

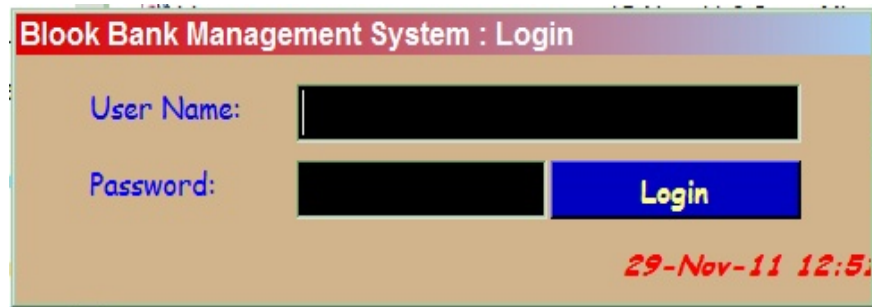
ADITA PROJECT

BLOOD BANK MANAGEMENT SYSTEM

WRITTEN BY : ARNAV MUKHOPADHYAY
ROLL NO.: YS-NS/29-2200011/2011
BATCH: 45051 SESSION: 29

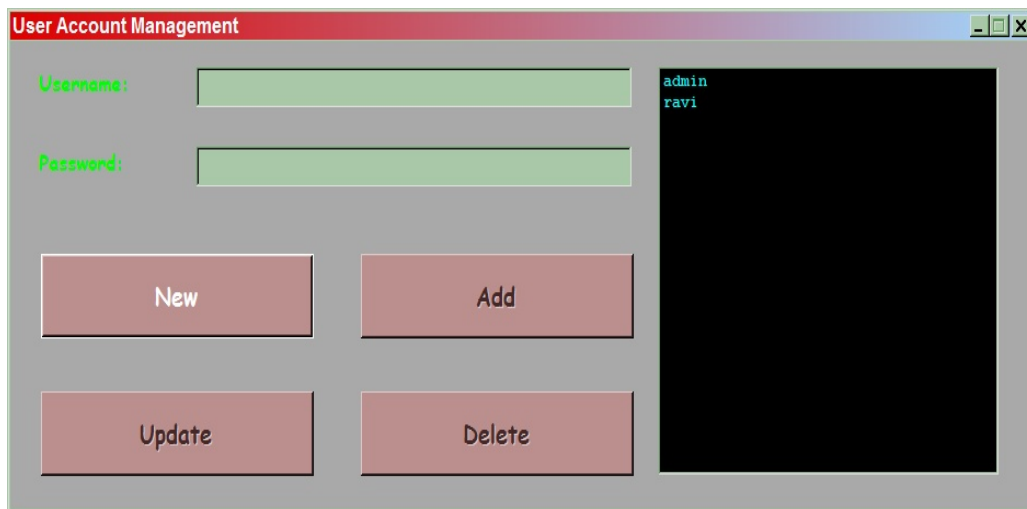
SCREENSHOTS

LOGIN SCREEN:



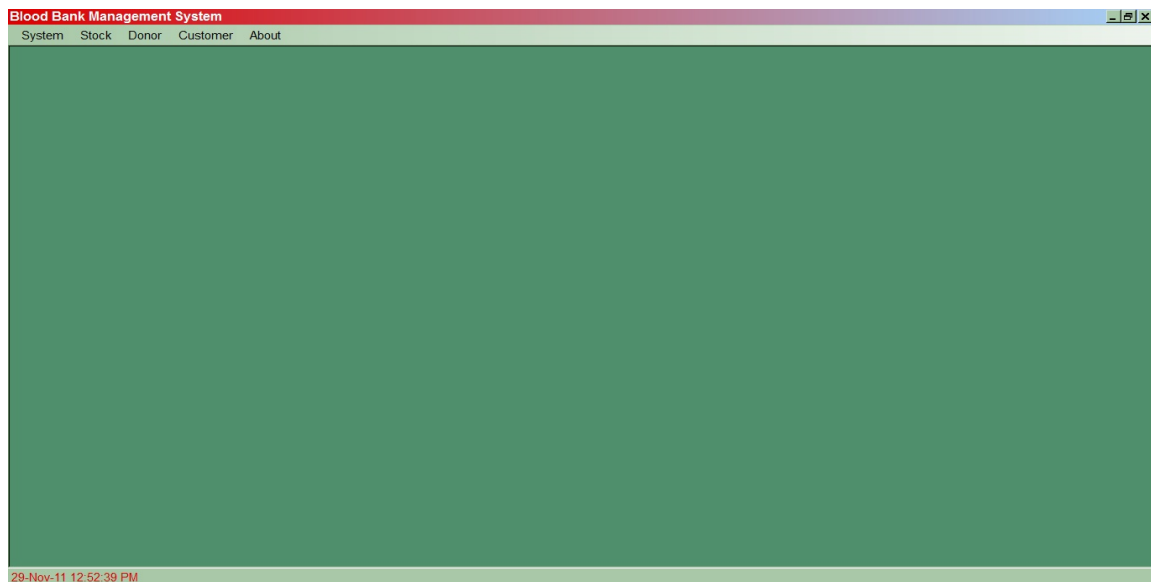
The screenshot shows a login window titled "Blood Bank Management System : Login". It features two input fields: "User Name:" and "Password:". To the right of the password field is a blue "Login" button. In the bottom right corner, the date and time "29-Nov-11 12:51" are displayed in red text.

USER ACCOUNT MANAGEMENT:



The screenshot shows a window titled "User Account Management". It has two input fields: "Username:" and "Password:". Below these fields are four buttons: "New", "Add", "Update", and "Delete". On the right side of the window is a list box containing the text "admin" and "ravi".

DESKTOP:



DONOR INFORMATION:

Donor ID: JBDB 67 / 2011

Name: Arnav

Blood Group: A+

Address: Kolkata, WB

Phone No. : 9822773737

Save

Close

DONOR INFORMATION UPDATE:

	Donor ID	Name	Blood Group	Address	Phone Number
▶	1	arnav	A+	kolkata	9163125708
	3	rajb	A+	kolkata	25441166
	4	manas	B+	kalyani, Nadia	987766551
	6	Ranajit Saha	B+	Naihati, Garifa	9766223457
	7	Wasim Akram	O-	Birati	98667744
	10	Rakesh Biswas	B-	Barasat	66557744
	27	Rahul Sen	A+	Kalyani	9855332244
	28	iuweruwerui	A+	sdf	0
	34	Kuntal Das	A-	jagaddal	77668899
	36	Manas	A+	Dehli	7657765
	37	egtrtrth	A+	dgq	0
	47	asdadasda	A+	asdadasd	0
	48	fgghghgggh	A+	ghjghjj	0
	49	Ramesh Guha	A+	Barrackpore	0
	50	Arun Singh	A+	Naihati	2323423525
	55	rajesh	A+	dehli	9988778876
	57	Kunal Sen	B+	Naihati	6865867867
	65	ramesh	A+	sdfsdf	2342424234
	67	Arnav	A+	Kolkata, WB	9822773737

CUSTOMER INFORMATION:

Customer Information

Bill No. : 68

Close

Customer Name:

Arun

Hospital Name:

XYZ

Blood Group:

A+

Number of Packets:

3

Save and Show Bill

CUSTOMER BILL REPORT:

[illegible]

PURCHASE & DONATION REPORT:

Blood Bank Management System - [ReportViewer]

System Stock Donor Customer About

BLOOD BANK MANAGEMENT SYSTEM

DATEWISE PURCHASE AND BLOOD DONATION REPORT

BLOOD DONATION REPORT

Donor ID	Name	Blood Group	Address	Phone Number
1	arnav	A+	kolkata	9163125708
3	rajib	A+	kolkata	25441166
4	manas	B+	kalyani, Nadia	987766551
6	Ranajit Saha	B+	Naihati, Garifa	9766223457
7	Wasim Akram	O-	Birati	98667744
10	Rakesh Biswas	B-	Barasat	66557744
27	Rahul Sen	A+	Kalyani	9855332244
28	anuruvornai	A+	sdf	0
34	Kuntal Das	A-	jagaddal	77668899
36	Manas	A+	Dehi	7657765
37	egtrtrth	A+	dqg	0
47	asdadasda	A+	asdasdasd	0
48	fghghghgggh	A+	ghighji	0
49	Ramesh Guha	A+	Barrackpore	0
50	Arun Singh	A+	Naihati	2323423525
55	rajesh	A+	dehi	9988778876

29-Nov-11 12:59:23 PM

STOCK LIST:

