

DIGITAL ASSIGNMENT - 3

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COURSE CODE	:	CSC3004
COURSE	:	VISUAL PROGRAMMING
DATE	:	11.04.2021

Create an innovative VP project. Add at least three forms to your project and add at least 3 controls to each form.

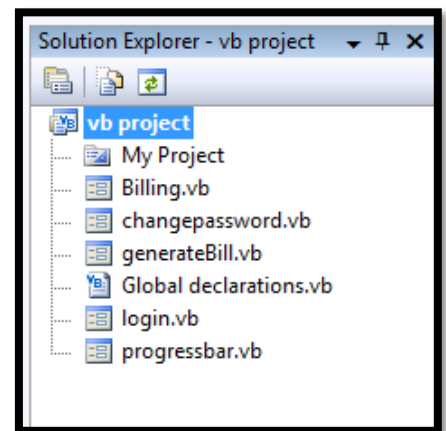
Note: Create your own project using your own idea using various features of vb2010. Do not copy from any source. You need to use the idea for your application on your own.

Project Title: Electricity Billing

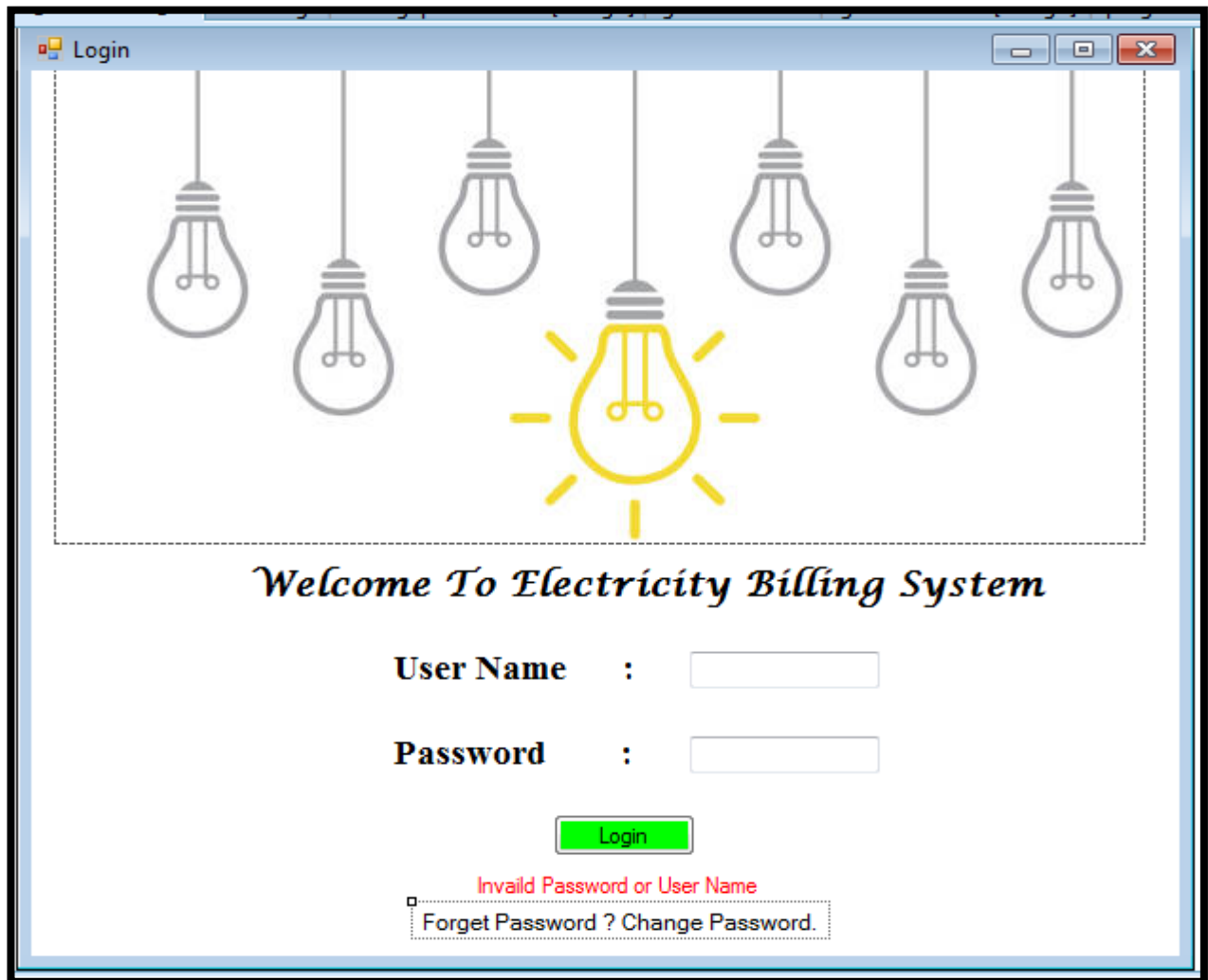
Input Design

Note: Forms added in this Project

1. Login
2. Billing
3. Progress Bill
4. Generate Bill
5. Change Password
6. Global Declarations(module.vb)



1. Login Form(Form1)



