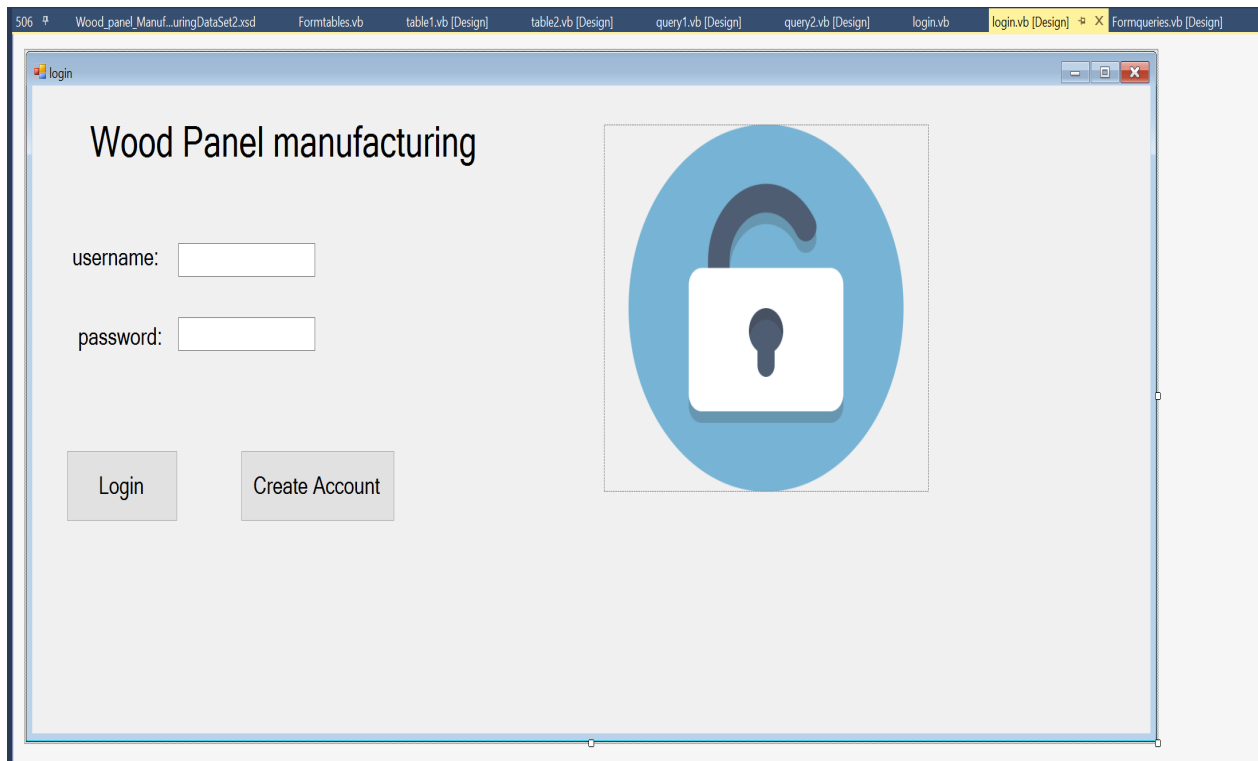


## PROJECT – Wood Panel Manufacturing

If we select the list of tables form from the Main menu, following login form is opened. The login form has the validation, if the user is prompted with username and password, the application uses the ASCII encryption algorithm for the login. If there is a match between the username and password, the user is allowed access to the tables and queries form, and denied if there is no match between the username and password.

Even there is option to create the account if there is no login and password.

### Login form:



The screenshot shows a Visual Studio IDE with a solution explorer at the top displaying files: 506, Wood\_panel\_Manuf..., uringDataSet2.xsd, Formtables.vb, table1.vb [Design], table2.vb [Design], query1.vb [Design], query2.vb [Design], login.vb, login.vb [Design] (selected), and Formqueries.vb [Design]. The main window is titled 'login' and contains the following elements:

