

# Employee Login Page

Username:

Password:

Login

## Admin Panel

Visit Catalogue Update Page

Visit Customer Segmentation Panel

# Customer Segmentation Page

View Customer Segmentation Analysis

View

## Frequent Customers

Customer_Id	Customer_Name	TotalOrders
31	Bilal Ahmed	5

## Occasional Customers

Customer_Id	Customer_Name	TotalOrders
17	Haider Ali	3
24	Ali Khan	4
25	Sara Ahmed	3
31	Bilal Ahmed	5
33	Mariam Khan	3

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## Rare Customers

<b>Customer_Id</b>	<b>Customer_Name</b>	<b>TotalOrders</b>
1	Contemporary Casuals	2
2	Value Furniture	1
3	Home Furnishings	1
4	Eastern Furniture	1
5	Impressions	1
8	California Classics	1
11	American Euro Lifestyles	1
12	Battle Creek Furniture	1
15	Mountain Scenes	1
16	Abdullah Iftikhar	2
20	Hammad Q	1
22	Hanzala	1
23	Wasif	1
26	Usman Tariq	2
27	Ayesha Malik	2
28	Hassan Raza	2
29	Zain Ali	1
30	Fatima Noor	1
32	Hamza Shah	2

## Premium Customers

Customer_Id	Customer_Name	TotalSpend
31	Bilal Ahmed	13000.00

## Bulk Buyers

Customer_Id	Customer_Name	AvgQuantity
8	California Classics	5
20	Hammad Q	5
31	Bilal Ahmed	13

## High Value Occasional Customers

Customer_Id	Customer_Name	TotalOrders	TotalSpend
31	Bilal Ahmed	5	13000.00

## CODE:

### [EmployeeLogin.aspx.vb](#):

**Imports** System.Data.SqlClient

**Partial Class** \_Default

**Inherits** System.Web.UI.Page

**Protected Sub** Button1\_Click(sender As Object, e As EventArgs) **Handles** Button1.Click

**Dim** conn **As New** SqlConnection("Server=ABDULLAH\SQLEXPRESS;Database=PVFC\_DB;User Id=FarmAdmin;Password=abcd8552;TrustServerCertificate=True;")

' 🔥 **Get RoleID instead of COUNT**

**Dim** query **As String** = "SELECT RoleID, UserID FROM USER\_† WHERE Username=@username AND PasswordHash=@password"

**Dim** cmd **As New** SqlCommand(query, conn)

```

cmd.Parameters.AddWithValue("@username", TextBox2.Text)
cmd.Parameters.AddWithValue("@password", TextBox3.Text)

conn.Open()

Dim reader As SqlDataReader = cmd.ExecuteReader()

If reader.Read() Then
    ' ✓ Login successful

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

    ' (Optional but recommended)
    Session("UserID") = reader("UserID")
    Session("RoleID") = roleID

    reader.Close()
    conn.Close()

    ' 🔥 Role-based redirection
    If roleID = 3 Then
        ' Employee
        Response.Redirect("adminpanel.aspx")

    ElseIf roleID = 2 Then

        Response.Redirect("updatecatalogue.aspx")
        ' Admin
    Else
        Response.Redirect("home.aspx") ' fallback (e.g. customer)
    End If

Else
    ' ✗ Login failed
    reader.Close()
    conn.Close()
    Response.Write("Invalid username or password")
End If

End Sub

End Class

```

## Adminpanel.aspx.vb:

```

Partial Class _Default
    Inherits System.Web.UI.Page

```

```

Protected Sub Button_cat_Click(sender As Object, e As EventArgs) Handles Button_cat.Click

```

```
Response.Redirect("updatecatalogue.aspx")
End Sub
```

```
Protected Sub Button_seg_Click(sender As Object, e As EventArgs) Handles Button_seg.Click
    Response.Redirect("segmentation.aspx")
End Sub
End Class
```

