MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION

MICROPROJECT REPORT ON

"Café Management System"
Diploma in Computer Engineering

Submitted By

Name: Amruta Namdev Vadar

Subject: Graphics user Interface using VB.net

Guided By: **Mr. G. A.Ghodake**

ASHOKRAO MANE POLYTECHNIC, VATHAR

Department of Computer Engineering

A. Y. 2023-24

DECLARATION

I hereby declare that the Micro-Project Report entitled **"Graphical user interface using VB.net"** with Module **"Café Management System"** is an authentic record on my own work as requirements of Micro Project during the period from **/ / 2023** to **/ / 2024** in partial fulfillment of **Second Year** in **Computer Engineering , Ashokrao Mane Polytechnic, Vathar** under the guidance of **Mr. G. A. Ghodake.**

Signature Of Students

Amruta Namdev Vadar

Date: / / 2024

Place: Vathar, Kolhapur.

ACKNOWLEDGMENT

The successful presentation of the **Graphics user Interface using VB.net Micro Project** would be incomplete without the mention of the people who made it possible and whose constant guidance crowned my effort with success.

I would like to extend my gratitude to HOD of Computer Department **Mr. S. A. Lakade Sir**, Kolhapur, for providing all the facilities to present this Micro-Project.

I would like to thank our Project Guide, **Mr. G. A. Ghodake**, Department of Computer Engineering, Ashokrao Mane Polytechnic, Vathar, for their constant guidance and inputs.

Sincerely,

Amruta Namdev Vadar

Place : Vathar, Kolhapur

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Report

Abstract

The GUI allows the user to operate the system through icons, drop-down menus, windows and a clicking device. The GUI avoids the user having to memorize and use complex functions, commands and options, thereby simplifying and enhancing the user experience.The purpose of this project is to give you practice with graphics using interface programming in.net. This project implemented using the components fromicons, graphic representations, windows and a clicking device.The direct manipulation of graphical icons, such as buttons, scroll bars, windows, tabs, menus, cursors, and the mouse pointing device, is becoming the standard for user-centered design in software application programming. Graphical user interfaces (GUIs) allow users to operate computers and other electronic devices intuitively. Many current graphical user interfaces have a touchscreen and voice-command feature.

Title

 Café Management System Using Graphical user interface Programming

Introduction

A graphical user interface, or GUI , is a form of user interface that allows users to interact with electronic devices through graphical icons and visual indicators such as secondary notation. In many applications, GUIs are used instead of text-based UIs, which are based on typed command labels or text navigation. GUIs were introduced in reaction to the perceived steep learning curve of command-line interfaces which require commands to be typed on a computer keyboard.The actions in a GUI are usually performed through direct manipulation of the graphical elements.

1.4 Course Outcomes Integrated

a) Describe GUI concepts.

b) Apply fundamental programming constructs.

c) Illustrate the concept of drag, drop, classes and object.

d) Elaborate the concept of string, Inheritance &try catch.

e) Describe and use constructors and destructors.

f) Implement the concept to inheritance.

g) Implement the notion of exception handling and multithreading.

h) Understand student record card system.

1.5. Resources Used

Sr. No.	Name of Resources	Specifications	Quantity	Remark
1	Computer	Window 10 , 4 GB Ram	1	-
2	Visual studio 2022	Editor	1	-
3	Internet	Google	-	-
4	Book	GUI Text Book	1	-

1.6 Actual Procedure Followed

1. Understand the Work

2. Data Collation

3. Taking references from Book and Internet

4. Preparing A Report

5. Actual time of Writing Program

6. Execution of A Program/Generating Output

7. Preparation

8. Project Submission

1.7 Output of Microproject

Organize ideas in systematic, Logical and Coherent Manner .It helps me to deal with the errors.It's also helps me to get knowledge to solve the Problems.

This Micro-Project is excepted to make programs of Café Management System using interfaces and also GUI Programming Language. The output of the program is attached at the end of this project.

1.8 Skill Developed

SelfLearning, Presentation, Punctuality, Applying and Analyzing the real life concept, Evaluation and Creativity:
a) Monitor
b) Checks output
c) Revise.