- Title:** Wood Panel manufacturing
- Username Field:** A text box labeled 'username:'.
- Password Field:** A text box labeled 'password:'.
- Login Button:** A button labeled 'Login'.
- Create Account Button:** A button labeled 'Create Account'.
- Graphic:** A large blue circular icon with a white padlock in the center, indicating a login or security feature.

```
506 logininfo.vb logininfo.vb [Design] Wood_panel_Manuf...uringDataSet2.xsd Formtables.vb table1.vb [Design] table2.vb [De
VB 506 login
1 Public Class login
2
3
4 Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
5     If TextBox1.Text = My.Settings.username And TextBox2.Text = My.Settings.password Then
6         Me.Hide()
7         Formtables.Show()
8     Else MsgBox("Username And Password Do Not match")
9     End If
10 End Sub
11
12 Private Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
13     Me.Hide()
14     logininfo.Show()
15 End Sub
16 End Class
```

Create Account form:

506 logininfo.vb logininfo.vb [Design] Wood\_panel\_Manuf...uringDataSet2.xsd Formtables.vb

The screenshot shows a Windows Forms application window titled 'logininfo'. The window contains a form with the following elements:

- A label 'New Username:' followed by a text box.
- A label 'Password:' followed by a text box.
- Two buttons at the bottom: 'Save' and 'Back'.

Using an ASCII encryption, the password is saved in different format.

```
506  logininfo.vb  logininfo.vb [Design]  Wood_panel_Manuf...uringDataSet2.xsd  Formtables.vb  table1.vb [Design]
VB 506
1  1 reference
   Public Class logininfo
2  0 references
   Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
3      My.Settings.username = TextBox1.Text
4      My.Settings.password = TextBox2.Text
5      Dim Encriptionfactor As Integer = 3
6      For Each letter As String In TextBox2.Text
7          TextBox2.Text += Chr(Asc(letter) + Encriptionfactor)
8      Next
9      My.Settings.Save()
10     login.Show()
11     Me.Hide()
12     MsgBox("Account created")
13     'MsgBox(TextBox2.Text)
14
15
16
17 End Sub
18
19 0 references
20 Private Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
21     Formtables.Show()
22     Me.Hide()
23 End Sub
End Class
```

Execution view:

login


## Wood Panel manufacturing

username:

password:

Login Create Account

506  
Username And Password Do Not match  
OK



**Create Account form:**

logininfo

New Username:

Password:

Save Back


login

# Wood Panel manufacturing

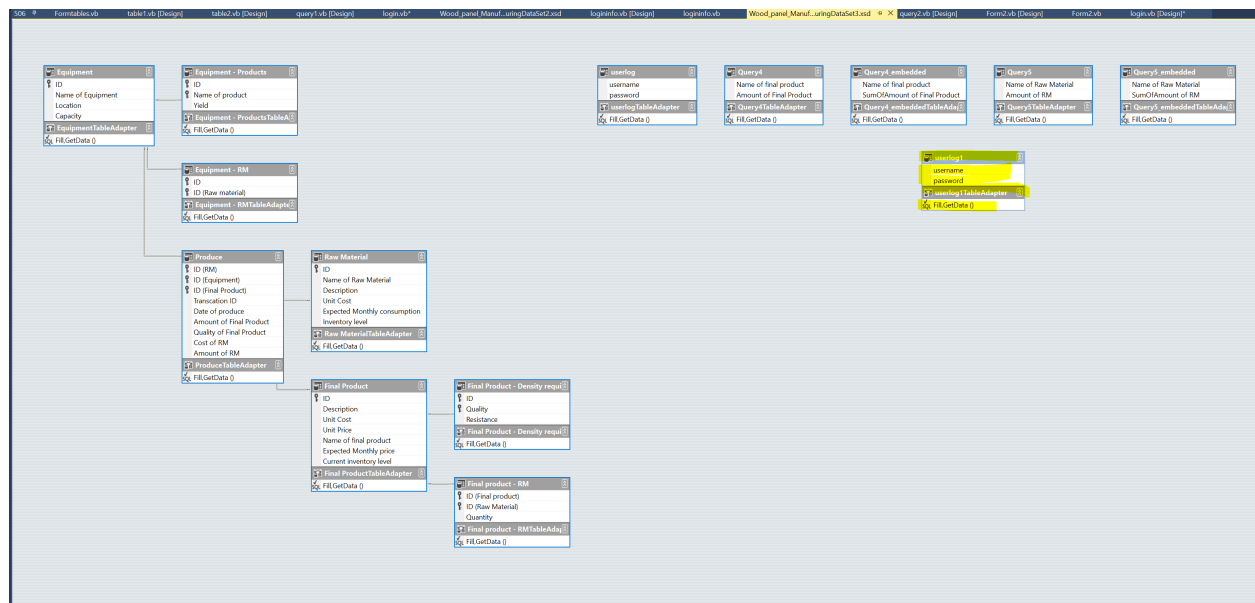
username:

password:

Login Create Account



506
Account created
OK



Here, after entering the username and password, the password is stored in the user-log table in the encrypted form. The user-log table is imported from the access table. Here, the password typed was “raj123”, but the saved password was “raj123udm456”.

