommand(checkDuplicateQuery,
con);
    checkDuplicateCmd.Parameters.AddWithValue("@oid", orderId);
    checkDuplicateCmd.Parameters.AddWithValue("@pid", productId);
    int duplicateExists = (int)checkDuplicateCmd.ExecuteScalar();

    if (duplicateExists > 0)
    {
        ShowMessage("Product is already added to this order!", "error");
        return;
    }

    string query = @"INSERT INTO Order_line_t (Order_Id, Product_Id,
Ordered_Quantity)
VALUES (@oid, @pid, @qty)";

    SqlCommand cmd = new SqlCommand(query, con);
    cmd.Parameters.AddWithValue("@oid", orderId);
    cmd.Parameters.AddWithValue("@pid", productId);
    cmd.Parameters.AddWithValue("@qty", quantity);

    cmd.ExecuteNonQuery();

    ShowMessage("Product added to order successfully!", "success");

    txtOrderId.Text = "";
    txtQuantity.Text = "1";
}
}

```

```

        catch (FormatException)
        {
            ShowMessage("Please enter valid numeric values for Order ID and
Quantity.", "error");
        }
        catch (SqlException ex)
        {
            ShowMessage("Database error: " + ex.Message, "error");
        }
        catch (Exception ex)
        {
            ShowMessage("Error: " + ex.Message, "error");
        }
    }

private void LoadAllProducts()
{
    try
    {
        using (SqlConnection con = new SqlConnection(connStr))
        {
            string query = @"SELECT
                                Product_Id,
                                Product_Description,
                                Product_Finish,
                                Standard_Price
                                FROM PRODUCT_t
                                ORDER BY Product_Id";

            SqlDataAdapter da = new SqlDataAdapter(query, con);
            DataTable dt = new DataTable();
            da.Fill(dt);

            gvProducts.DataSource = dt;
            gvProducts.DataBind();
        }
    }
    catch (Exception ex)
    {
        ShowMessage("Error loading products: " + ex.Message, "error");
    }
}

private void ShowMessage(string message, string type)
{
    lblMsg.Text = message;
    if (type == "success")
    {
        lblMsg.CssClass = "message success";
    }
    else if (type == "error")
    {
        lblMsg.CssClass = "message error";
    }
    else
    {
        lblMsg.CssClass = "message info";
    }
}
}

```