2.Actual Implimentation of Program

2.1 Program Code

```vb
//form
Public Class Form1


Private Sub Form1_Load (sender As Object, e As EventArgs) Handles MyBase.Load
Timer1. Start ()
End Sub

Private Sub PictureBox2_Click (sender As Object, e As EventArgs) Handles
PictureBox2.Click
Application.Exit ()
End Sub

 Private Sub Timer1_Tick (sender As Object, e As EventArgs) Handles Timer1.Tick
 ProgressBar.Increment (1)
 If ProgressBar1.Value = 100 Then
 Me.Hide()
 Dim log = New login
 log.Show()
 Timer1.Enabled = False

 End If
 End Sub
 End Class


//login
Public Class login

Private Sub PictureBox2_Click(sender As Object, e As EventArgs) Handles
PictureBox2.Click
Application.Exit()
 End Sub


Private Sub Button1_Click (sender As Object, e As EventArgs) Handles
Button1.Click
If txtusername.Text = "" Or txtpassword.Text = "" Then
MsgBox (" Please Enter username and password")
ElseIf txtusername.Text = "Admin" And txtpassword.Text = "Password" Then
Dim obj = New items
obj.Show ()
 Me.Hide ()

Else
MsgBox ("you have Entered wrong username or password")
txtusername.Text = ""
txtpassword.Text = ""
```

```vb
        End If
    End Sub

    Private    Sub    LinkLabel1_LinkClicked(sender    As    Object,    e    As
LinkLabelLinkClickedEventArgs) Handles LinkLabel1.LinkClicked
        Dim Obj = New order
        Obj.Show()
        Me.Hide()
    End Sub
End Class

//items
Imports System.Data.OleDb

Public Class items
    Dim   Con   asnew   OleDbConnection   ("Provider=Microsoft.ACE.OLEDB.12.0;Data
Source=C:\Users\AMRUTA\OneDrive\Desktop\my_project\cafe system.accdb")

    Private  Sub  PictureBox2_Click(sender  As  Object,  e  As  EventArgs)  Handles
PictureBox2.Click
        Application.Exit()
    End Sub

    Private  Sub  imgseller_Click(sender  As  Object,  e  As  EventArgs)  Handles
imgseller.Click
        Dim Obj = New order
        Obj.Show()
        Me.Hide()
    End Sub

    Private  Sub  imglogout_Click(sender  As  Object,  e  As  EventArgs)  Handles
imglogout.Click
        Dim Obj = New login
        Obj.Show()
        Me.Hide()
    End Sub


    Private  Sub  btnreset_Click  (sender  As  Object,  e  As  EventArgs)  Handles
btnreset.Click
        Reset ()
    End Sub

    Private  Sub  btndelete_Click  (sender  As  Object,  e  As  EventArgs)  Handles
btndelete.Click
        If key = 0 Then
        MsgBox ("select Details of Delete")
        Else
        Con.Open ()
        Dim query = "delete from items_tbl where item_id=" & key & ""
        Dim cmd As OleDbCommand



        cmd  = New OleDbCommand(query, Con)
        cmd.ExecuteNonQuery()
```

```vbnet
        MsgBox ("items deleted")
        Con.Close ()
        Reset ()

        Displayitems ()

        End If
    End Sub

    Private Sub btnupdate_Click (sender As Object, e As EventArgs) Handles
btnupdate.Click
        If txtitemname.Text = "" Or Cbitemcategory.SelectedIndex = -1 Or
txtitemprice.Text = "" Or txtitemquantity.Text = "" Then
        MsgBox ("missing Information")
        Else

        Try
        Con.open ()

        Dim query = "update items_tbl set item_name='" & txtitemname.Text &
"',item_category='" & Cbitemcategory.SelectedValue.ToString() & "',item_price="
& txtitemprice.Text & ",item_quantity=" & txtitemquantity.Text & " Where
item_id=" & key & ""
        Dim cmd As OleDbCommand
        cmd = New OleDbCommand(query, Con)
        cmd.ExecuteNonQuery ()
        MsgBox ("Item updated")
        Con.Close ()
        Reset ()
        Displayitems ()

        Catch ex As Exception
        MsgBox (ex.Message)

        End Try
        End If
    End Sub
    Private Sub Displayitems ()
        Con.Open ()
        Dim query = "select*from items_tbl"
        Dim cmd = New OleDbCommand (query, Con)