Form2

1 of 2

	username	password
▶	raj	raj123udm456
	sam	sam456lo978
*		

506


2 references

```

1  Public Class Form2
2      Private Sub Userlog1BindingNavigatorSaveItem_Click(sender As Object, e As EventArgs) Handles Userlog1BindingNavigatorSaveItem.Click
3          Me.Validate()
4          Me.Userlog1BindingSource.EndEdit()
5          Me.TableAdapterManager.UpdateAll(Me.Wood_panel_ManufacturingDataSet3)
6      End Sub
7
8
9      Private Sub Form2_Load(sender As Object, e As EventArgs) Handles MyBase.Load
10         'TODO: This line of code loads data into the 'Wood_panel_ManufacturingDataSet3.userlog1' table. You can move, or remove it, as needed.
11         Me.Userlog1TableAdapter.Fill(Me.Wood_panel_ManufacturingDataSet3.userlog1)
12     End Sub
13
14
15
16 End Class

```

**After logging in,**

 Formtables

— □ ×

## List of Tables

- ☒ Equipment
- ☐ Raw Material

Show

Back

## 2. User interface

I have changed the interface of the main form into 1 form, letting the user access all functions and information in one screen. If we select the dropdown as the list of tables and list of queries.

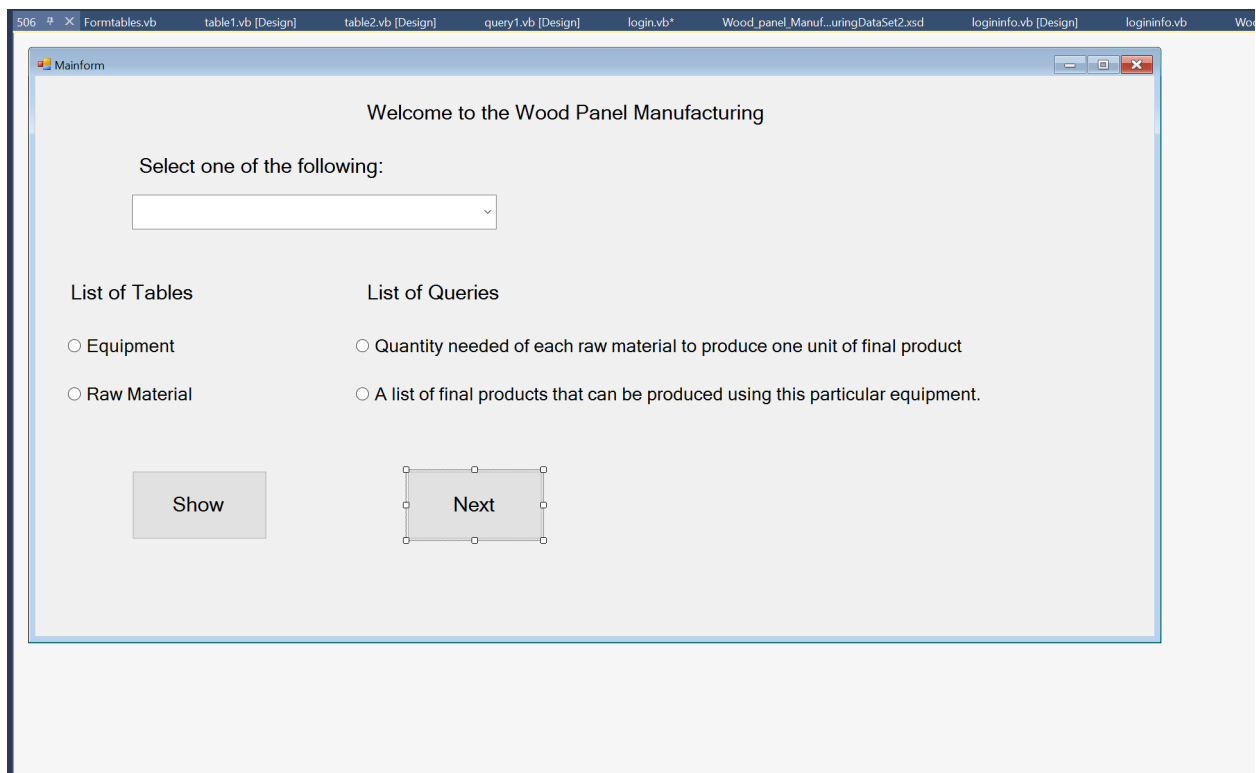
**Learnability:** The application is simple to learn and easy to understand.