## Segmentation.aspx.vb:

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

```
Partial Class CustomerSegmentation
    Inherits System.Web.UI.Page
```

```
Dim connStr As String = "Server=ABDULLAH\SQLEXPRESS;Database=PVFC_DB;User
Id=FarmAdmin;Password=abcd8552;"
```

```
Protected Sub btnView_Click(sender As Object, e As EventArgs) Handles btnView.Click
```

```
    LoadFrequentCustomers()
    LoadOccasionalCustomers()
    LoadRareCustomers()
    LoadPremiumCustomers()
    LoadBulkBuyers()
    LoadHighValueOccasional()
```

```
End Sub
```

```
' 1. FREQUENT CUSTOMERS (Orders >= 10)
Private Sub LoadFrequentCustomers()
```

```
    Dim query As String = " SELECT C.Customer_Id, C.Customer_Name, COUNT(O.Order_Id) AS
TotalOrders FROM CUSTOMER_† C JOIN ORDER_† O ON C.Customer_Id = O.Customer_Id GROUP
BY C.Customer_Id, C.Customer_Name HAVING COUNT(O.Order_Id) >= 5"
```

```
    BindGrid(query, gvFrequent)
```

```
End Sub
```

```
' 2. OCCASIONAL CUSTOMERS (3 - 9 orders)
Private Sub LoadOccasionalCustomers()
```

```
    Dim query As String = "SELECT C.Customer_Id, C.Customer_Name, COUNT(O.Order_Id) AS
TotalOrders FROM CUSTOMER_† C JOIN ORDER_† O ON C.Customer_Id = O.Customer_Id GROUP
BY C.Customer_Id, C.Customer_Name HAVING COUNT(O.Order_Id) BETWEEN 3 AND 9"
```

```
    BindGrid(query, gvOccasional)
```

```
End Sub
```

**' 3. RARE CUSTOMERS (< 3 orders)**

**Private Sub LoadRareCustomers()**

**Dim query As String = "SELECT C.Customer\_Id, C.Customer\_Name, COUNT(O.Order\_Id) AS TotalOrders FROM CUSTOMER\_† C JOIN ORDER\_† O ON C.Customer\_Id = O.Customer\_Id GROUP BY C.Customer\_Id, C.Customer\_Name HAVING COUNT(O.Order\_Id) < 3"**

**BindGrid(query, gvRare)**

**End Sub**

**' 4. PREMIUM CUSTOMERS (High spending)**

**Private Sub LoadPremiumCustomers()**

**Dim query As String = "SELECT C.Customer\_Id, C.Customer\_Name, SUM(P.Standard\_Price \* OL.Ordered\_Quantity) AS TotalSpend FROM CUSTOMER\_† C JOIN ORDER\_† O ON C.Customer\_Id = O.Customer\_Id JOIN ORDER\_LINE\_† OL ON O.Order\_Id = OL.Order\_Id JOIN PRODUCT\_† P ON OL.Product\_Id = P.Product\_Id GROUP BY C.Customer\_Id, C.Customer\_Name HAVING SUM(P.Standard\_Price \* OL.Ordered\_Quantity) >= 5000"**

**BindGrid(query, gvPremium)**

**End Sub**

**' 5. BULK BUYERS (avg quantity >= 5)**

**Private Sub LoadBulkBuyers()**

**Dim query As String = "SELECT C.Customer\_Id, C.Customer\_Name, AVG(OL.Ordered\_Quantity) AS AvgQuantity FROM CUSTOMER\_† C JOIN ORDER\_† O ON C.Customer\_Id = O.Customer\_Id JOIN ORDER\_LINE\_† OL ON O.Order\_Id = OL.Order\_Id GROUP BY C.Customer\_Id, C.Customer\_Name HAVING AVG(OL.Ordered\_Quantity) >= 5"**

**BindGrid(query, gvBulk)**

**End Sub**

**' 6. HIGH VALUE OCCASIONAL (≤5 orders AND high spend)**

**Private Sub LoadHighValueOccasional()**

**Dim query As String = "SELECT C.Customer\_Id, C.Customer\_Name, COUNT(O.Order\_Id) AS TotalOrders, SUM(P.Standard\_Price \* OL.Ordered\_Quantity) AS TotalSpend FROM CUSTOMER\_† C JOIN ORDER\_† O ON C.Customer\_Id = O.Customer\_Id JOIN ORDER\_LINE\_† OL ON O.Order\_Id = OL.Order\_Id JOIN PRODUCT\_† P ON OL.Product\_Id = P.Product\_Id GROUP BY C.Customer\_Id, C.Customer\_Name HAVING COUNT(O.Order\_Id) <= 5 AND SUM(P.Standard\_Price \* OL.Ordered\_Quantity) >= 5000"**

**BindGrid(query, gvHighValue)**

**End Sub**

**' COMMON GRID BIND METHOD (VERY IMPORTANT CLEAN DESIGN)**

**Private Sub BindGrid(query As String, grid As GridView)**

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

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

Dim dt As New DataTable()

Try
    conn.Open()
    Dim da As New SqlDataAdapter(cmd)
    da.Fill(dt)
    grid.DataSource = dt
    grid.DataBind()

Catch ex As Exception
    Response.Write("Error: " & ex.Message)
End Try

End Using
End Using

End Sub

End Class
```