Stock List						
	Stock ID	Blood Group	Packets	Rate	Purchase Date	Expiry Date
▶	2	A+	0	150	07-Nov-2011	07-Jan-2013
	5	B+	10	192	07-Nov-2011	07-Nov-2012
	8	O-	11	250	07-Nov-2011	07-Oct-2012
	11	B-	3	122	07-Nov-2011	07-Jul-2012
	35	A+	2	333	08-Nov-2011	07-Mar-2013

STOCK REPORT:

Blood Bank Management System - [ReportViewer]

System

Stock


Donor

Customer

About

</

ABOUT DIALOG:

About Blood Bank Management System	
	Blood Bank Management System Designed by Arnav Mukhopadhyay Roll: YS-N24/29-2200011/2011 Batch: 45051 Session: 29th ADITA-SEM-III Project Year: 2011
OK	

SOURCE CODE

SOURCE CODE: BBDATABASE.VB

```
Imports System.Data.OleDb
Imports System.Drawing.Printing
Imports System.Windows.Forms
Imports System.IO

Public Class BBDatabase
    Private Shared db As OleDbConnection = Nothing

    Public Sub New()
        If Not (db Is Nothing) Then
            Exit Sub
        End If

        Try
            Dim str As String = "PROVIDER=Microsoft.Jet.OLEDB.4.0;Data Source=bbms.mdb"
            db = New OleDbConnection(str)
            db.Open()

            Catch ex As Exception
                MessageBox.Show("ERROR: Cannot open database", "Database failure", MessageBoxButtons.OK,
                MessageBoxIcon.Error)
                Application.Exit()
            End Try
        End Sub

        ' USER ACCOUNTS HELPER UI

        Public Function AppendUser(ByVal username As String, ByVal password As String) As Boolean
            If db Is Nothing Then
                Return False
            End If

            If username.Trim.Length < 1 Or password.Trim.Length < 1 Then
                Return False
            End If

            Try
                Dim sql As String
                sql = String.Format("INSERT INTO LOGIN VALUES ('{0}', '{1}')" , username, password)
                Dim ad As New OleDbDataAdapter(sql, db)
                Dim ds As New DataSet()
                ad.Fill(ds)
```

```

        Catch ex As Exception
            Return False
        End Try
        Return True
    End Function

    Public Function GetPassword(ByVal username As String, ByRef password As String) As Boolean
        If db Is Nothing Then
            Return False
        End If

        If username.Trim.Length < 1 Then
            Return False
        End If

        Try
            Dim sql As String
            sql = String.Format("SELECT USERNAME, PASSWORD FROM LOGIN WHERE USERNAME='{0}'", username)
            Dim ad As New OleDbDataAdapter(sql, db)
            Dim ds As New DataSet()
            ad.Fill(ds)
            If ds.Tables(0).Rows(0).Item(0) = username Then
                password = ds.Tables(0).Rows(0).Item(1)
                Return True
            Else
                Throw New Exception()
            End If
        End Try

        Catch ex As Exception
            Return False
        End Try
        Return True
    End Function

    Public Function VerifyUser(ByVal username As String, ByVal password As String) As Boolean
        If db Is Nothing Then
            Return False
        End If

        If username.Trim.Length < 1 Or password.Trim.Length < 1 Then
            Return False
        End If

        Try
            Dim sql As String
            sql = String.Format("SELECT USERNAME, PASSWORD FROM LOGIN WHERE USERNAME='{0}' AND PASSWORD='{1}'", username, password)

```



```

        Dim ad As New OleDbDataAdapter(sql, db)
        Dim ds As New DataSet()
        ad.Fill(ds)

        If ds.Tables(0).Rows(0).Item(0) = username And ds.Tables(0).Rows(0).Item(1) = password Then
            Return True
        Else
            Throw New Exception()
        End If
    Catch ex As Exception
        Return False
    End Try

End Function

Public Delegate Sub funcEnumUsers(ByVal username As String, ByVal password As String, ByVal obj As Object)

Public Sub EnumAccounts(ByVal funcEnum As funcEnumUsers, ByVal obj As Object)
    If db Is Nothing Then
        Exit Sub
    End If

    Try
        Dim sql As String
        sql = String.Format("SELECT USERNAME, PASSWORD FROM LOGIN")
        Dim ad As New OleDbDataAdapter(sql, db)
        Dim ds As New DataSet()
        ad.Fill(ds)

        For Each dr As DataRow In ds.Tables(0).Rows
            funcEnum(dr.Item(0), dr.Item(1), obj)
        Next
    Catch ex As Exception

    End Try

End Sub

Public Function DeleteUser(ByVal username As String) As Boolean
    If db Is Nothing Then
        Return False
    End If

    If username.Trim.Length < 1 Then
        Return False
    End If

    Try

```

```

        Dim sql As String
        sql = String.Format("DELETE FROM LOGIN WHERE USERNAME='{0}'", username)
        Dim ad As New OleDbDataAdapter(sql, db)
        Dim ds As New DataSet()
        ad.Fill(ds)

    Catch ex As Exception
        Return False
    End Try
    Return True

End Function

Public Function UpdateUser(ByVal username As String, ByVal password As String) As Boolean
    If db Is Nothing Then
        Return False
    End If

    If username.Trim.Length < 1 Or password.Trim.Length < 1 Then
        Return False
    End If

    Try
        Dim sql As String
        sql = String.Format("UPDATE LOGIN SET [PASSWORD]='{1}' WHERE [USERNAME]='{0}'", username, password)
        Dim ad As New OleDbDataAdapter(sql, db)
        Dim ds As New DataSet()
        ad.Fill(ds)

    Catch ex As Exception
        Return False
    End Try
    Return True

End Function

'Stock Information
Public Structure StockInfo
    Public Stock_ID As Integer
    Public Blood_Group As String
    Public Packets As Integer
    Public Rate As Double
    Public Purchase_Date As Date
    Public Exp_Date As Date
End Structure

Public Sub PrintBloodStock(ByVal form As Form)
    Try
        Dim dtToday As Date = Date.Today
        Dim sql As String
        sql = String.Format("SELECT STOCK_ID, BLOOD_GROUP, PACKETS, RATE, PURCHASE_DATE, EXP_DATE FROM STOCK

```

```

WHERE PURCHASE_DATE=#{0}-{1}-{2}#", _
        dtToday.Year, dtToday.Month, dtToday.Day)

Dim ad As New OleDbDataAdapter(sql, db)
Dim ds As New DataSet()
ad.Fill(ds)

Dim filePath As String = Path.GetTempFileName() + ".htm"
Dim file As StreamWriter = New StreamWriter(filePath, False, System.Text.Encoding.ASCII)
If file Is Nothing Then
    Throw New Exception("Cannot create the Report file")
End If
file.WriteLine("<html>")
file.WriteLine("    <head>")
file.WriteLine("        <title>Blood Stock on " + dtToday.ToString("dd-MMM-yyyy") + "</title>")
file.WriteLine("    </head>")
file.WriteLine("    <body><center>")
file.WriteLine("        <h1><u><font color=red>BLOOD BANK MANAGEMENT SYSTEM</font></u></h1>")
file.WriteLine("        <h2><u><font color=blue>Blood Stock on " + dtToday.ToString("dd-MMM-yyyy")
+ "</font></u></h2>")
file.WriteLine("        <br><br>")
file.WriteLine("        <table align=center width='90%' border=2 cellpadding=3>")
    Dim hdr() As String = {"Stock ID", "Blood Group", "Packets", "Rate", "Purchase Date", "Expiry
Date"}
file.WriteLine("            <tr>")
For Each hdrStr In hdr
    file.WriteLine("                <th>")
    file.WriteLine(hdrStr)
    file.WriteLine("                </th>")
Next
file.WriteLine("            </tr>")

For Each row As DataRow In ds.Tables(0).Rows
    Dim rowStr() As String = {row.Item("STOCK_ID").ToString(), _
        row.Item("BLOOD_GROUP").ToString(), _
        row.Item("PACKETS").ToString(), _
        row.Item("RATE").ToString(), _
        Date.Parse(row.Item("PURCHASE_DATE")).ToString("dd-MMM-yyyy"), _
        Date.Parse(row.Item("EXP_DATE")).ToString("dd-MMM-yyyy")}

    file.WriteLine("            <tr>")
    For Each rstr In rowStr
        file.WriteLine("                <td><center>")
        file.WriteLine(rstr)
        file.WriteLine("                </center></td>")
    Next
    file.WriteLine("            </tr>")

Next