        Dim adapter = New OleDbDataAdapter (cmd)
        Dim builder = New OleDbCommandBuilder (adapter)
        builder= New OleDbCommandBuilder(adapter)
        Dim ds = New DataSet ()
        adapter.Fill (ds)
        DGVitems.DataSource = ds.Tables(0)
        Con.close()

    End Sub
    Private Sub btnadd_Click(sender As Object, e As EventArgs) Handles btnadd.Click

        If txtitemname.Text = "" Or Cbitemcategory.SelectedIndex = -1 Or
txtitemprice.Text = "" Or txtitemquantity.Text = "" Then
                MsgBox ("missing information!")
        Else
```

```vbnet
Con.open ()
Dim query = "insert into items_tbl (item_name,item_category,
item_price,item_quantity ) Values ('" & txtitemname.Text & "','" &
Cbitemcategory.SelectedValue. ToString () & "', '" & txtitemprice.Text & "',"
& txtitemquantity.Text & " )"
Dim cmd As OleDbCommand
cmd = New OleDbCommand(query, Con)
cmd.ExecuteNonQuery ()
MsgBox ("Item added")
Con.Close ()
Reset ()
Displayitems ()
End If
End Sub


Private Sub btnlogout_Click(sender As Object, e As EventArgs) Handles
btnlogout.Click
Dim Obj = New login
Obj.Show()
Me.Hide()
End Sub

Private Sub btnseller_Click(sender As Object, e As EventArgs) Handles
btnseller.Click
Dim Obj = New order
Obj.Show ()
Me.Hide ()
End Sub
Private Sub Reset()
txtitemname.Text = ""
Cbitemcategory.SelectedItem = 0
txtitemprice.Text = ""
txtitemquantity.Text = ""
End Sub

Private Sub FillCategory ()
Con.Open ()
Dim cmd = New OleDbCommand ("select*from cate_a", Con)
Dim adapter = New OleDbDataAdapter (cmd)
Dim tbl = New DataTable ()
adapter.Fill (tbl)
Cbitemcategory.DataSource = tbl
Cbitemcategory.DisplayMember = "category_name"
Cbitemcategory.ValueMember = "category_name"
Con.Close ()

End Sub




Private Sub btnAddCategory_Click (sender As Object, e As EventArgs) Handles
btnAddCategory.Click
 If txtitemcategory.Text = "" Then
```

```vb
            MsgBox ("Enter category name")
            Else
            Con.Open ()

        Dim query As String = "insert into cate_a(category_name)values('" +
        txtitemcategory.Text + "')"
        Dim cmd As OleDbCommand
        cmd = New OleDbCommand(query, Con)
        cmd.ExecuteNonQuery()
        Con.close ()
        MsgBox("category added")
        txtitemcategory.Clear()
        FillCategory()
        End If
        End Sub

        Private Sub Panel1_Paint(sender As Object, e As PaintEventArgs) Handles
        Panel1.Paint
        FillCategory()
        End Sub



        Dim key = 0
        Private Sub DGVitems_CellContentClick(sender As Object, e As
        DataGridViewCellEventArgs)

        Dim row As DataGridViewRow = DGVitems.Rows(e.RowIndex)
        txtitemname.Text = row.Cells(1).Value.ToString
        Cbitemcategory.SelectedValue = row.Cells(2).Value.ToString
        txtitemprice.Text = row.Cells(3).Value.ToString
        txtitemquantity.Text = row.Cells(4).Value.ToString
        If txtitemname.Text = "" Then
        key = 0
        Else
        key = Convert.ToInt32(row.Cells(0).Value.ToString)
        End If
        End Sub

        Private Sub items_Load(sender As Object, e As EventArgs) Handles MyBase.Load
        FillCategory()
        Displayitems()
        End Sub
        End Class



        // order
        Imports System.Data.OleDb

        Public Class order
        Dim con as new OleDbConnection ("Provider=Microsoft.ACE.OLEDB.12.0;Data
        Source=C:\Users\AMRUTA\OneDrive\Desktop\my_project\cafe system.accdb")

        Private Sub Displayitems()
        Con.Open()
        Dim query = "select*from items_tbl"
        Dim cmd = New OleDbCommand(query, Con)
```

```vbnet
        Dim adapter = New OleDbDataAdapter(cmd)
        Dim builder = New OleDbCommandBuilder(adapter)