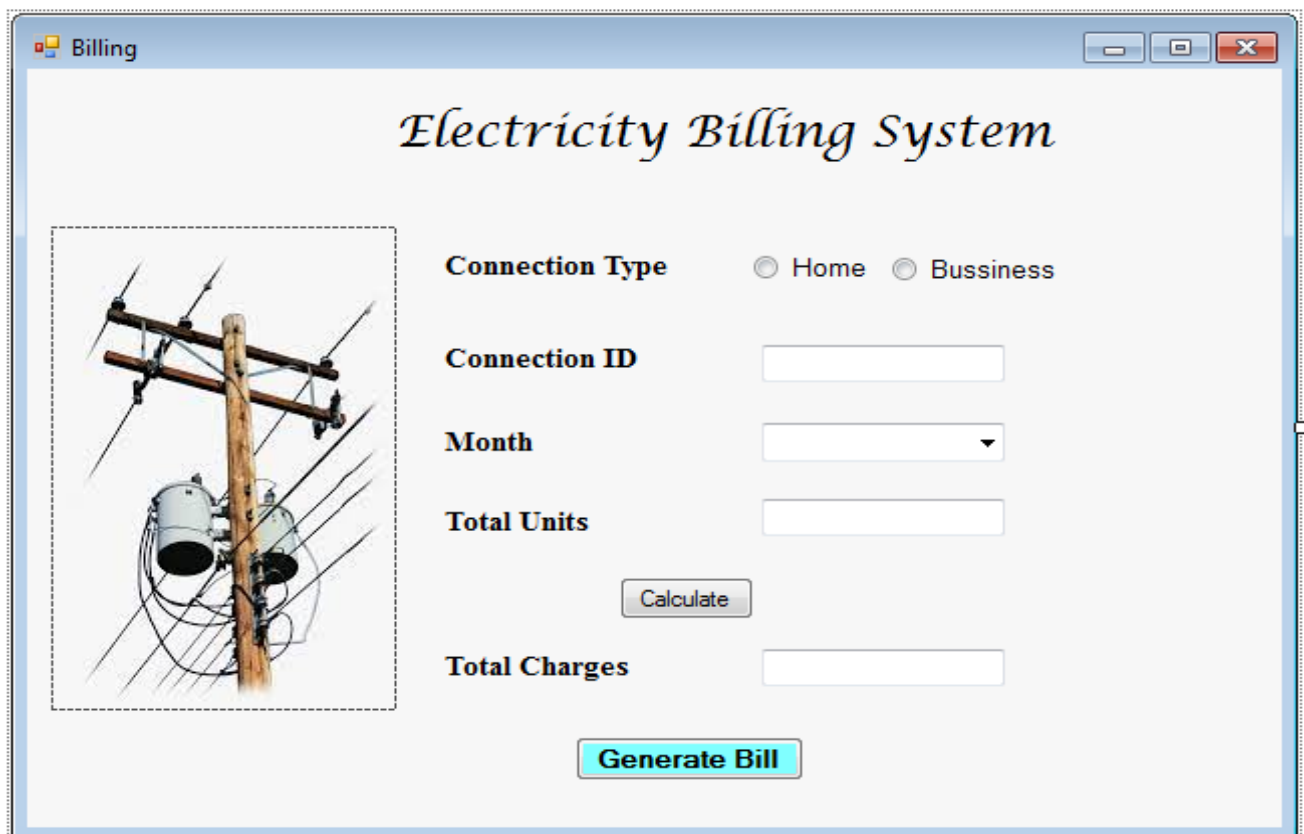
A screenshot of a web browser window titled "Login". The page features a decorative header with seven light bulbs hanging from above; the central bulb is illuminated in yellow, while the others are grey outlines. Below the header, the text "Welcome To Electricity Billing System" is displayed in a stylized, italicized font. The login form consists of two input fields: "User Name" and "Password", each preceded by a colon. A green "Login" button is positioned below the password field. A red error message, "Invalid Password or User Name", is visible above a checkbox labeled "Forget Password ? Change Password."

Login

Invalid Password or User Name

☐ Forget Password ? Change Password.