```

```

file.WriteLine("        </table>")
file.WriteLine("        <br><br>")
file.WriteLine("        </center>")
file.WriteLine("        <hr>")
file.WriteLine("        <br><br>")
        file.WriteLine("                <input type='button' id='printme' value='Print the Report'
onClick='window.print()' />")
file.WriteLine("        <br><br>")
file.WriteLine("    </body>")
file.WriteLine("</html>")
file.Flush()
file.Close()

'            System.Diagnostics.Process.Start("file:/// " + filePath)
Dim frm As New FormReportViewer()
frm.ShowReportWindow(form, "file:/// " + filePath)
Catch ex As Exception
    MessageBox.Show(ex.Message.ToString, "Error in generating Report", MessageBoxButtons.OK,
MessageBoxIcon.Error)
End Try
End Sub

```

```

Private Function AppendDonorToStock(ByVal bloodgroup As String) As Boolean
Try
    Dim rate As Double = 0
    Double.TryParse(TextBox("Enter Purchase Rate: ", "Purchase Rate Settings:", "0.00"), rate)

    Dim dd As String = TextBox("Enter Expiry Period (in months): ", "Expiry Period Settings", "6")
    Dim expMonth As Integer = 6
    Integer.TryParse(dd, expMonth)

    Dim purchaseDate As Date = Date.Today
    Dim expiryDate As Date = purchaseDate
    expiryDate = expiryDate.AddMonths(expMonth)

    Dim sql As String
    sql = String.Format("INSERT INTO STOCK VALUES ({0}, '{1}', {2}, {3}, #{4}-{5}-{6}#, #{7}-{8}-
{9}#)", _
        BBDatabase.GenerateId(), bloodgroup, 1, rate, _
        purchaseDate.Year, purchaseDate.Month, purchaseDate.Day, _
        expiryDate.Year, expiryDate.Month, expiryDate.Day)

    Dim ad As New OleDbDataAdapter(sql, db)
    Dim ds As New DataSet()
    ad.Fill(ds)
    Return True
Catch ex As Exception

```

```
Return False
```

```
End Try
```

```
End Function
```

```
Private Function UpdateDonorToStock(ByVal bloodgroup As String) As Boolean
```

```
Try
```

```
Dim purchaseDate As Date = Date.Today
```

```
Dim sql As String
```

```
sql = String.Format("SELECT STOCK_ID, PACKETS FROM STOCK WHERE BLOOD_GROUP='{0}' AND  
PURCHASE_DATE=#{1}-{2}-{3}#", _  
bloodgroup, purchaseDate.Year, purchaseDate.Month, purchaseDate.Day)
```

```
Dim ad As New OleDbDataAdapter(sql, db)
```

```
Dim ds As New DataSet()
```

```
ad.Fill(ds)
```

```
Dim stockId As Integer = 0
```

```
Dim nPackets As Integer = 0
```

```
Integer.TryParse(ds.Tables(0).Rows(0).Item(0).ToString(), stockId)
```

```
Integer.TryParse(ds.Tables(0).Rows(0).Item(1).ToString(), nPackets)
```

```
nPackets += 1
```

```
sql = String.Format("UPDATE STOCK SET [PACKETS]={0} WHERE STOCK_ID={1}", _  
nPackets, stockId)
```

```
ad = New OleDbDataAdapter(sql, db)
```

```
ds = New DataSet()
```

```
ad.Fill(ds)
```

```
Return True
```

```
Catch ex As Exception
```

```
Return False
```

```
End Try
```

```
End Function
```

```
Public Function AddDonorToStock(ByVal info As DonorInfo) As Boolean
```

```
Try
```

```
Dim sdate As Date = Date.Now
```

```
Dim sbloodgroup As String = info.Blood_Group
```

```
' Check if we have any stock of BLOOD_GROUP at today's date
```

```
Dim sql As String
```

```
sql = String.Format("SELECT COUNT(STOCK_ID) FROM STOCK WHERE BLOOD_GROUP='{0}' AND  
PURCHASE_DATE=#{1}-{2}-{3}#", _  
sbloodgroup, sdate.Year, sdate.Month, sdate.Day)
```

```
Dim ad As New OleDbDataAdapter(sql, db)
```

```
Dim ds As New DataSet()
```

```
ad.Fill(ds)
```

```
Dim n As Integer = 0
```

```

Integer.TryParse(ds.Tables(0).Rows(0).Item(0).ToString(), n)
If n < 1 Then
    Return AppendDonorToStock(sbloodgroup)
Else
    Return UpdateDonorToStock(sbloodgroup)

End If

Catch ex As Exception
    Return False
End Try
End Function

Public Function EnumStock() As StockInfo()
    Try
        Dim sql As String
        sql = "SELECT STOCK_ID, BLOOD_GROUP, PACKETS, RATE, PURCHASE_DATE, EXP_DATE FROM STOCK"

        Dim ad As New OleDbDataAdapter(sql, db)
        Dim ds As New DataSet()
        ad.Fill(ds)

        Dim sinfo As New List(Of StockInfo)
        For Each rw As DataRow In ds.Tables(0).Rows
            Dim info As StockInfo
            info.Stock_ID = 0
            Integer.TryParse(rw.Item("STOCK_ID").ToString(), info.Stock_ID)
            info.Blood_Group = rw.Item("BLOOD_GROUP").ToString().Trim
            info.Packets = 0
            Integer.TryParse(rw.Item("PACKETS").ToString(), info.Packets)
            info.Rate = 0
            Double.TryParse(rw.Item("RATE").ToString(), info.Rate)
            Date.TryParse(rw.Item("PURCHASE_DATE").ToString(), info.Purchase_Date)
            Date.TryParse(rw.Item("EXP_DATE").ToString(), info.Exp_Date)
            sinfo.Add(info)
        Next
        Return sinfo.ToArray()
    Catch ex As Exception
        Return Nothing
    End Try
End Function

Public Function UpdateStockRate(ByVal id As Integer, ByVal rate As Double)
    Try
        Dim sql As String
        sql = String.Format("UPDATE STOCK SET [RATE]={0} WHERE STOCK_ID={1}", rate, id)

        Dim ad As New OleDbDataAdapter(sql, db)
        Dim ds As New DataSet()

```

```

        ad.Fill(ds)

        Return True
    Catch ex As Exception
        Return False
    End Try
End Function

Public Function UpdateStockExpDate(ByVal id As Integer, ByVal expdate As Date)
    Try
        Dim sql As String
        sql = String.Format("UPDATE STOCK SET [EXP_DATE]=#{0}-{1}-{2}# WHERE STOCK_ID={3}", _
            expdate.Year, expdate.Month, expdate.Day, id)

        Dim ad As New OleDbDataAdapter(sql, db)
        Dim ds As New DataSet()
        ad.Fill(ds)

        Return True
    Catch ex As Exception
        Return False
    End Try
End Function

' Donor Information
Public Structure DonorInfo
    Public Donor_ID As Integer
    Public Donor_Name As String
    Public Blood_Group As String
    Public Address As String
    Public PhoneNo As Long
End Structure

Public Function AppendDonor(ByVal info As DonorInfo) As Boolean
    Try
        Dim sql As String
        Dim bgroup As String
        bgroup = info.Blood_Group.Trim
        bgroup = bgroup.Substring(0, Math.Min(3, bgroup.Length))
        sql = String.Format("INSERT INTO DONOR VALUES({0},'{1}', '{2}', '{3}', '{4}')", _
            info.Donor_ID, info.Donor_Name, bgroup, info.Address, info.PhoneNo.ToString)

        Dim ad As New OleDbDataAdapter(sql, db)
        Dim ds As New DataSet()
        ad.Fill(ds)

        Return True
    Catch ex As Exception
        Debug.Print(ex.ToString())
        Return False
    End Try
End Function