        builder = New OleDbCommandBuilder(adapter)
        Dim ds = New DataSet()
        adapter.Fill(ds)
        DGVitems.DataSource = ds.Tables(0)
        Con.Close()
    End Sub

    Private Sub FilterBycategory()
        Con.Open()
        Dim query =     "select*from    items_tbl    where    item_category='"    &
        Cbitemcategory.SelectedValue.ToString() & "'"
        Dim cmd = New OleDbCommand(query, Con)
        Dim adapter = New OleDbDataAdapter(cmd)
        Dim builder = New OleDbCommandBuilder(adapter)
        builder = New OleDbCommandBuilder(adapter)
        Dim ds = New DataSet()
        adapter.Fill(ds)
        DGVitems.DataSource = ds.Tables(0)
        Con.close()
    End Sub

    Private Sub Fillcategory()
        Con.Open()
        Dim cmd = New OleDbCommand("select*from cate_a", Con)
        Dim adapter = New OleDbDataAdapter(cmd)
        Dim tbl = New DataTable()
        adapter.Fill(tbl)
        Cbitemcategory.DataSource = tbl
        Cbitemcategory.DisplayMember = "category_name"
        Cbitemcategory.ValueMember = "category_name"
        Con.Close()
    End Sub

    Private Sub btnRefresh_Click(sender As Object, e As EventArgs) Handles
    btnRefresh.Click
        Displayitems()
    End Sub

    Private Sub btnseller_Click(sender As Object, e As EventArgs) Handles
    btnseller.Click
        Dim Obj = New login
        Obj.Show()
        Me.Hide()
    End Sub

    Private Sub PictureBox3_Click(sender As Object, e As EventArgs) Handles
    PictureBox3.Click
        Dim Obj = New login
        Obj.Show()
        Me.Hide()
    End Sub

    Private Sub btnlogout_Click(sender As Object, e As EventArgs) Handles
    btnlogout.Click
```

```vbnet
        Dim Obj = New login
        Obj.Show()
        Me.Hide()
        End Sub

        Private Sub imglogout_Click(sender As Object, e As EventArgs) Handles
        imglogout.Click
        Dim Obj = New login
        Obj.Show()
        Me.Hide()
        End Sub

        Private Sub Label9_Click(sender As Object, e As EventArgs) Handles Label9.Click
        Dim Obj = New Views_orders
        Obj.Show()
        Me.Hide()
        End Sub

        Private Sub PictureBox2_Click(sender As Object, e As EventArgs) Handles
        PictureBox2.Click


        Application.Exit()
        End Sub


        Private Sub order_Load(sender As Object, e As EventArgs) Handles MyBase.Load
        Displayitems()
        Fillcategory()
        End Sub

        Private Sub updateitems()
        Try
        Dim Newquantity = Stock - Convert.ToInt32(txtquantity.Text)
        Con.Open()
        Dim query = "update items_tbl set item_quantity=" & Newquantity & "where
        item_id=" & key & ""
        Dim cmd As OleDbCommand
        cmd = New OleDbCommand(query, Con)
        cmd.ExecuteNonQuery()
        MsgBox("item updated")
        Con.Close()
        Displayitems()
        Catch ex As Exception
        MsgBox(ex.Message)
        End Try
        End Sub
        Private Sub Button2_Click(sender As Object, e As EventArgs) Handles
        Button2.Click
        If txtquantity.Text = "" Then
        MsgBox("select an item")
        ElseIf txtquantity.Text > Stock Then
        MsgBox("No Enough Stock")
        Else
        Dim rnum As Integer = DGVBills.Rows.Add()
        Dim total = Convert.ToInt32(txtquantity.Text) * price
```

```vbnet
        i = i + 1
        DGVBills.Rows.Item(rnum).Cells("Column1").Value = i
        DGVBills.Rows.Item(rnum).Cells("Column2").Value = prodname
        DGVBills.Rows.Item(rnum).Cells("Column3").Value = price
        DGVBills.Rows.Item(rnum).Cells("Column4").Value = txtquantity.Text
        DGVBills.Rows.Item(rnum).Cells("Column5").Value = total
        GrdTotal = GrdTotal + total