2. BILLING (Form2)



A screenshot of a web browser window titled "Billing". The page features a decorative header with a photograph of a wooden utility pole with cross-arms and electrical equipment. The title "Electricity Billing System" is displayed in a stylized, italicized font. The billing form includes a "Connection Type" section with radio buttons for "Home" and "Bussiness". Below this are input fields for "Connection ID", "Month" (with a dropdown arrow), "Total Units", and "Total Charges". A grey "Calculate" button is located between the "Total Units" and "Total Charges" fields. A blue "Generate Bill" button is positioned at the bottom of the form.

Billing

Electricity Billing System

Connection Type ☐ Home ☐ Bussiness

Connection ID

Month

Total Units

Calculate

Total Charges

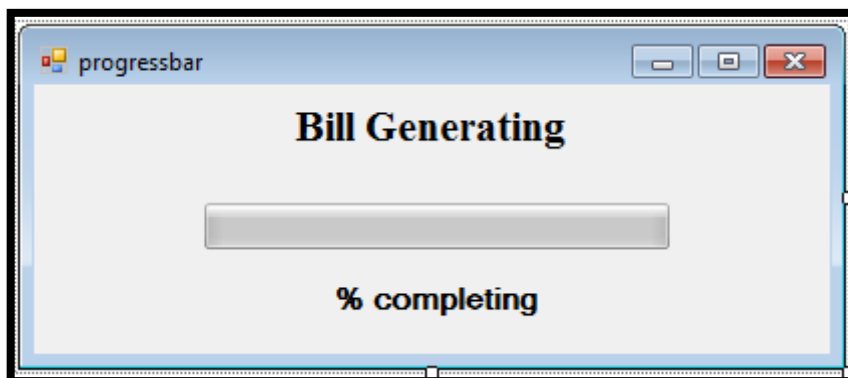
Generate Bill

Functionalities & Controls used in 2nd Form

Functionalities: Calculating the Total Charges based on Connection Type and Generate Bill

Controls : Picture Box, Radio Button, Combo Box, Text box, Buttons, Labels.

3. Progress Bill



4. Generate Bill



Controls: Picture Box, Rich Box, Button, Label.

5. Change Password

Controls: Picture Box, Labels, Buttons, Textboxes

Event Procedures: Global Variables for this Project (Moduel1)

Module Module1

```
Public username As String = "NITHISH G"  
Public password As String = "vb#1"  
Public home As Integer = 4  
Public business As Integer = 6  
Public unit_charge As Integer = 0  
Public total_amount As Integer = 0  
Public total_units As Integer = 0  
Public total_charges As Integer = 0  
Public connection_type As String = ""  
Public connection_ID As String = ""  
Public month As String = " "
```

End Module

Event Procedures: Login (Form1)

```
Public Class login

    Private Sub Form1_Load(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles MyBase.Load

        Label4.Visible = False

    End Sub

    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles Button1.Click

        If TextBox1.Text = username And TextBox2.Text = password Then
            Billing.Show()
            Me.Visible = False

        Else
            Label4.Visible = True
        End If

    End Sub

    Private Sub Label3_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles Label3.Click

        changepassword.Show()
        Me.Visible = False

    End Sub
End Class
```

Event Procedures: Billing (Form2)

```
Public Class Billing

    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click

        connection_ID = TextBox1.Text

        month = ComboBox1.SelectedItem
        If RadioButton1.Checked Then
            unit_charge = home
            connection_type = "Home"
        Else
            unit_charge = business
            connection_type = "Business"
        End If

        total_amount = TextBox2.Text * unit_charge
        TextBox3.Text = total_amount
        total_units = TextBox2.Text

    End Sub

    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button2.Click
```

```

        progressbar.Show()

        Me.Visible = False

    End Sub
End Class

```

Event Procedures: Progress Bill (Form3)

```

Public Class progressbar

    Private Sub progressbar_Load(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
        Dim i As Integer = 0
        Timer1.Start()
        Me.Visible = False
        GenerateBill.Show()

    End Sub

    Private Sub Timer1_Tick(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Timer1.Tick

        ProgressBar1.Minimum = 0
        ProgressBar1.Maximum = 100
        For i = 0 To 100
            ProgressBar1.Increment(1)
            Label2.Text = ProgressBar1.Value & " % Completing"
        Next
    End Sub
End Class