**Efficiency:** There are shortcuts for this application to view the tables and the list of view and queries.

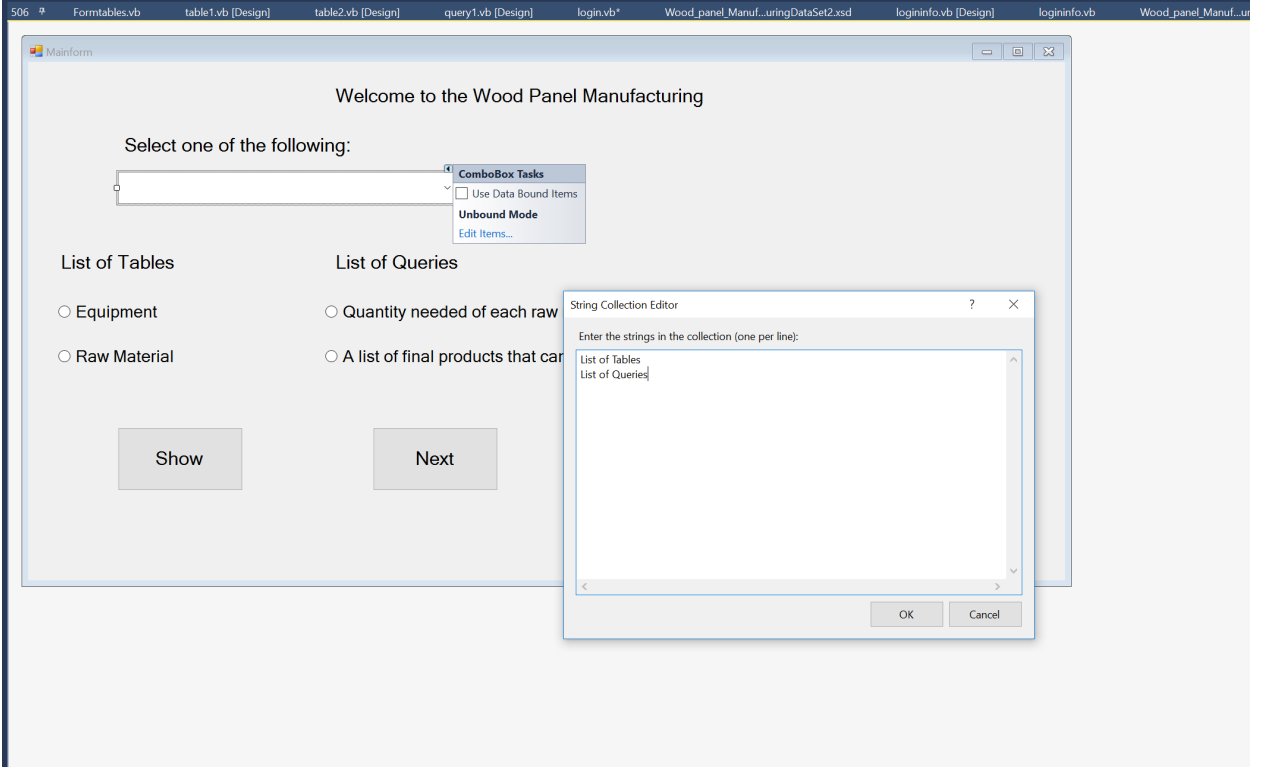
**Memorability:** The username and password is saved, and the user can access the application as the application remembers using the login form.