        LblTotal.Text = "Rs" + Convert.ToString(GrdTotal)
        updateitems()
        txtquantity.Text = ""
        key = 0
    End If
    End Sub

    Private Sub AddBill()
    Con.Open()
    Dim query = "insert into order_tbl(order_date,order_amount) values('" &
    DateTime.Today.Date & "'," & GrdTotal & ")"
    Dim cmd As OleDbCommand
    cmd = New OleDbCommand(query, Con)
    cmd.ExecuteNonQuery()
    MsgBox("Bill Added")
    Con.Close()
    End Sub

    Private Sub Label11_Click(sender As Object, e As EventArgs) Handles
    Label11.Click
    AddBill()
    PrintPreviewDialog1.Show()
    End Sub


    Private Sub PrintDocument1_PrintPage(sender As Object, e As
    Printing.PrintPageEventArgs) Handles PrintDocument1.PrintPage
    e.Graphics.DrawString("Cafe Shop", New Font("Arial", 22), Brushes.BlueViolet,
    335, 35)
    e.Graphics.DrawString("***YourBill***", New Font("Arial", 14),
    Brushes.BlueViolet, 350, 60)
    Dim bm As New Bitmap(Me.DGVBills.Width, Me.DGVBills.Height)
    DGVBills.DrawToBitmap(bm, New Rectangle(0, 0, Me.DGVBills.Width,
    Me.DGVBills.Height))
    e.Graphics.DrawImage(bm, 0, 90)
    e.Graphics.DrawString("Total Amount" + GrdTotal.ToString(), New Font("Arial",
    15), Brushes.Crimson, 325, 580)
            e.Graphics.DrawString("************** Thanks for buying in our cafe
    **************", New Font("Arial", 15), Brushes.Crimson, 130, 600)

    End Sub

    Dim prodname As String
    Dim i = 0, price, quantity
    Dim GrdTotal = 0
    Dim key = 0, Stock
    Private Sub DGVitems_CellContentClick_1(sender As Object, e As
```

```vb
DataGridViewCellEventArgs)
Dim row As DataGridViewRow = DGVitems.Rows(e.RowIndex)
prodname = row.Cells(1).Value.ToString
If prodname = "" Then
key = 0
Stock = 0
Else
key = Convert.ToInt32(row.Cells(0).Value.ToString)
Stock = Convert.ToInt32(row.Cells(4).Value.ToString)
price = Convert.ToInt32(row.Cells(3).Value.ToString)
End If
End Sub
Private Sub Cbitemcategory_SelectionChangeCommitted (sender As Object,e As
EventArgs) Handles Cbitemcategory.SelectionChangeCommitted
FilterBycategory()
End Sub
End Class


Imports System.Data.OleDb
Public Class Views_orders
Dim Con =New OleDbConnection ("Provider=Microsoft.ACE.OLEDB.12.0;Data Source =
C:\Users\AMRUTA \OneDrive\Desktop \my_project \cafe system. accdb")

Private Sub PictureBox2_Click(sender As Object, e As EventArgs) Handles
PictureBox2.Click
Application.Exit()
End Sub


Private Sub Label10_Click(sender As Object, e As EventArgs) Handles
Label10.Click
Dim Obj = New order
Obj.Show()
Me.Hide()
End Sub

Private Sub btnseller_Click(sender As Object, e As EventArgs) Handles
btnseller.Click
Dim Obj = New login
Obj.Show()
Me.Hide ()
End Sub

Private Sub PictureBox3_Click(sender As Object, e As EventArgs) Handles
PictureBox3.Click
Dim Obj = New login
Obj.Show()
Me.Hide()
End Sub

Private Sub imglogout_Click(sender As Object, e As EventArgs) Handles
imglogout.Click
Dim Obj = New login
Obj.Show()
Me.Hide()
End Sub
```

```vbnet
Private Sub btnlogout_Click(sender As Object, e As EventArgs) Handles
btnlogout.Click
Dim Obj = New login
Obj.Show()
Me.Hide()
End Sub

Private Sub DataGridView1_CellContentClick(sender As Object, e As
DataGridViewCellEventArgs) Handles DGVOrders.CellContentClick
End Sub
Private Sub DisplayBills()
Con.Open()
Dim query = "select *from order_tbl"
Dim cmd = New OleDbCommand(query, Con)
Dim adapter = New OleDbDataAdapter(cmd)
Dim builder = New OleDbCommandBuilder(adapter)
builder = New OleDbCommandBuilder(adapter)
Dim ds = New DataSet()
adapter.Fill(ds)
DGVOrders.DataSource = ds.Tables(0)
Con.Close()
End Sub

Private Sub Views_orders_Load(sender As Object, e As EventArgs) Handles
MyBase.Load
DisplayBills()
End Sub
End Class
```