```

Event Procedures: Generate Bill(Form4)

```

Public Class GenerateBill

    Private Sub Form1_Load(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles MyBase.Load

        Me.AutoScroll = True
        RichTextBox1.AppendText(vbCrLf & vbCrLf)
        RichTextBox1.AppendText(vbTab & "   Electricity Bill " & vbCrLf & vbCrLf &
vbCrLf)
        RichTextBox1.AppendText("           Connection ID       : " & connection_ID &
vbCrLf & vbCrLf)
        RichTextBox1.AppendText("           Connection type  : " & connection_type &
vbCrLf & vbCrLf)
        RichTextBox1.AppendText("           Month                : " & month & vbCrLf
& vbCrLf)
        RichTextBox1.AppendText("           Units                  : " & total_units &
vbCrLf & vbCrLf)
        RichTextBox1.AppendText("           Total Charges         : " & total_amount &
vbCrLf)

    End Sub

    Private Sub Button1_Click_1(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
        Billing.Show()
        Me.Visible = False
    End Sub

```

```
Private Sub Button2_Click_1(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button2.Click

    login.Show()
    Me.Visible = False
End Sub
End Class
```

Event Procedures: Change Password (Form5)

```
Public Class changepassword

    Private Sub Form2_Load(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles MyBase.Load
        Label4.Visible = False

    End Sub

    Private Sub Button1_Click_1(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
        If TextBox1.Text = password And TextBox2.Text = TextBox3.Text Then

            password = TextBox3.Text

            If Label4.Visible = True Then
                Label4.Visible = False
            End If

            MsgBox("Password Changed successfully", MsgBoxStyle.Information, "password
change")

            If MsgBoxResult.Ok Then
                login.Show()
                Me.Visible = False
            End If

        Else
            Label4.Visible = True

        End If


    End Sub

End Class
```

Output Form

Login Form

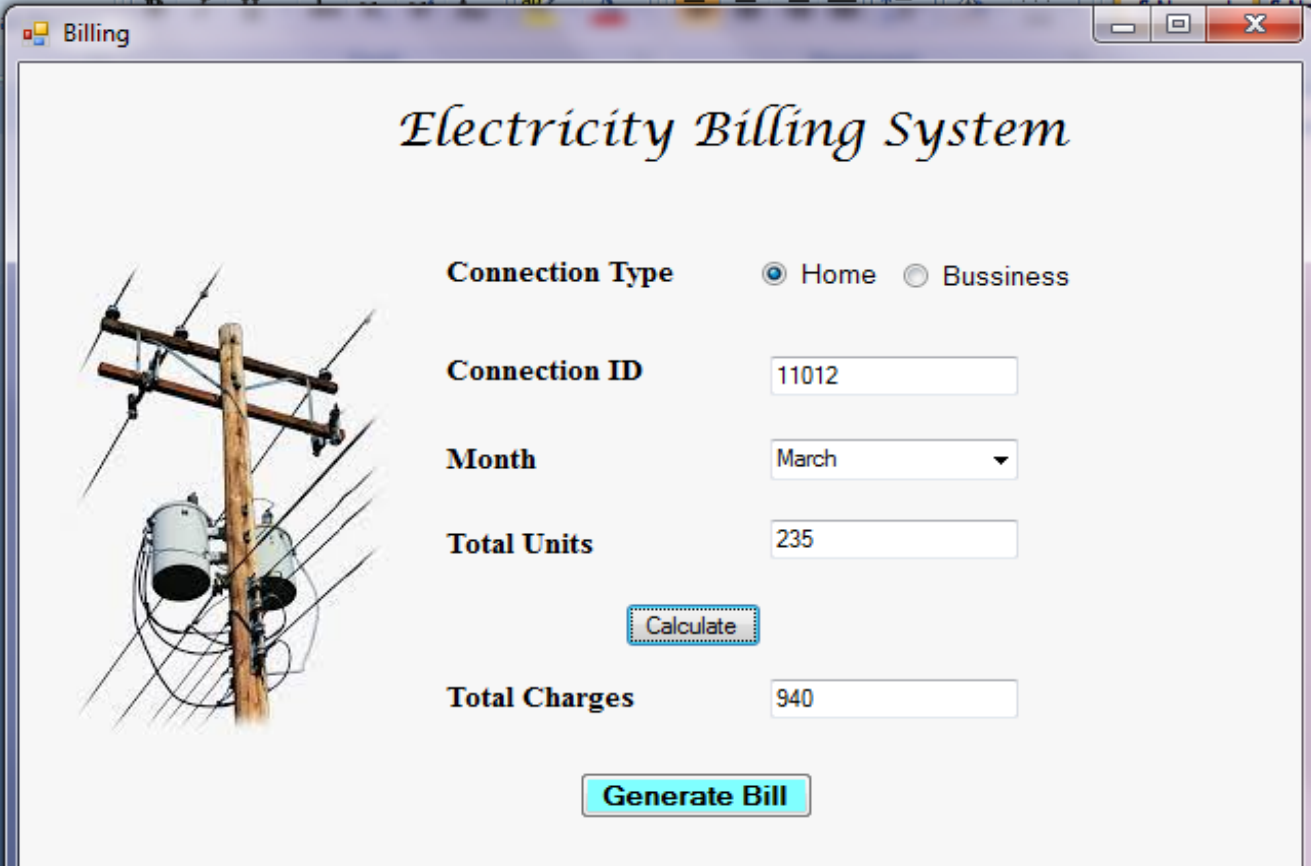
Login Form : → User Name : NITHISH G → Password : vb#1