**Low Error rate:** The application is very responsive and runs without any bugs.

**User Friendly:** The application is easy and very user friendly as you can access every element using just one form.







## Code view:

```
506  Formtables.vb    table1.vb [Design]    table2.vb [Design]    query1.vb [Design]    login.vb*    Wood_panel_Manuf...uringDataSet2.xsd
VB 506  MainForm

1  1 reference
   Public Class MainForm
2  0 references
   Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
3  If ComboBox1.SelectedItem = "List of Tables" Then
4      Label3.Visible = True
5      RadioButton1.Visible = True
6      RadioButton2.Visible = True
7  ElseIf ComboBox1.SelectedItem = "List of Queries" Then
8      Label4.Visible = True
9      RadioButton3.Visible = True
10     RadioButton4.Visible = True
11 End If
12 End Sub
13
14 0 references
   Private Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
15 If RadioButton1.Checked Then
16     table1.Show()
17     login.Show()
18     Me.Hide()
19 ElseIf RadioButton2.Checked Then
20     table2.Show()
21     login.Show()
22     Me.Hide()
23 ElseIf RadioButton3.Checked Then
24     query1.Show()
25     login.Show()
26     Me.Hide()
27 ElseIf RadioButton4.Checked Then
28     query2.Show()
29     login.Show()
30     Me.Hide()
31 End If
32 End Sub
33 End Class
34
35
```

## Equipment table:

506 Formtables.vb table1.vb [Design] table2.vb [Design] query1.vb [Design] login.vb\* Wood\_panel\_Manuf...uringDataSet2.xsd logininfo.vb [Design] logininfo.vb

table1

0 of (0)

ID	Name of Equipment	Location	Capacity
*			

## Raw material table:

506 Formtables.vb table1.vb [Design] table2.vb [Design] query1.vb [Design] login.vb\* Wood\_panel\_Manuf...uringDataSet2.xsd logininfo.vb [Design] logininfo.vb

table2

0 of (0)

ID	Name of Raw Material	Description	Unit Cost	Expected Monthly consumption	Inventory level
*					

## Query 1

506 Formtables.vb table1.vb [Design] table2.vb [Design] query1.vb [Design] login.vb\* Wood\_panel\_Manuf...uringDataSet2.xsd

query1

0 of {0}

	Name of Raw Material	Name of final product	Quantity
*			

## Query 2

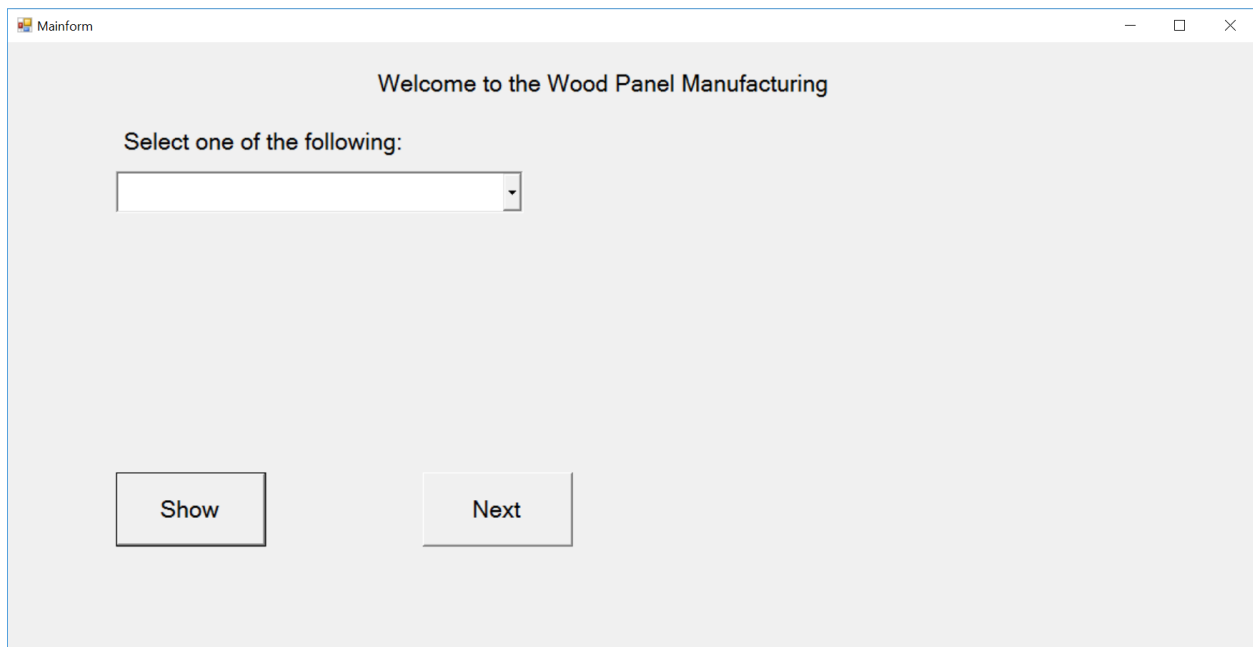
506 Formtables.vb table1.vb [Design] table2.vb [Design] query1.vb [Design] login.vb\* Wood\_panel\_Manuf...uringDataSet2.xsd logininfo.vb [D