```

```
End Try
End Function
```

```
Public Function EnumDonors() As DonorInfo()
```

```
Try
```

```
Dim sql As String
```

```
sql = String.Format("SELECT Donor_ID, Donor_Name, Blood_Group, Address, PhoneNo FROM DONOR")
```

```
Dim ad As New OleDbDataAdapter(sql, db)
```

```
Dim ds As New DataSet()
```

```
ad.Fill(ds)
```

```
Dim l As New List(Of DonorInfo)
```

```
For Each row As DataRow In ds.Tables(0).Rows
```

```
Dim info As New DonorInfo()
```

```
info.Donor_ID = 0
```

```
Integer.TryParse(row.Item(0), info.Donor_ID)
```

```
info.Donor_Name = row.Item(1)
```

```
info.Blood_Group = row.Item(2)
```

```
info.Address = row.Item(3)
```

```
info.PhoneNo = 0
```

```
info.PhoneNo = 0
```

```
Long.TryParse(row.Item(4), info.PhoneNo)
```

```
l.Add(info)
```

```
Next
```

```
Return l.ToArray()
```

```
Catch ex As Exception
```

```
Debug.Print(ex.ToString())
```

```
Return Nothing
```

```
End Try
```

```
End Function
```

```
Public Function FindDonorById(ByVal id As Integer, ByRef info As DonorInfo) As Boolean
```

```
Try
```

```
Dim sql As String
```

```
sql = String.Format("SELECT DONOR_ID, DONOR_NAME, BLOOD_GROUP, ADDRESS, PHONENO FROM DONOR WHERE  
DONOR_ID = {0}", _  
id)
```

```
Dim ad As New OleDbDataAdapter(sql, db)
```

```
Dim ds As New DataSet()
```

```
ad.Fill(ds)
```

```
info.Donor_ID = Integer.Parse(ds.Tables(0).Rows(0).Item(0))
```

```
info.Donor_Name = ds.Tables(0).Rows(0).Item(1)
```

```
info.Blood_Group = ds.Tables(0).Rows(0).Item(2)
```



```

        info.Address = ds.Tables(0).Rows(0).Item(3)
        info.PhoneNo = Long.Parse(ds.Tables(0).Rows(0).Item(4))
        Return True

    Catch ex As Exception
        Debug.Print(ex.ToString())
        Return False
    End Try
End Function

Public Function UpdateDonor(ByVal info As DonorInfo) As Boolean
    Try
        Dim sql As String
        Dim bgroup As String
        bgroup = info.Blood_Group.Trim
        bgroup = bgroup.Substring(0, Math.Min(3, bgroup.Length))
        sql = String.Format("UPDATE DONOR SET [DONOR_ID]={0}, [DONOR_NAME]='{1}', BLOOD_GROUP='{2}', ADDRESS='{3}', PHONENO='{4}' WHERE DONOR_ID={0}", _
            info.Donor_ID, info.Donor_Name, bgroup, info.Address, info.PhoneNo.ToString)

        Dim ad As New OleDbDataAdapter(sql, db)
        Dim ds As New DataSet()
        ad.Fill(ds)
        Return True
    Catch ex As Exception
        Debug.Print(ex.ToString())
        Return False
    End Try
End Function

' Customer Purchase Information
Public Structure CustomerInfo
    Public BillNo As Integer
    Public CustomerName As String
    Public Hospital_Name As String
    Public Blood_Group As String
    Public Purchase_Date As Date
    Public No_Of_Packet As Integer
    Public Price As Double
End Structure

Private Sub UpdateStockSetPackets(ByVal id As Integer, ByVal nPackets As Integer)
    If nPackets < 0 Then
        nPackets = 0
    End If

    Dim sql As String
    sql = String.Format("UPDATE STOCK SET [PACKETS]= {0} WHERE STOCK_ID={1}", _

```

```

        nPackets, id)
    Dim ad As New OleDbDataAdapter(sql, db)
    Dim ds As New DataSet()
    ad.Fill(ds)
End Sub

Private Sub AddCustomerAppendBill(ByVal info As CustomerInfo, ByVal usablePackets As Integer, ByVal
price As Double)
    Dim sql As String
    sql = String.Format("INSERT INTO CUSTOMER VALUES ({0}, '{1}', '{2}', '{3}', #{4}-{5}-{6}#, {7},
{8})", _
        info.BillNo, _
        info.CustomerName.Trim, _
        info.Hospital_Name, _
        info.Blood_Group.Trim, _
        info.Purchase_Date.Year, info.Purchase_Date.Month, info.Purchase_Date.Day, _
        usablePackets, _
        price)
    Dim ad As New OleDbDataAdapter(sql, db)
    Dim ds As New DataSet()
    ad.Fill(ds)
End Sub

Private Sub GatherPackets(ByVal ds As DataRow, ByVal info As CustomerInfo, ByRef sampleCount As Integer)
    If sampleCount <= 0 Then
        Exit Sub
    End If

    Dim availablePackets As Integer = 0
    Integer.TryParse(ds.Item("PACKETS").ToString(), availablePackets)
    If availablePackets <= 0 Then
        Exit Sub
    End If

    Dim usablePacket As Integer = Math.Min(sampleCount, availablePackets)
    sampleCount -= usablePacket
    If usablePacket <= 0 Then
        Exit Sub
    End If

    ' update stock database
    UpdateStockSetPackets(Integer.Parse(ds.Item("STOCK_ID").ToString()), availablePackets -
usablePacket)

    ' update customer database
    Dim price As Double = 0
    Double.TryParse(ds.Item("RATE").ToString(), price)
    AddCustomerAppendBill(info, usablePacket, price)
End Sub

```

```

Public Function AppendCustomer(ByVal info As CustomerInfo) As Boolean
    Try
        ' List all the available blood samples from stock
        Dim sql As String
        sql = String.Format("SELECT STOCK_ID, PACKETS, RATE FROM STOCK WHERE BLOOD_GROUP='{0}' AND
EXP_DATE>#{1}-{2}-{3}#", _
                                info.Blood_Group, info.Purchase_Date.Year, info.Purchase_Date.Month,
info.Purchase_Date.Day)
        Dim ad As New OleDbDataAdapter(sql, db)
        Dim ds As New DataSet()
        ad.Fill(ds)

        Dim fullCapacity As Integer = 0
        For Each rows As DataRow In ds.Tables(0).Rows
            Dim subCaps As Integer = 0
            Integer.TryParse(rows.Item("PACKETS").ToString(), subCaps)
            fullCapacity += subCaps
        Next
        If info.No_Of_Packet > fullCapacity Then
            Return False
        End If

        Dim reqPackets As Integer = info.No_Of_Packet
        For Each rows As DataRow In ds.Tables(0).Rows
            If reqPackets <= 0 Then
                Exit For
            End If

            GatherPackets(rows, info, reqPackets)
        Next

        Return True
    Catch ex As Exception
        MessageBox.Show(ex.Message)
        Return False
    End Try
End Function

Public Sub GenerateCustomerBill(ByVal frmParent As Form, ByVal id As Integer)
    Try
        Dim dtToday As Date = Date.Today
        Dim sql As String
        sql = String.Format("SELECT BILLNO, CUSTOMERNAME, HOSPITAL_NAME, BLOOD_GROUP, PURCHASE_DATE,
NO_OF_PACKET, PRICE FROM CUSTOMER WHERE BILLNO={0}", _
                                id)
    
```

```

Dim ad As New OleDbDataAdapter(sql, db)
Dim ds As New DataSet()
ad.Fill(ds)

Dim filePath As String = Path.GetTempFileName() + ".htm"
Dim file As TextWriter = New StreamWriter(filePath, False, System.Text.Encoding.ASCII)
If file Is Nothing Then
    Throw New Exception("Cannot create the Report file")
End If
file.WriteLine("<html>")
file.WriteLine("    <head>")
file.WriteLine("        <title>Customer Bill # " + id.ToString() + "</title>")
file.WriteLine("    </head>")
file.WriteLine("    <body><center>")
file.WriteLine("        <h1><u><font color=red>BLOOD BANK MANAGEMENT SYSTEM</font></u></h1>")
file.WriteLine("        <h2><u><font color=blue>Customer Bill # " + id.ToString() + " dtd. " + _
    Date.Parse(ds.Tables(0).Rows(0).Item("PURCHASE_DATE")).ToString("dd-MMM-yyyy") +
"</font></u></h2>")
file.WriteLine("        <br><br>")

file.WriteLine("<table align=center width='80%' border=0 cellpadding=0>")
file.WriteLine("<tr>")
file.WriteLine("        <td><b>Bill    No.:    </b>&nbsp;&nbsp;&nbsp;<tt>" +
ds.Tables(0).Rows(0).Item("BILLNO").ToString() + "</tt></td>")
file.WriteLine("        <td><b>Blood    Group:    </b>&nbsp;&nbsp;&nbsp;<tt>" +
ds.Tables(0).Rows(0).Item("BLOOD_GROUP").ToString() + "</tt></td>")
file.WriteLine("        <td><b>Bill    Date:    </b>&nbsp;&nbsp;&nbsp;<tt>{0}</tt></td>",
Date.Parse(ds.Tables(0).Rows(0).Item("PURCHASE_DATE")).ToString("dd-MMM-yyyy"))
file.WriteLine("</tr>")
file.WriteLine("<tr>")
file.WriteLine("        <td><b>Name:    </b>&nbsp;&nbsp;&nbsp;<tt><b>{0}</b></tt></td>",
ds.Tables(0).Rows(0).Item("CUSTOMERNAME"))
file.WriteLine("        <td colspan=2><b>Hospital Name: </b>&nbsp;&nbsp;&nbsp;<tt><b>{0}</b></tt></td>",
ds.Tables(0).Rows(0).Item("HOSPITAL_NAME"))
file.WriteLine("</tr>")
file.WriteLine("</table><br>")

file.WriteLine("        <table align=center width='90%' border=2 cellpadding=3>")
file.WriteLine("<tr>")
file.WriteLine("        <th>{0}</th><th>{1}</th><th>{2}</th><th>{3}</th>", "Sl. No.", "Packets
Supplied", "Packet Price", "Total Cost")
file.WriteLine("</tr>")

Dim totalPrice As Double = 0
Dim reqPrice As Double = 0
Dim reqCost As Double = 0
Dim counter As Integer = 0
For Each row As DataRow In ds.Tables(0).Rows