The login window features a graphic of seven lightbulbs hanging from wires, with the central one glowing yellow. Below the graphic, the text "Welcome To Electricity Billing System" is displayed in a stylized font. The login fields are as follows:

Field	Value
User Name	NITHISH G
Password	vb#1

A green "Login" button is located below the password field. At the bottom, there is a link: "Forget Password ? Change Password."

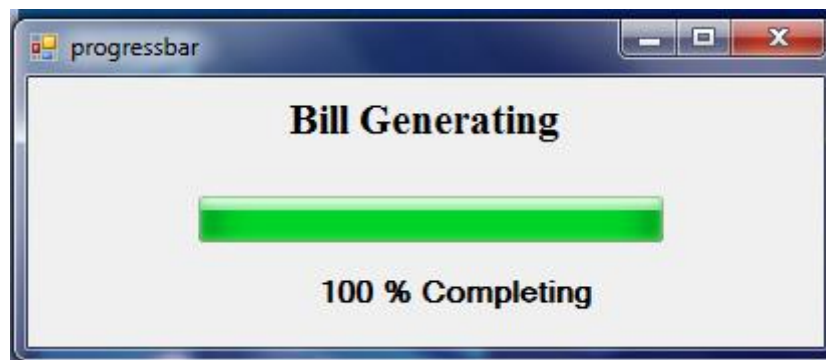


The billing window features a graphic of a utility pole with wires and transformers on the left. The title "Electricity Billing System" is centered at the top. The form fields are as follows:

Field	Value
Connection Type	<input checked="" type="radio"/> Home <input type="radio"/> Bussiness
Connection ID	11012
Month	March
Total Units	235
Total Charges	940

A "Calculate" button is located below the "Total Units" field. A "Generate Bill" button is located at the bottom of the form.