query2

0 of {0}

	Name of Raw Material	Name of final product	Quantity
*			

## Execution view:

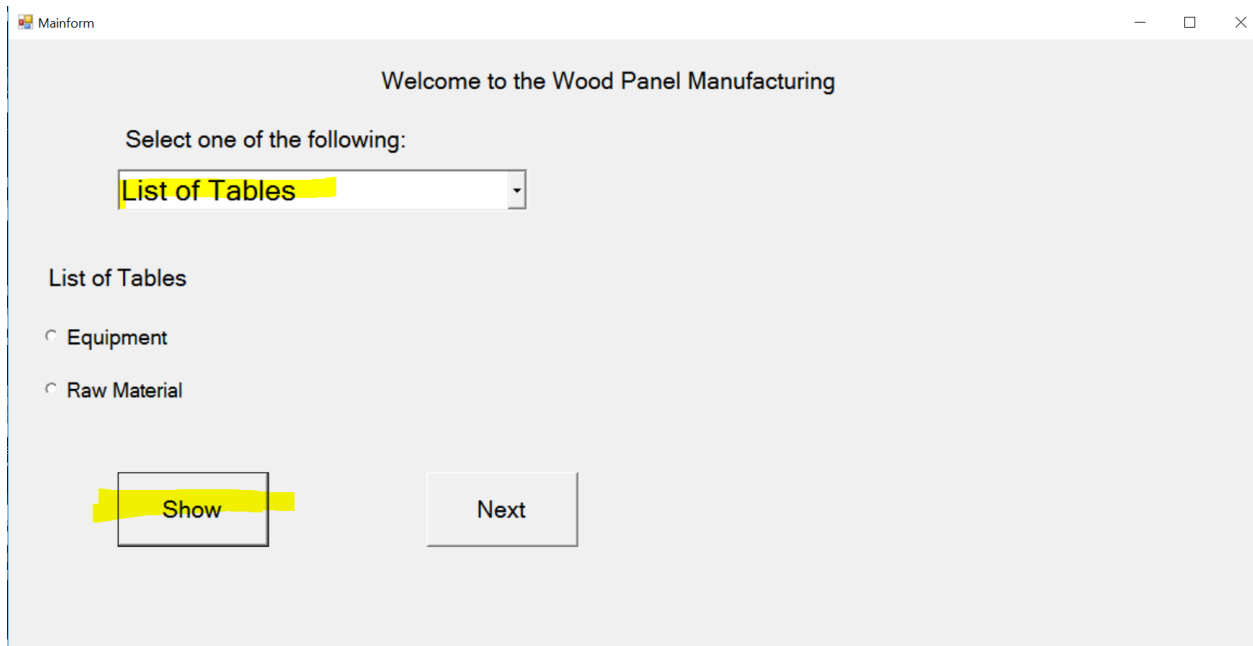


Mainform

Welcome to the Wood Panel Manufacturing

Select one of the following:

Show Next



Mainform

Welcome to the Wood Panel Manufacturing

Select one of the following:

List of Tables

List of Tables

☐ Equipment

☐ Raw Material

Show Next

Mainform

Welcome to the Wood Panel Manufacturing

Select one of the following:

List of Queries

List of Queries

- ☐ Quantity needed of each raw material to produce one unit of final product
- ☐ A list of final products that can be produced using this particular equipment.