```

```

Double.TryParse(row.Item("PRICE").ToString(), reqPrice)
Dim nPackets As Integer = 0
Integer.TryParse(row.Item("NO_OF_PACKET").ToString(), nPackets)
reqCost = reqPrice * nPackets
If reqCost < 0 Then
    reqCost *= -1
End If
totalPrice += reqCost
counter += 1

file.WriteLine("<tr>")
file.WriteLine("<td><center>{0}</center></td><td>{1}</td><td>{2}</td><td>{3}</td>", _
    counter, nPackets, reqPrice, reqCost)

file.WriteLine("</tr>")
Next
file.WriteLine("<tr>")
file.WriteLine("th align=right colspan=3>Gross Total amount:
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;</th>")
file.WriteLine("<td>{0}</td>", totalPrice)
file.WriteLine("</tr>")

file.WriteLine("</table>")
file.WriteLine("<br><br>")
file.WriteLine("</center>")
file.WriteLine("<hr>")
file.WriteLine("<br><br>")
file.WriteLine("<input type='button' id='printme' value='Print the Report'
onClick='window.print()' />")
file.WriteLine("<br><br>")
file.WriteLine("</body>")
file.WriteLine("</html>")
file.Flush()
file.Close()

' System.Diagnostics.Process.Start("file:/// " + filePath)
Dim frm As New FormReportViewer()
frm.ShowReportWindow(frmParent, "file:/// " + filePath)
Catch ex As Exception
    MessageBox.Show(ex.Message.ToString, "Error in generating Report", MessageBoxButtons.OK,
        MessageBoxIcon.Error)

End Try
End Sub

Public Sub GenerateAllReport(ByVal frmParent As Form)
Try

```

```

Dim filePath As String = Path.GetTempFileName() + ".htm"
Dim file As TextWriter = New StreamWriter(filePath, False, System.Text.Encoding.ASCII)
If file Is Nothing Then
    Throw New Exception("Cannot create the Report file")
End If

file.WriteLine("<html>")
file.WriteLine("    <head>")
file.WriteLine("        <title>Datewise Purchase and Blood Donation Report</title>")
file.WriteLine("    </head>")
file.WriteLine("    <body><center>")
file.WriteLine("        <h1><u><font color=red>BLOOD BANK MANAGEMENT SYSTEM</font></u></h1>")
file.WriteLine("            <h2><u><font color=blue>DATEWISE PURCHASE AND BLOOD DONATION")
REPORT</font></u></h2>")
file.WriteLine("        <br><br>")

file.WriteLine("<h2><center>BLOOD DONATION REPORT</center></h2>")
file.WriteLine("<table align=center width='90%' border=2 cellpadding=3>")
file.WriteLine("<tr>")
file.WriteLine("<th>{0}</th><th>{1}</th><th>{2}</th><th>{3}</th><th>{4}</th>", _
    "Donor ID", "Name", "Blood Group", "Address", "Phone Number")
file.WriteLine("</tr>")

Dim sql As String
sql = String.Format("SELECT DONOR_ID, DONOR_NAME, BLOOD_GROUP, ADDRESS, PHONENO FROM DONOR")
Dim ad As New OleDbDataAdapter(sql, db)
Dim ds As New DataSet()
ad.Fill(ds)
For Each row As DataRow In ds.Tables(0).Rows
    file.WriteLine("<tr>")
    file.WriteLine("<td><center><tt>{0}</tt></center></td>", row.Item("DONOR_ID"))
    file.WriteLine("<td>{0}</td>", row.Item("DONOR_NAME"))
    file.WriteLine("<td><center><tt><b>{0}</b></tt></center></td>", row.Item("BLOOD_GROUP"))
    file.WriteLine("<td>{0}</td>", row.Item("ADDRESS"))
    file.WriteLine("<td><center>{0}</center></td>", row.Item("PHONENO"))
    file.WriteLine("</tr>")
Next

file.WriteLine("</table>")
file.WriteLine("<br><br>")
file.WriteLine("</center>")
file.WriteLine("<hr>")

file.WriteLine("<h2><center>BLOOD PACKET PURCHASE REPORT</center></h2>")
file.WriteLine("<center>")
file.WriteLine("<table align=center width='90%' border=2 cellpadding=3>")
file.WriteLine("<tr>")
file.WriteLine("<th>{0}</th><th>{1}</th><th>{2}</th><th>{3}</th><th>{4}</th><th>{5}</th><th>{6}</th><th>{7}<")

```

```

<th>", _
                "Bill No.", "Customer Name", "Hospital Name", "Blood Group", _
                "Purchase Date", "No. Of. Packets", "Price", "Total Cost")
file.WriteLine("</tr>")

        sql = String.Format("SELECT BILLNO, CUSTOMERNAME, HOSPITAL_NAME, BLOOD_GROUP, PURCHASE_DATE,
NO_OF_PACKET, PRICE FROM CUSTOMER")
ad = New OleDbDataAdapter(sql, db)
ds = New DataSet()
ad.Fill(ds)

Dim grossSale As Double = 0
For Each row As DataRow In ds.Tables(0).Rows
    file.WriteLine("<tr>")
    file.WriteLine("<td><center><tt>{0}</tt></center></td>", row.Item("BILLNO"))
    file.WriteLine("<td>{0}</td>", row.Item("CUSTOMERNAME"))
    file.WriteLine("<td>{0}</td>", row.Item("HOSPITAL_NAME"))
    file.WriteLine("<td><center><tt><b>{0}</b></tt></center></td>", row.Item("BLOOD_GROUP"))
                                file.WriteLine("<td><center>{0}</center></td>",
Date.Parse(row.Item("PURCHASE_DATE").ToString()).ToString("dd-MMM-yyyy"))

        Dim nPackets As Integer = 0
        Dim price As Double = 0
        Integer.TryParse(row.Item("NO_OF_PACKET").ToString(), nPackets)
        Double.TryParse(row.Item("PRICE").ToString(), price)
        Dim tPrice As Double
        tPrice = nPackets * price
        If tPrice < 0 Then
            tPrice *= -1
        End If
        grossSale += tPrice

        file.WriteLine("<td><center>{0}</center></td>", nPackets)
        file.WriteLine("<td><center>{0}</center></td>", price)
        file.WriteLine("<td><center>{0}</center></td>", tPrice)
        file.WriteLine("</tr>")
Next

file.WriteLine("<tr>")
    file.WriteLine("<th align=right colspan=7> Gross sale till " + Date.Now.ToString("dd-MMM-yyyy")
+ " : &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~<br><br>"
file.WriteLine("<th><tt>{0}</tt></th>", grossSale)
file.WriteLine("</tr>")
file.WriteLine("</table>")
file.WriteLine("<br><br>")
file.WriteLine("</center>")
file.WriteLine("<hr>")

file.WriteLine("                <br><br>")

```

```

        file.WriteLine("                <input type='button' id='printme' value='Print the Report'
onClick='window.print()' />")
        file.WriteLine("                <br><br>")
        file.WriteLine("            </body>")
        file.WriteLine("</html>")
        file.Flush()
        file.Close()

'            System.Diagnostics.Process.Start("file:/// " + filePath)
Dim frm As New FormReportViewer()
frm.ShowReportWindow(frmParent, "file:/// " + filePath)
Catch ex As Exception
    MessageBox.Show(ex.Message.ToString, "Error in generating Report", MessageBoxButtons.OK,
MessageBoxIcon.Error)

End Try

End Sub