3.Output of Microproject

2.1 Output
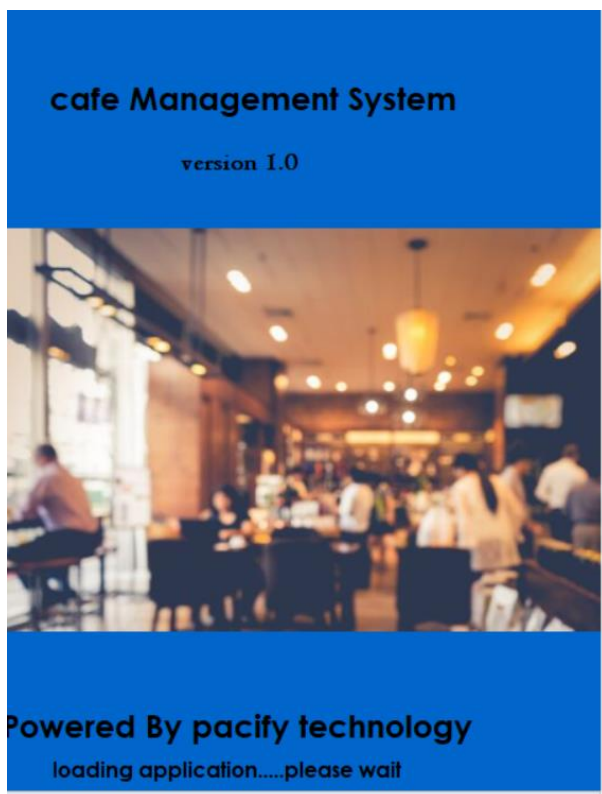
Loading page :-

Login page :-

cafe Management System

version 1.0

Powered By pacify technology

loading application.....please wait

cafe management system   ✕

Please Enter username and password

OK
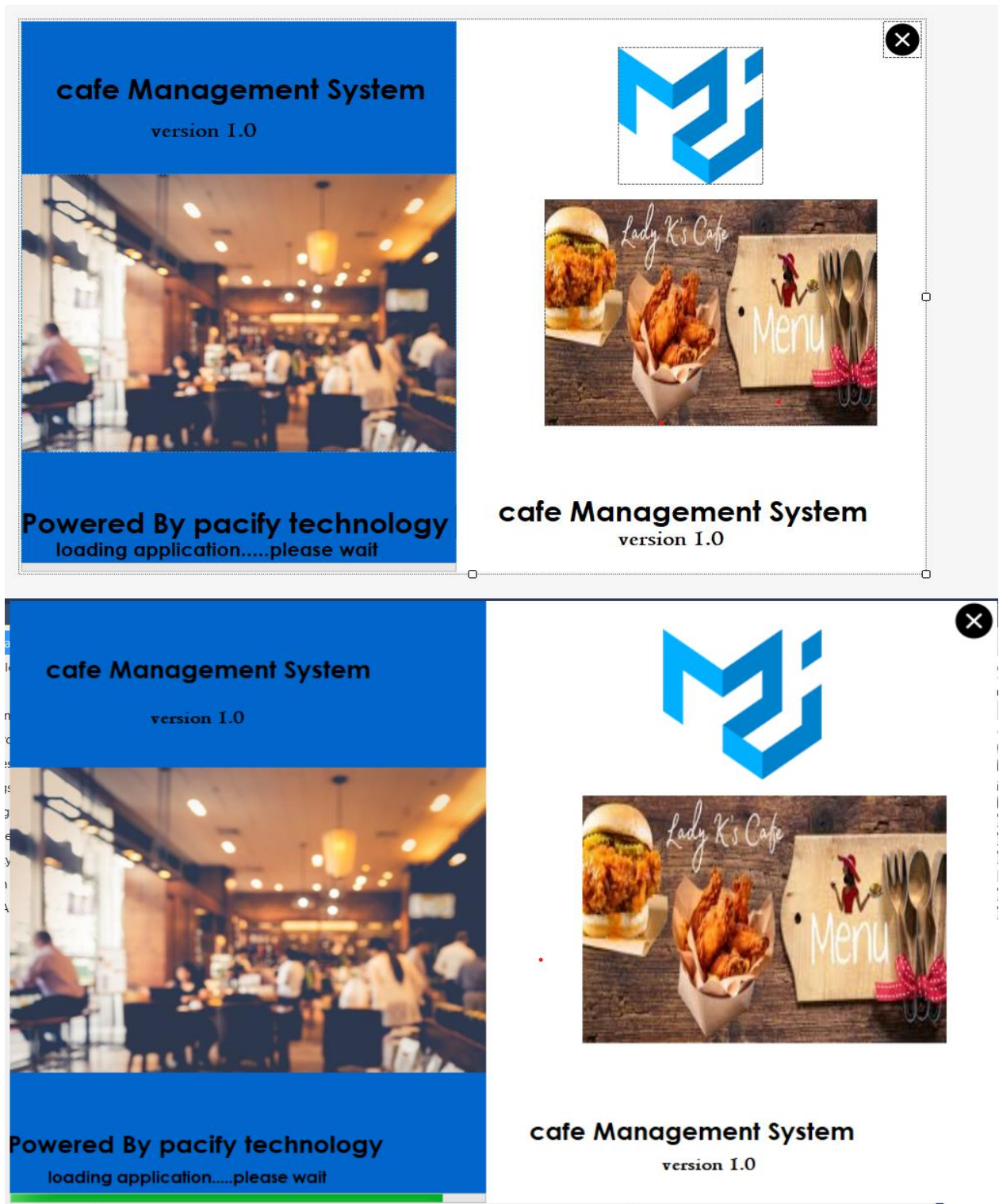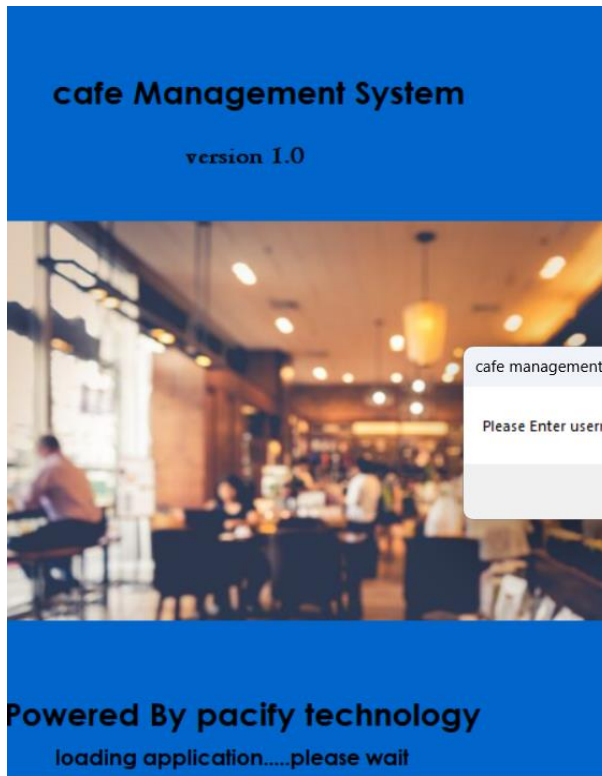
Enter Username here