```
}
```

## Product Search.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="ProductSearch.aspx.cs"  
Inherits="PVFC.ProductSearch" %>
```

```
<!DOCTYPE html>  
<html>  
<head runat="server">  
  <title>Product Search</title>  
  <style>  
    body {  
      font-family: Arial, sans-serif;  
      background-color: #f2f2f2;  
    }  
    .container {  
      width: 800px;  
      margin: 40px auto;  
      padding: 25px;  
      background-color: white;  
      border: 1px solid #ccc;  
      border-radius: 10px;  
    }  
    h2 {  
      text-align: center;  
      margin-bottom: 20px;  
      color: #333;  
      border-bottom: 2px solid #4CAF50;  
      padding-bottom: 10px;  
    }  
    .search-box {  
      background: #f9f9f9;  
      padding: 20px;  
      border: 1px solid #ddd;  
      margin-bottom: 20px;  
      border-radius: 8px;  
    }  
    .search-box label {  
      font-weight: bold;  
      display: block;  
      margin-bottom: 5px;  
    }  
    .search-box select {  
      width: 100%;  
      padding: 10px;  
      margin: 10px 0;  
      border: 1px solid #ccc;  
      border-radius: 4px;  
      font-size: 14px;  
    }  
    .search-box input {  
      width: 100%;  
      padding: 10px;  
      margin: 10px 0;  
      border: 1px solid #ccc;  
      border-radius: 4px;  
      box-sizing: border-box;  
    }  
  }  
</head>  
</html>
```

```
.btn {
  padding: 10px 20px;
  margin: 5px;
  cursor: pointer;
  border: none;
  border-radius: 4px;
  color: white;
  font-size: 14px;
}
.btn-search {
  background: #2196F3;
}
.btn-search:hover {
  background: #0b7dda;
}
.btn-clear {
  background: #FF9800;
}
.btn-clear:hover {
  background: #e68900;
}
.btn-back {
  background: #D2691E;
}
.btn-back:hover {
  background: #8B4513;
}
.result-box {
  margin-top: 20px;
  padding: 15px;
  background: #f5f5f5;
  border: 1px solid #ddd;
  border-radius: 8px;
}
.product-detail {
  background: white;
  padding: 15px;
  margin-top: 10px;
  border: 1px solid #ddd;
  border-radius: 8px;
}
.product-detail table {
  width: 100%;
}
.product-detail td {
  padding: 8px;
}
.product-detail .label {
  font-weight: bold;
  width: 120px;
  background: #f0f0f0;
}
.button-group {
  text-align: center;
  margin-top: 20px;
  padding-top: 20px;
  border-top: 1px solid #ddd;
}
.message {
  padding: 10px;
  margin: 10px 0;
}
```

```

        border-radius: 4px;
    }
    .error {
        background: #ffebee;
        border: 1px solid #f44336;
        color: #c62828;
    }
    .info {
        background: #e3f2fd;
        border: 1px solid #2196F3;
        color: #1565c0;
    }
    .success {
        background: #e8f5e9;
        border: 1px solid #4CAF50;
        color: #2e7d32;
    }
}
</style>
</head>
<body>
    <form id="form1" runat="server">
        <div class="container">
            <h2>Product Search</h2>

            <div class="search-box">
                <label>Select Product Name:</label>
                <asp:DropDownList ID="ddlProductNames" runat="server"
AutoPostBack="true"
OnSelectedIndexChanged="ddlProductNames_SelectedIndexChanged"
Width="100%">
                    <asp:ListItem Text="-- Select a Product --" Value="" />
                </asp:DropDownList>

                <div style="text-align: center; margin-top: 15px;">
                    <asp:Button ID="btnSearch" runat="server" Text="Search Selected
Product" CssClass="btn btn-search" OnClick="btnSearch_Click" />
                    <asp:Button ID="btnClear" runat="server" Text="Clear" CssClass="btn
btn-clear" OnClick="btnClear_Click" />
                </div>
            </div>

            <div class="result-box">
                <h3>Product details</h3>
                <asp:Label ID="lblResultCount" runat="server" Text="Select a product
from the dropdown to view details." ForeColor="#666" />

                <div class="product-detail" id="productDetail" runat="server"
visible="false">
                    <table>
                        <tr>
                            <td class="label">Product ID:</td>
                            <td><asp:Label ID="lblProductId" runat="server" Font-
Bold="true" /></td>
                        </tr>
                        <tr>
                            <td class="label">Product Name:</td>
                            <td><asp:Label ID="lblProductName" runat="server" Font-
Bold="true" ForeColor="#4CAF50" /></td>
                        </tr>
                    </table>
                </div>
            </div>
        </div>
    </form>

```

```

        <td class="label">Finish:</td>
        <td><asp:Label ID="lblFinish" runat="server" /></td>
    </tr>
    <tr>
        <td class="label">Price:</td>
        <td><asp:Label ID="lblPrice" runat="server" Font-Bold="true"
ForeColor="#2196F3" /></td>
    </tr>
    <tr>
        <td class="label">Category:</td>
        <td><asp:Label ID="lblCategory" runat="server" /></td>
    </tr>
</table>
</div>
</div>

<asp:Label ID="lblMsg" runat="server" CssClass="message" />

<div class="button-group">
    <asp:Button ID="btnBack" runat="server" Text="← Back to Main Page"
CssClass="btn btn-back" OnClick="btnBack_Click" />
</div>
</div>
</form>
</body>
</html>

```

## Product Search.aspx.cs

```

using System;
using System.Configuration;
using System.Data;
using System.Data.SqlClient;

namespace PVFC
{
    public partial class ProductSearch : System.Web.UI.Page
    {
        string connStr =
ConfigurationManager.ConnectionStrings["PVFCConnectionString"].ConnectionString;

        protected void Page_Load(object sender, EventArgs e)
        {
            if (!IsPostBack)
            {
                LoadProductNames();
            }
        }

        private void LoadProductNames()
        {
            try
            {
                using (SqlConnection con = new SqlConnection(connStr))
                {
                    string query = @"SELECT Product_Id, Product_Description
FROM PRODUCT_t
ORDER BY Product_Description";