Show Next

**If we select the list of tables or list of queries, we get the login form:**

Mainform

Welcome to the Wood Panel Manufacturing

Select one of the following:

List of Tables

List of Tables

- ☒ Equipment
- ☐ Raw Material

Show Next

## Login form:

506 Wood\_panel\_Manuf...ringDataSet2.xsd Formtables.vb table1.vb [Design] table2.vb [Design] query1.vb [Design] query2.vb [Design] login.vb login.vb [Design] Formqueries.vb [Design]


login

### Wood Panel manufacturing

username:

password:

Login Create Account



```
506 logininfo.vb logininfo.vb [Design] Wood_panel_Manuf...uringDataSet2.xsd Formtables.vb table1.vb [Design] table2.vb [De
VB 506
1 1 reference
2 Public Class login
3
4 0 references
5 Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
6     If TextBox1.Text = My.Settings.username And TextBox2.Text = My.Settings.password Then
7         Me.Hide()
8         Formtables.Show()
9     Else MsgBox("Username And Password Do Not match")
10    End If
11 End Sub
12
13 0 references
14 Private Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
15     Me.Hide()
16     logininfo.Show()
17 End Sub
18 End Class
```

Create Account form:

The screenshot shows the Visual Studio IDE with the 'logininfo.vb [Design]' window active. The form is titled 'logininfo' and contains two text boxes for 'New Username' and 'Password'. Below the text boxes are two buttons labeled 'Save' and 'Back'. The form is styled with a light gray background and a blue border. The 'Save' button is on the left and the 'Back' button is on the right.

Using an ASCII encryption, the password is saved in different format.



```
506 logininfo.vb logininfo.vb [Design] Wood_panel_Manuf...uringDataSet2.xsd Formtables.vb table1.vb [Design]
VB 506 logininfo
1 1 reference
2 Public Class logininfo
3 0 references
4 Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
5     My.Settings.username = TextBox1.Text
6     My.Settings.password = TextBox2.Text
7     Dim Encriptionfactor As Integer = 3
8     For Each letter As String In TextBox2.Text
9         TextBox2.Text += Chr(Asc(letter) + Encriptionfactor)
10    Next
11    My.Settings.Save()
12    login.Show()
13    Me.Hide()
14    MsgBox("Account created")
15    'MsgBox(TextBox2.Text)
16
17 End Sub
18
19 0 references
20 Private Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
21     Formtables.Show()
22     Me.Hide()
23 End Sub
24 End Class
```

## Execution view:

login

Wood Panel manufacturing

username: raj

password: \*\*\*

Login Create Account

login

## Wood Panel manufacturing

username:

password:

Login Create Account

506

Username And Password Do Not match

OK

### Create Account form:

logininfo

New Username:

Password:

Save Back

login

Wood Panel manufacturing

username:

password:

Login

Create Account

506

Account created

OK

Equipment table:

table1

1 of 10

	ID	Name of Equipment	Location	Capacity
▶	1	wood cutter	L1	5
	2	CNC	L2	6
	3	Chain saw	L3	5
	4	File	L4	6
	5	Presser	L5	9
	6	Holder	L6	8
	7	Engraver	L7	6
	8	Cold Press	L8	5
	9	Veneer Peeling	L9	7
	10	Sand paper	I10	9
*				

## Raw material Table:

table2

1 of 4

	ID	Name of Raw Material	Description	Unit Cost	Expected Monthly consumption	Inventory level
▶	1	chips	10mm dimension	100	50	20
	2	flakes	20mm dimension	200	60	10
	3	strands	30mm dimension	300	50	40
	4	shreds	40mm dimension	150	10	50
*						

## Query 1:

query1

1 of 7

	Name of Raw Material	Name of final product	Quantity
▶	flakes	Wood panel outsi...	60
	flakes	Sturdy	40
	flakes	Sturdy	50
	strands	Sturdy	40
	strands	Sturdy	50
	chips	Ply	50
	shreds	Door	20
*			

Query 2:

query2

1 of 7

	Name of Raw Material	Name of final product	Quantity
▶	flakes	Wood panel outsi...	60
	flakes	Sturdy	40
	flakes	Sturdy	50
	strands	Sturdy	40
	strands	Sturdy	50
	chips	Ply	50
	shreds	Door	20
*			