```

```

' Id generator
Public Shared Function GenerateId() As Integer
    Dim id As Integer = 0
    Try
        Try
            Dim db As New BBDatabase()

            Dim sql As String
            sql = String.Format("SELECT ID FROM AUTOID")
            Dim ad As New OleDbDataAdapter(sql, BBDatabase.db)
            Dim ds As New DataSet()
            ad.Fill(ds)
            id = Integer.Parse(ds.Tables(0).Rows(0).Item(0))
            id = id + 1

            sql = String.Format("UPDATE AUTOID SET [ID]={0}", id)
            Dim ad1 As New OleDbDataAdapter(sql, BBDatabase.db)
            Dim ds1 As New DataSet()
            ad1.Fill(ds1)
        Catch ex As Exception
            ' cannot apply update so apply select
        Try
            Dim sql As String
            sql = String.Format("UPDATE AUTOID SET [ID]={0}", id)
            Dim ad1 As New OleDbDataAdapter(sql, BBDatabase.db)
            Dim ds1 As New DataSet()
            ad1.Fill(ds1)

        Catch ex1 As Exception

```



```

        End Try
    End Try

    Catch ex2 As Exception
    End Try

    Return id
End Function
End Class

```

SOURCE CODE: FORMCUSTOMERINFO.DESIGNER.VB

```

<Global.Microsoft.VisualBasic.CompilerServices.DesignerGenerated()> _
Partial Class FormCustomerInfo
    Inherits System.Windows.Forms.Form

    'Form overrides dispose to clean up the component list.
    <System.Diagnostics.DebuggerNonUserCode()> _
    Protected Overrides Sub Dispose(ByVal disposing As Boolean)
        Try
            If disposing AndAlso components IsNot Nothing Then
                components.Dispose()
            End If
        Finally
            MyBase.Dispose(disposing)
        End Try
    End Sub

    'Required by the Windows Form Designer
    Private components As System.ComponentModel.IContainer

    'NOTE: The following procedure is required by the Windows Form Designer
    'It can be modified using the Windows Form Designer.
    'Do not modify it using the code editor.
    <System.Diagnostics.DebuggerStepThrough()> _
    Private Sub InitializeComponent()
        Me.Label1 = New System.Windows.Forms.Label()
        Me.Label2 = New System.Windows.Forms.Label()
        Me.Label3 = New System.Windows.Forms.Label()
        Me.Label4 = New System.Windows.Forms.Label()
        Me.Label5 = New System.Windows.Forms.Label()
        Me.tbId = New System.Windows.Forms.TextBox()
        Me.tbName = New System.Windows.Forms.TextBox()
        Me.tbHospital = New System.Windows.Forms.TextBox()
        Me.tbPackets = New System.Windows.Forms.TextBox()
        Me.btnSave = New System.Windows.Forms.Button()
        Me.btnClose = New System.Windows.Forms.Button()
        Me.cbBloodGroup = New System.Windows.Forms.ComboBox()
        Me.SuspendLayout()
    End Sub

```

```

,
'Label1
,
Me.Label1.AutoSize = True
Me.Label1.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
Me.Label1.Location = New System.Drawing.Point(13, 21)
Me.Label1.Name = "Label1"
Me.Label1.Size = New System.Drawing.Size(81, 23)
Me.Label1.TabIndex = 0
Me.Label1.Text = "Bill No. :"
,
'Label2
,
Me.Label2.AutoSize = True
Me.Label2.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
Me.Label2.Location = New System.Drawing.Point(13, 64)
Me.Label2.Name = "Label2"
Me.Label2.Size = New System.Drawing.Size(138, 23)
Me.Label2.TabIndex = 1
Me.Label2.Text = "Customer Name:"
,
'Label3
,
Me.Label3.AutoSize = True
Me.Label3.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
Me.Label3.Location = New System.Drawing.Point(13, 103)
Me.Label3.Name = "Label3"
Me.Label3.Size = New System.Drawing.Size(129, 23)
Me.Label3.TabIndex = 2
Me.Label3.Text = "Hospital Name:"
,
'Label4
,
Me.Label4.AutoSize = True
Me.Label4.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
Me.Label4.Location = New System.Drawing.Point(13, 147)
Me.Label4.Name = "Label4"
Me.Label4.Size = New System.Drawing.Size(107, 23)
Me.Label4.TabIndex = 3
Me.Label4.Text = "Blood Group:"
,
'Label5
,
Me.Label5.AutoSize = True
Me.Label5.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,

```

```

System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.Label5.Location = New System.Drawing.Point(13, 189)
    Me.Label5.Name = "Label5"
    Me.Label5.Size = New System.Drawing.Size(167, 23)
    Me.Label5.TabIndex = 4
    Me.Label5.Text = "Number of Packets:"
    ,
    'tbId
    ,

    Me.tbId.BorderStyle = System.Windows.Forms.BorderStyle.None
    Me.tbId.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.tbId.Location = New System.Drawing.Point(186, 21)
    Me.tbId.MaxLength = 10
    Me.tbId.Name = "tbId"
    Me.tbId.ReadOnly = True
    Me.tbId.Size = New System.Drawing.Size(151, 23)
    Me.tbId.TabIndex = 5
    Me.tbId.TabStop = False
    ,
    'tbName
    ,

    Me.tbName.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.tbName.Location = New System.Drawing.Point(186, 61)
    Me.tbName.MaxLength = 64
    Me.tbName.Name = "tbName"
    Me.tbName.Size = New System.Drawing.Size(337, 30)
    Me.tbName.TabIndex = 1
    ,
    'tbHospital
    ,

    Me.tbHospital.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.tbHospital.Location = New System.Drawing.Point(186, 100)
    Me.tbHospital.MaxLength = 64
    Me.tbHospital.Name = "tbHospital"
    Me.tbHospital.Size = New System.Drawing.Size(337, 30)
    Me.tbHospital.TabIndex = 2
    ,
    'tbPackets
    ,

    Me.tbPackets.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.tbPackets.Location = New System.Drawing.Point(186, 186)
    Me.tbPackets.MaxLength = 5
    Me.tbPackets.Name = "tbPackets"
    Me.tbPackets.Size = New System.Drawing.Size(126, 30)
    Me.tbPackets.TabIndex = 4

```

```

    ,
    'btnSave
    ,

    Me.btnSave.Font = New System.Drawing.Font("Comic Sans MS", 14.25!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.btnSave.Location = New System.Drawing.Point(331, 150)
    Me.btnSave.Name = "btnSave"
    Me.btnSave.Size = New System.Drawing.Size(192, 66)
    Me.btnSave.TabIndex = 5
    Me.btnSave.Text = "Save and Show Bill"
    Me.btnSave.UseVisualStyleBackColor = True
    ,
    'btnClose
    ,

    Me.btnClose.Font = New System.Drawing.Font("Comic Sans MS", 14.25!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.btnClose.Location = New System.Drawing.Point(343, 15)
    Me.btnClose.Name = "btnClose"
    Me.btnClose.Size = New System.Drawing.Size(180, 40)
    Me.btnClose.TabIndex = 6
    Me.btnClose.Text = "Close"
    Me.btnClose.UseVisualStyleBackColor = True
    ,
    'cbBloodGroup
    ,

    Me.cbBloodGroup.DropDownStyle = System.Windows.Forms.ComboBoxStyle.DropDownList
    Me.cbBloodGroup.Font = New System.Drawing.Font("Comic Sans MS", 12.0!,
System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.cbBloodGroup.FormattingEnabled = True
    Me.cbBloodGroup.Location = New System.Drawing.Point(187, 147)
    Me.cbBloodGroup.Name = "cbBloodGroup"
    Me.cbBloodGroup.Size = New System.Drawing.Size(98, 31)
    Me.cbBloodGroup.TabIndex = 3
    ,
    'FormCustomerInfo
    ,

    Me.AutoScaleDimensions = New System.Drawing.SizeF(6.0!, 13.0!)
    Me.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font
    Me.ClientSize = New System.Drawing.Size(553, 245)
    Me.Controls.Add(Me.cbBloodGroup)
    Me.Controls.Add(Me.btnClose)
    Me.Controls.Add(Me.btnSave)
    Me.Controls.Add(Me.tbPackets)
    Me.Controls.Add(Me.tbHospital)
    Me.Controls.Add(Me.tbName)
    Me.Controls.Add(Me.tbId)
    Me.Controls.Add(Me.Label5)
    Me.Controls.Add(Me.Label4)
    Me.Controls.Add(Me.Label3)