Bill Generating Progress

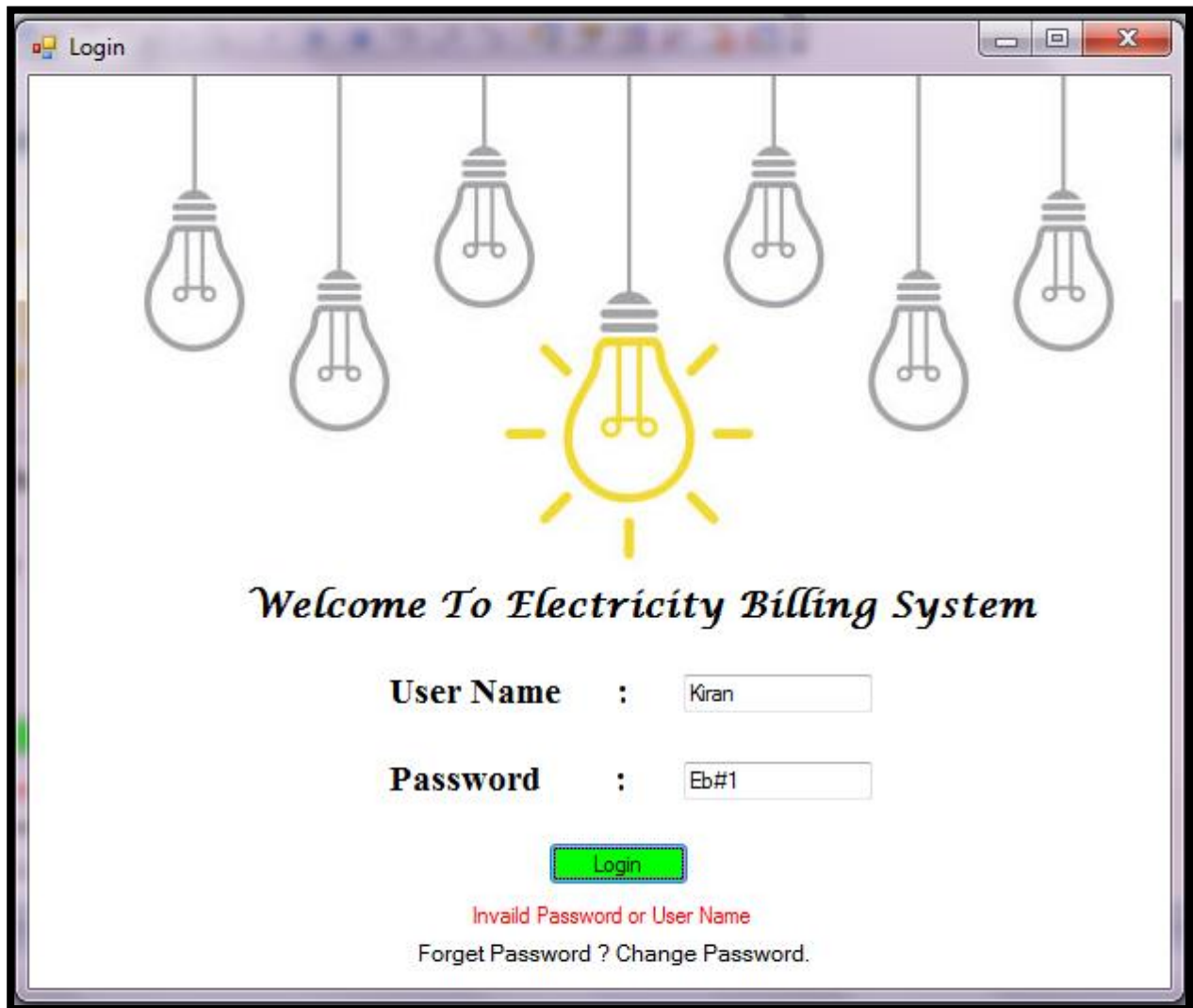


Bill generate Form



Case: 1 If User Enter Wrong Password or User Name → **Show Invalid Password**

Example: if am giving Username as Kiran Password as Eb#1 it will show invalid



Login

Welcome To Electricity Billing System

User Name :

Password :

Login

Invalid Password or User Name

Forget Password ? Change Password.

Case: 2

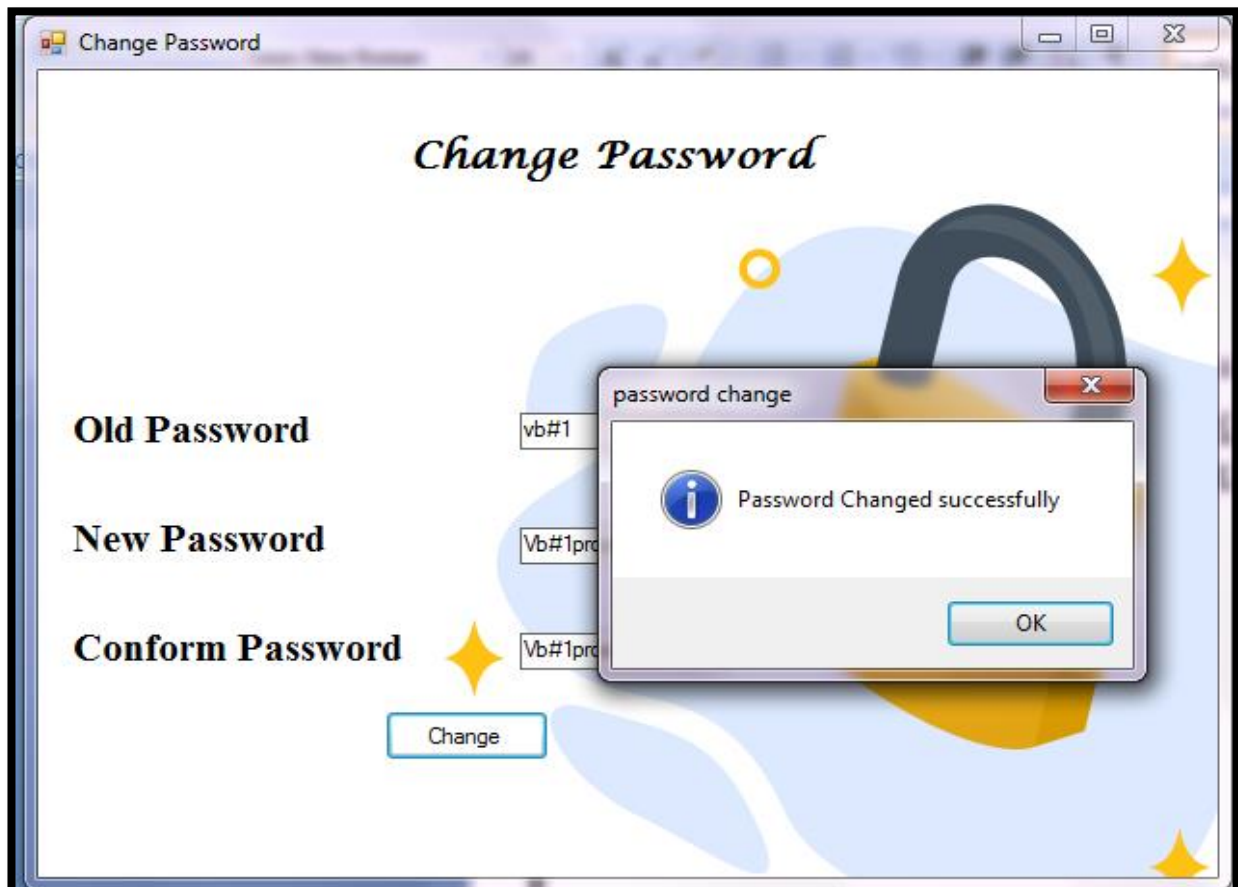
- If User needs to change the password → click on below text as Forget Password? Change password.
- So it will navigate to Change Password Form