```

```

        SqlCommand cmd = new SqlCommand(query, con);
        con.Open();
        SqlDataReader dr = cmd.ExecuteReader();

        ddlProductNames.Items.Clear();
        ddlProductNames.Items.Add(new System.Web.UI.WebControls.ListItem("--
Select a Product --", ""));

        while (dr.Read())
        {
            ddlProductNames.Items.Add(new
System.Web.UI.WebControls.ListItem(
                dr["Product_Description"].ToString(),
                dr["Product_Id"].ToString()));
        }
        dr.Close();
    }
}
catch (Exception ex)
{
    ShowMessage("Error loading products: " + ex.Message, "error");
}
}

protected void ddlProductNames_SelectedIndexChanged(object sender, EventArgs e)
{
    if (!string.IsNullOrEmpty(ddlProductNames.SelectedValue))
    {
        int productId = Convert.ToInt32(ddlProductNames.SelectedValue);
        LoadProductDetails(productId);
    }
    else
    {
        productDetail.Visible = false;
        lblResultCount.Text = "Select a product from the dropdown to view
details.";
    }
}

protected void btnSearch_Click(object sender, EventArgs e)
{
    if (string.IsNullOrEmpty(ddlProductNames.SelectedValue))
    {
        ShowMessage("Please select a product from the dropdown first!",
"error");
        return;
    }

    int productId = Convert.ToInt32(ddlProductNames.SelectedValue);
    LoadProductDetails(productId);
    ShowMessage("Product details loaded successfully!", "success");
}

protected void btnClear_Click(object sender, EventArgs e)
{
    ddlProductNames.SelectedIndex = 0;
    productDetail.Visible = false;
}

```

```

        lblResultCount.Text = "Select a product from the dropdown to view details.";
        ShowMessage("Cleared! Select a product to view details.", "info");
    }

    private void LoadProductDetails(int productId)
    {
        try
        {
            using (SqlConnection con = new SqlConnection(connStr))
            {
                string query = @"SELECT
                                P.Product_Id,
                                P.Product_Description,
                                P.Product_Finish,
                                P.Standard_Price,
                                ISNULL(PL.Product_Line_Name, 'Uncategorized') AS
Category
                                FROM PRODUCT_t P
                                LEFT JOIN PRODUCT_LINE_t PL ON P.Product_Line_Id =
PL.Product_Line_Id
                                WHERE P.Product_Id = @pid";

                SqlCommand cmd = new SqlCommand(query, con);
                cmd.Parameters.AddWithValue("@pid", productId);

                con.Open();
                SqlDataReader dr = cmd.ExecuteReader();

                if (dr.Read())
                {
                    lblProductId.Text = dr["Product_Id"].ToString();
                    lblProductName.Text = dr["Product_Description"].ToString();
                    lblFinish.Text = dr["Product_Finish"].ToString();
                    lblPrice.Text = "$" +
Convert.ToDecimal(dr["Standard_Price"]).ToString("N2");
                    lblCategory.Text = dr["Category"].ToString();

                    productDetail.Visible = true;
                    lblResultCount.Text = "Showing details for selected product:";
                }
                else
                {
                    productDetail.Visible = false;
                    lblResultCount.Text = "Product not found!";
                    ShowMessage("Product not found in database!", "error");
                }
                dr.Close();
            }
        }
        catch (Exception ex)
        {
            ShowMessage("Error loading product details: " + ex.Message, "error");
        }
    }

    protected void btnBack_Click(object sender, EventArgs e)
    {
        Response.Redirect("index.aspx");
    }

```

```
private void ShowMessage(string message, string type)
{
    lblMsg.Text = message;
    if (type == "error")
    {
        lblMsg.CssClass = "message error";
    }
    else if (type == "success")
    {
        lblMsg.CssClass = "message success";
    }
    else
    {
        lblMsg.CssClass = "message info";
    }
}
}
```