ter password here

Login

Click here to open

seller

cafe Management System

version 1.0

Powered By pacify technology

loading application.....please wait

Enter Username here

Admin

Enter password here

Password

Login

Click here to open

seller

Admin
Add Items :-

Cafe Management System

manage items

Name [   ] **Add Categories**

Itemname	category	Price	Quantity
[ ]	Burger ▾	[ ]	[ ]

Add **update** **Delete** **Reset**

cafe management system ✕

missing information!

OK

item_id	item_name	gory	item_price	item_quantity
1	FullChaume		35	5
2	cold	Coffe	30	8
3	chinese maggie	Maggie	40	10
▶ 4	Garlic panipuri	panipuri	30	4
5	Black Tea	Tea	20	6
6	Green Tea	Tea	25	2
7	Full Momos	Momos	35	5
*				

Seller

Logout

Cafe Management System

manage items

Name [   ] **Add Categories**

Itemname	category	Price	Quantity
white	Tea ▾	25	3

Add **update** **Delete** **Reset**

cafe management system ✕

Item added

OK

item_id	item_name	gory	item_price	item_quantity
1	FullChaume		35	5
2	cold	Coffe	30	8
3	chinese maggie	Maggie	40	10
▶ 4	Garlic panipuri	panipuri	30	4
5	Black Tea	Tea	20	6
6	Green Tea	Tea	25	2
7	Full Momos	Momos	35	5
*				