Change Password Form



A screenshot of a Windows-style application window titled "Change Password". The window has a light blue background with a large yellow padlock illustration on the right. The title "Change Password" is centered at the top in a stylized font. Below the title, there are three labels: "Old Password", "New Password", and "Conform Password". Each label is followed by a text input field. The "Old Password" field contains the text "vb#1". The "New Password" field contains the text "Vb#1project". The "Conform Password" field also contains the text "Vb#1project". Below these fields is a "Change" button. The window has standard Windows window controls (minimize, maximize, close) in the top right corner.

This will validate the old Password if it Correct it will show you the Message through message box control



A screenshot of the same "Change Password" application window, but with a message box overlaid. The message box is titled "password change" and contains an information icon (a blue circle with a white 'i') and the text "Password Changed successfully". There is an "OK" button at the bottom of the message box. The background application window is partially obscured by the message box, but the labels and input fields are still visible.

Now the Password is changed as **Vb#1project**

So now we again change password by giving wrong password and check for message

If old password is not entered correctly then it will show the

Let's give old password as project



The screenshot shows a window titled "Change Password". Inside, the title "Change Password" is written in a stylized font. There are three input fields: "Old Password" containing "project", "New Password" containing "vb#1", and "Conform Password" containing "vb#1". A blue key icon is positioned over the "New Password" field. A "Change" button is located below the input fields. At the bottom, a red error message reads "Invalid old Password , try again." The background features a large yellow padlock and a blue hand holding a key.

It identified as wrong so it show invalid old password and try again.

If once you entered the correct old password and you can change password then press change button it will show you a message password changed successfully then it will automatically to **login form**.

Billing Form

Then if you enter the Correct User name and password click On Login Button then it will navigate to Billing form.


User should select Connection Type, Enter Connection ID, choice the month from combo box, enter the total units of current used.

Unit Cost for Home 4rs , for Business 6rs

Billing Form

Billing

Electricity Billing System



Connection Type ☐ Home ☒ Bussiness

Connection ID

Month
January
February
March
April
May
June
Jully
Agust
September
October
November
December

Total Units

Total Charges

Once you gave all details click Calculate button to know charges

Billing

Electricity Billing System



Connection Type ☐ Home ☒ Bussiness

Connection ID

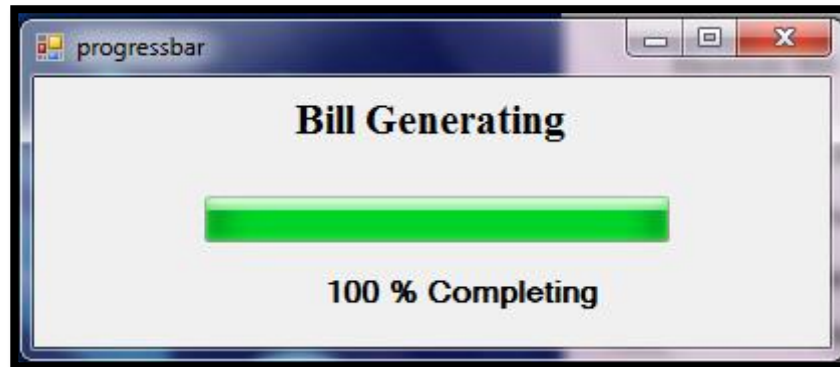
Month

Total Units

Total Charges

Progress Bill

After the calculate Total charges click on Generate Bill so it will navigate to Progress Bill