```

```

        Me.Controls.Add(Me.Label2)
        Me.Controls.Add(Me.Label1)
        Me.FormBorderStyle = System.Windows.Forms.FormBorderStyle.FixedSingle
        Me.MaximizeBox = False
        Me.Name = "FormCustomerInfo"
        Me.Text = "Customer Information"
        Me.ResumeLayout(False)
        Me.PerformLayout()

End Sub

Friend WithEvents Label1 As System.Windows.Forms.Label
Friend WithEvents Label2 As System.Windows.Forms.Label
Friend WithEvents Label3 As System.Windows.Forms.Label
Friend WithEvents Label4 As System.Windows.Forms.Label
Friend WithEvents Label5 As System.Windows.Forms.Label
Friend WithEvents tbId As System.Windows.Forms.TextBox
Friend WithEvents tbName As System.Windows.Forms.TextBox
Friend WithEvents tbHospital As System.Windows.Forms.TextBox
Friend WithEvents tbPackets As System.Windows.Forms.TextBox
Friend WithEvents btnSave As System.Windows.Forms.Button
Friend WithEvents btnClose As System.Windows.Forms.Button
Friend WithEvents cbBloodGroup As System.Windows.Forms.ComboBox
End Class

```

SOURCE CODE: FORMCUSTOMERINFO.VB

```

Public Class FormCustomerInfo
    Dim bgroup() As String = {"A+", "A-", "B+", "B-", "O+", "O-", "AB+", "AB-"}
    Private Sub LoadBloodGroups()
        cbBloodGroup.Items.Clear()
        cbBloodGroup.Items.AddRange(bgroup)
        cbBloodGroup.SelectedIndex = 0
    End Sub

    Private Sub FormCustomerInfo_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load
        tbId.Text = BBDatabase.GenerateId()
        LoadBloodGroups()

        tbName.Focus()
    End Sub

    Private Sub btnClose_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnClose.Click
        Me.Close()
    End Sub

    Private Sub tbName_KeyDown(ByVal sender As Object, ByVal e As System.Windows.Forms.KeyEventArgs) Handles tbName.KeyDown

```

```
    If e.KeyCode = Keys.Enter Then
        tbHospital.Focus()
    End If
End Sub
```

```
Private Sub tbHospital_KeyDown(ByVal sender As Object, ByVal e As System.Windows.Forms.KeyEventArgs)
Handles tbHospital.KeyDown
    If e.KeyCode = Keys.Enter Then
        cbBloodGroup.Focus()
    End If
End Sub
```

```
Private Sub cbBloodGroup_KeyDown(ByVal sender As Object, ByVal e As System.Windows.Forms.KeyEventArgs)
Handles cbBloodGroup.KeyDown
    If e.KeyCode = Keys.Enter Then
        tbPackets.Focus()
    End If
End Sub
```

```
Private Sub tbPackets_KeyDown(ByVal sender As Object, ByVal e As System.Windows.Forms.KeyEventArgs)
Handles tbPackets.KeyDown
    If e.KeyCode = Keys.Enter Then
        btnSave.PerformClick()
    End If
End Sub
```

```
Private Sub btnSave_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
btnSave.Click
    Try
        Dim db As New BBDatabase()
        Dim info As New BBDatabase.CustomerInfo()
        info.BillNo = Integer.Parse(tbId.Text)

        If tbName.Text.Trim.Length < 1 Then
            tbName.Focus()
            Exit Sub
        End If
        info.CustomerName = tbName.Text.Trim

        If tbHospital.Text.Trim.Length < 1 Then
            tbHospital.Focus()
            Exit Sub
        End If
        info.Hospital_Name = tbHospital.Text.Trim

        info.Blood_Group = cbBloodGroup.Text.Trim
        info.Purchase_Date = Date.Today
        info.No_Of_Packet = 0
        If Integer.TryParse(tbPackets.Text, info.No_Of_Packet) = False Then
```

```

        tbPackets.Focus()
    Exit Sub
End If
If info.No_Of_Packet < 1 Then
    tbPackets.Focus()
    Exit Sub
End If

If db.AppendCustomer(info) = False Then
    MessageBox.Show("Sorry!!! The required number of Blood Packets cannot be supplied",
    "Inadequate Blood subbply", _
        MessageBoxButtons.OK, MessageBoxIcon.Hand)
    tbPackets.Focus()
    Exit Sub
End If

db.GenerateCustomerBill(ParentForm, info.BillNo)
Me.Dispose()
Catch ex As Exception
    MessageBox.Show(ex.Message, "Error occurred adding customer", MessageBoxButtons.OK,
    MessageBoxIcon.Hand)
End Try
End Sub
End Class

```

SOURCE CODE: FORMDONORINFO.DESIGNER.VB

```

<Global.Microsoft.VisualBasic.CompilerServices.DesignerGenerated()> _
Partial Class FormDonorInfo
    Inherits System.Windows.Forms.Form

    'Form overrides dispose to clean up the component list.
    <System.Diagnostics.DebuggerNonUserCode()> _
    Protected Overrides Sub Dispose(ByVal disposing As Boolean)
        Try
            If disposing AndAlso components IsNot Nothing Then
                components.Dispose()
            End If
        Finally
            MyBase.Dispose(disposing)
        End Try
    End Sub

    'Required by the Windows Form Designer
    Private components As System.ComponentModel.IContainer

    'NOTE: The following procedure is required by the Windows Form Designer
    'It can be modified using the Windows Form Designer.
    'Do not modify it using the code editor.

```

```

<System.Diagnostics.DebuggerStepThrough(>> _
Private Sub InitializeComponent()
    Me.Label1 = New System.Windows.Forms.Label()
    Me.Label2 = New System.Windows.Forms.Label()
    Me.Label3 = New System.Windows.Forms.Label()
    Me.Label4 = New System.Windows.Forms.Label()
    Me.Label5 = New System.Windows.Forms.Label()
    Me.tbDonorId = New System.Windows.Forms.TextBox()
    Me.tbName = New System.Windows.Forms.TextBox()
    Me.tbAddress = New System.Windows.Forms.TextBox()
    Me.tbPhone = New System.Windows.Forms.TextBox()
    Me.btnSave = New System.Windows.Forms.Button()
    Me.btnClose = New System.Windows.Forms.Button()
    Me.Label6 = New System.Windows.Forms.Label()
    Me.Label7 = New System.Windows.Forms.Label()
    Me.cbBloodGroup = New System.Windows.Forms.ComboBox()
    Me.SuspendLayout()
    ,
    'Label1
    ,
    Me.Label1.AutoSize = True
        Me.Label1.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.Label1.Location = New System.Drawing.Point(25, 20)
    Me.Label1.Name = "Label1"
    Me.Label1.Size = New System.Drawing.Size(89, 23)
    Me.Label1.TabIndex = 0
    Me.Label1.Text = "Donor ID:"
    ,
    'Label2
    ,
    Me.Label2.AutoSize = True
        Me.Label2.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.Label2.Location = New System.Drawing.Point(25, 55)
    Me.Label2.Name = "Label2"
    Me.Label2.Size = New System.Drawing.Size(60, 23)
    Me.Label2.TabIndex = 1
    Me.Label2.Text = "Name:"
    ,
    'Label3
    ,
    Me.Label3.AutoSize = True
        Me.Label3.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.Label3.Location = New System.Drawing.Point(25, 94)
    Me.Label3.Name = "Label3"
    Me.Label3.Size = New System.Drawing.Size(107, 23)
    Me.Label3.TabIndex = 2

```



```

Me.Label3.Text = "Blood Group:"
,

'Label4
,

Me.Label4.AutoSize = True
    Me.Label4.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.Label4.Location = New System.Drawing.Point(25, 131)
    Me.Label4.Name = "Label4"
    Me.Label4.Size = New System.Drawing.Size(80, 23)
    Me.Label4.TabIndex = 3
    Me.Label4.Text = "Address:"
,

'Label5
,

Me.Label5.AutoSize = True
    Me.Label5.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.Label5.Location = New System.Drawing.Point(25, 241)
    Me.Label5.Name = "Label5"
    Me.Label5.Size = New System.Drawing.Size(102, 23)
    Me.Label5.TabIndex = 4
    Me.Label5.Text = "Phone No. :"
,

'tbDonorId
,

Me.tbDonorId.BorderStyle = System.Windows.Forms.BorderStyle.None
    Me.tbDonorId.Font = New System.Drawing.Font("Consolas", 14.25!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.tbDonorId.ForeColor = System.Drawing.SystemColors.ControlText
    Me.tbDonorId.Location = New System.Drawing.Point(181, 21)
    Me.tbDonorId.MaxLength = 10
    Me.tbDonorId.Name = "tbDonorId"
    Me.tbDonorId.ReadOnly = True
    Me.tbDonorId.Size = New System.Drawing.Size(149, 23)
    Me.tbDonorId.TabIndex = 5
    Me.tbDonorId.TabStop = False
,

'tbName
,

    Me.tbName.Font = New System.Drawing.Font("Consolas", 14.25!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.tbName.Location = New System.Drawing.Point(120, 57)
    Me.tbName.MaxLength = 64
    Me.tbName.Name = "tbName"
    Me.tbName.Size = New System.Drawing.Size(341, 30)
    Me.tbName.TabIndex = 1
,

'tbAddress