Seller

Logout

Seller Buy An items:-

View_Orders :-

Add Bill :-

Print Bill:-

Close

Cafe Shop
YourBill

Id	product	price	Quantity	Total
*				

Total Amount0
************** Thanks for buying in our cafe **************
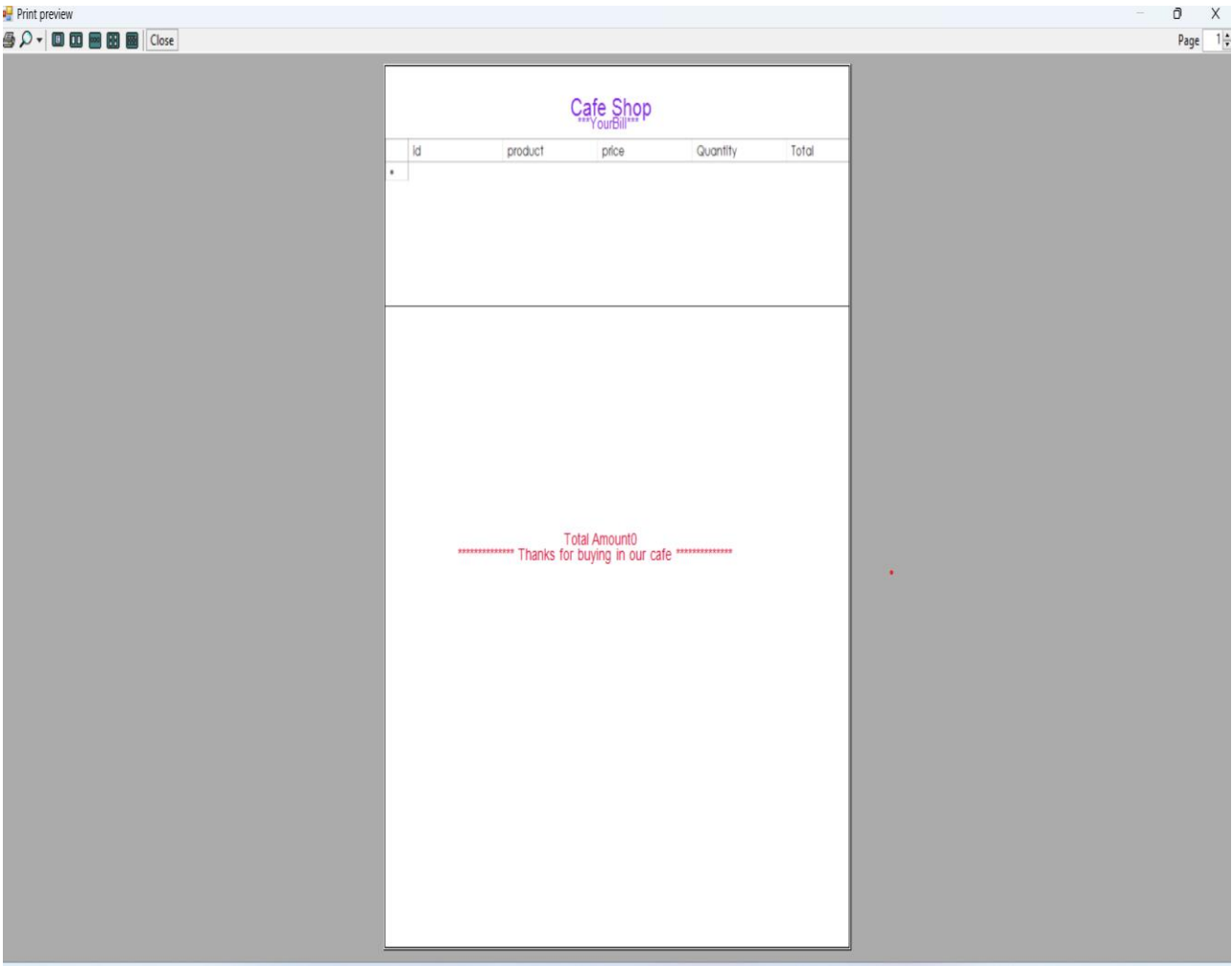
Database Tables:-

Category Table:-

category_id	category_nai	Click to Add
1	Burger	
2	Pizza	
3	Coffe	
4	Tea	
5	Maggie	
6	panipuri	
7	Shevpuri	
8	Chaumeen	
9	Momos	
* (New)		

Order Table:-

cate_a | items_tbl | **order_tbl**

order_id	order_date	order_amou	Click to Add
1	08-04-2024	70	
2	09-04-2024	90	
3	09-04-2024	120	
4	10-04-2024	30	
5	11-04-2024	80	
6	13-04-2024	50	
7	14-04-2024	35	
8	14-04-2024	0	
9	14-04-2024	0	
10	14-04-2024	0	
* (New)			

Items Table:-

item_id	item_name	item_catego	item_price	item_quantit	Click to Add
1	FullChaumeen	Chaumeen	35	5	
2	cold	Coffe	30	8	
3	chinese maggie	Maggie	40	10	
4	Garlic panipuri	panipuri	30	4	
5	Black Tea	Tea	20	6	
6	Green Tea	Tea	25	2	
7	Full Momos	Momos	35	5	
8	white	Tea	25	3	
*	(New)				

Application Exit :-

When you click Exit so all window is closed.

4.Conclusion

Windows Forms provides a unified programming model for standard Windows application development. It does not matter what language you are using—you can always be productive because the common substrate has been developed to benefit all.

Windows Forms brings a true object-oriented programming model to Windows GUI development, allowing for an extensible framework that is so much cleaner and easier to use compared to previous attempts.

In this chapter, we've shown you the architecture of the Windows Forms application. The Controls and Containers architecture, while very simple, is very powerful and flexible for developing Windows-based applications. We have also shown you how to build a Windows Forms application, from a simple do-nothing application, to data binding, to a multiple-document interface application.