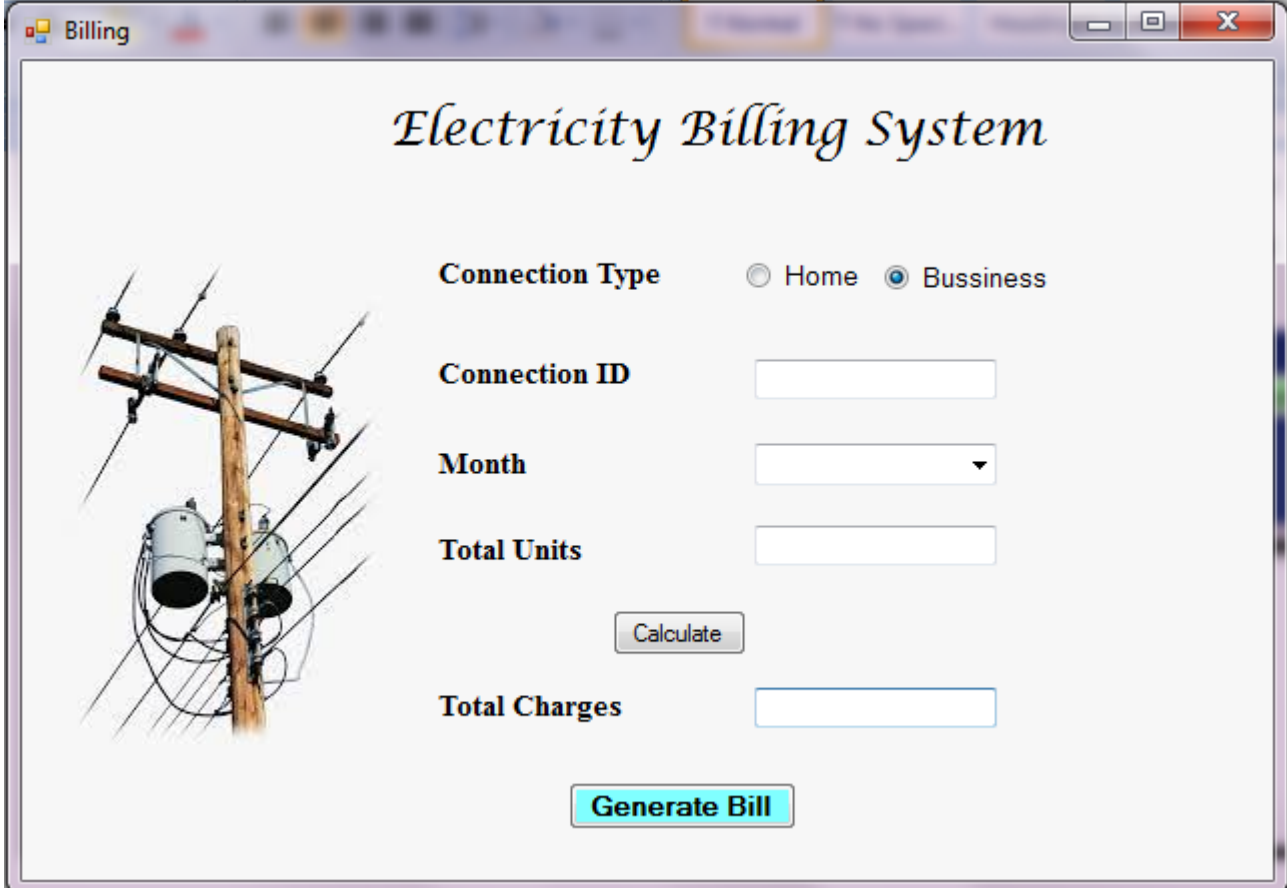
After the reaching 100% of progress bar it will navigate to Generate Bill

Generate Bill

The Bill will be shown on Rich Box Control shown below



If user wants to get back to the Billing → Press Back Button



The screenshot shows a window titled "Billing" with a standard Windows-style title bar (minimize, maximize, close buttons). The main content area has a light gray background. At the top center, the text "Electricity Billing System" is displayed in a large, italicized, black serif font. On the left side, there is a detailed illustration of a wooden utility pole with cross-arms, insulators, and several power lines. To the right of the pole, the form contains the following elements: a "Connection Type" label followed by two radio buttons, "Home" and "Bussiness" (with a typo), where "Bussiness" is selected; a "Connection ID" label followed by a text input field; a "Month" label followed by a dropdown menu; a "Total Units" label followed by a text input field; a "Calculate" button; a "Total Charges" label followed by a text input field; and a "Generate Bill" button at the bottom center.

Electricity Billing System

Connection Type ☐ Home ☒ Bussiness

Connection ID

Month

Total Units

Total Charges

Or else if User wants to end Press → logout Button to End Application