```

```

        ,
        Me.tbAddress.Font = New System.Drawing.Font("Consolas", 14.25!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
        Me.tbAddress.Location = New System.Drawing.Point(120, 131)
        Me.tbAddress.MaxLength = 128
        Me.tbAddress.Multiline = True
        Me.tbAddress.Name = "tbAddress"
        Me.tbAddress.ScrollBars = System.Windows.Forms.ScrollBars.Vertical
        Me.tbAddress.Size = New System.Drawing.Size(341, 102)
        Me.tbAddress.TabIndex = 3
        ,
        'tbPhone
        ,
        Me.tbPhone.Font = New System.Drawing.Font("Consolas", 14.25!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
        Me.tbPhone.Location = New System.Drawing.Point(133, 239)
        Me.tbPhone.MaxLength = 10
        Me.tbPhone.Name = "tbPhone"
        Me.tbPhone.Size = New System.Drawing.Size(328, 30)
        Me.tbPhone.TabIndex = 4
        ,
        'btnSave
        ,
        Me.btnSave.Font = New System.Drawing.Font("Microsoft Sans Serif", 15.75!,
System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point, CType(0, Byte))
        Me.btnSave.Location = New System.Drawing.Point(482, 24)
        Me.btnSave.Name = "btnSave"
        Me.btnSave.Size = New System.Drawing.Size(121, 62)
        Me.btnSave.TabIndex = 5
        Me.btnSave.Text = "Save"
        Me.btnSave.UseVisualStyleBackColor = True
        ,
        'btnClose
        ,
        Me.btnClose.Font = New System.Drawing.Font("Consolas", 15.75!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
        Me.btnClose.Location = New System.Drawing.Point(482, 207)
        Me.btnClose.Name = "btnClose"
        Me.btnClose.Size = New System.Drawing.Size(121, 62)
        Me.btnClose.TabIndex = 6
        Me.btnClose.Text = "Close"
        Me.btnClose.UseVisualStyleBackColor = True
        ,
        'Label6
        ,
        Me.Label6.AutoSize = True
        Me.Label6.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
        Me.Label6.Location = New System.Drawing.Point(120, 20)

```

```

Me.Label6.Name = "Label6"
Me.Label6.Size = New System.Drawing.Size(55, 23)
Me.Label6.TabIndex = 7
Me.Label6.Text = "JDDB"
,
'Label7
,
Me.Label7.AutoSize = True
    Me.Label7.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.Label7.Location = New System.Drawing.Point(348, 20)
    Me.Label7.Name = "Label7"
    Me.Label7.Size = New System.Drawing.Size(65, 23)
    Me.Label7.TabIndex = 8
    Me.Label7.Text = "/ 2011"
,
'cbBloodGroup
,
Me.cbBloodGroup.DropDownStyle = System.Windows.Forms.ComboBoxStyle.DropDownList
    Me.cbBloodGroup.Font = New System.Drawing.Font("Consolas", 15.75!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.cbBloodGroup.FormattingEnabled = True
    Me.cbBloodGroup.Location = New System.Drawing.Point(135, 93)
    Me.cbBloodGroup.MaxLength = 3
    Me.cbBloodGroup.Name = "cbBloodGroup"
    Me.cbBloodGroup.Size = New System.Drawing.Size(93, 32)
    Me.cbBloodGroup.TabIndex = 2
,
'FormDonorInfo
,
Me.AutoScaleDimensions = New System.Drawing.SizeF(6.0!, 13.0!)
Me.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font
Me.ClientSize = New System.Drawing.Size(619, 295)
Me.Controls.Add(Me.cbBloodGroup)
Me.Controls.Add(Me.Label7)
Me.Controls.Add(Me.Label6)
Me.Controls.Add(Me.btnClose)
Me.Controls.Add(Me.btnSave)
Me.Controls.Add(Me.tbPhone)
Me.Controls.Add(Me.tbAddress)
Me.Controls.Add(Me.tbName)
Me.Controls.Add(Me.tbDonorId)
Me.Controls.Add(Me.Label5)
Me.Controls.Add(Me.Label4)
Me.Controls.Add(Me.Label3)
Me.Controls.Add(Me.Label2)
Me.Controls.Add(Me.Label1)
Me.FormBorderStyle = System.Windows.Forms.FormBorderStyle.FixedDialog
Me.MaximizeBox = False

```

```

        Me.Name = "FormDonorInfo"
        Me.Text = "Donor Information"
        Me.ResumeLayout(False)
        Me.PerformLayout()

End Sub

Friend WithEvents Label1 As System.Windows.Forms.Label
Friend WithEvents Label2 As System.Windows.Forms.Label
Friend WithEvents Label3 As System.Windows.Forms.Label
Friend WithEvents Label4 As System.Windows.Forms.Label
Friend WithEvents Label5 As System.Windows.Forms.Label
Friend WithEvents tbDonorId As System.Windows.Forms.TextBox
Friend WithEvents tbName As System.Windows.Forms.TextBox
Friend WithEvents tbAddress As System.Windows.Forms.TextBox
Friend WithEvents tbPhone As System.Windows.Forms.TextBox
Friend WithEvents btnSave As System.Windows.Forms.Button
Friend WithEvents btnClose As System.Windows.Forms.Button
Friend WithEvents Label6 As System.Windows.Forms.Label
Friend WithEvents Label7 As System.Windows.Forms.Label
Friend WithEvents cbBloodGroup As System.Windows.Forms.ComboBox
End Class

```

SOURCE CODE: FORMDONORINFO.VB

```

Public Class FormDonorInfo
    Private updateId As Integer
    Dim bggroup() As String = {"A+", "A-", "B+", "B-", "O+", "O-", "AB+", "AB-"}

    Private Sub LoadBloodGroups()
        cbBloodGroup.Items.Clear()
        cbBloodGroup.Items.AddRange(bggroup)
        cbBloodGroup.SelectedIndex = 0
    End Sub

    Private Sub LoadTheDonor()
        Dim info As New BBDatabase.DonorInfo()
        Dim db As New BBDatabase()
        If db.FindDonorById(updateId, info) = False Then
            MessageBox.Show("Cannot retrieve the Donor information of the provided ID", "Error retrieving Donor Information", MessageBoxButtons.OK, MessageBoxIcon.Stop)
            Me.Dispose()
        End Sub
    End If

    tbDonorId.Text = info.Donor_ID
    tbName.Text = info.Donor_Name
    tbAddress.Text = info.Address
    tbPhone.Text = info.PhoneNo
    Try

```

```

        cbBloodGroup.SelectedIndex = cbBloodGroup.Items.IndexOf(info.Blood_Group)
    Catch ex As Exception
        Debug.Print(ex.ToString())
    End Try
    tbName.Focus()
    cbBloodGroup.Enabled = False
End Sub

```

```

Private Sub FormDonorInfo_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load
    LoadBloodGroups()
    If updateId = -1 Then
        tbDonorId.Text = BBDatabase.GenerateId()
        tbName.Focus()
    Else
        LoadTheDonor()
    End If
End Sub

```

```

Private Sub btnClose_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnClose.Click
    Me.Dispose()
End Sub

```

```

Private Sub tbName_KeyUp(ByVal sender As Object, ByVal e As System.Windows.Forms.KeyEventArgs) Handles tbName.KeyUp
    If e.KeyCode = Keys.Enter Then
        If cbBloodGroup.Enabled = False Then
            tbAddress.Focus()
        Else
            cbBloodGroup.Focus()
        End If
    End If
End Sub

```

```

Private Sub tbPhone_KeyUp(ByVal sender As Object, ByVal e As System.Windows.Forms.KeyEventArgs) Handles tbPhone.KeyUp
    If e.KeyCode = Keys.Enter Then
        btnSave.PerformClick()
    End If
End Sub

```

```

Private Sub btnSave_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnSave.Click

```

```

Try
    ' Generate Donor Info Structure
    Dim info As BBDatabase.DonorInfo
    If Integer.TryParse(tbDonorId.Text.Trim, info.Donor_ID) = False Then
        MessageBox.Show("Severe Error... Invalid Donor ID", "Invalid Doonor ID",
        MessageBoxButtons.OK, MessageBoxIcon.Stop)
        Exit Sub
    End If

    If tbName.Text.Trim.Length < 1 Then
        tbName.Focus()
        Exit Sub
    End If
    info.Donor_Name = tbName.Text.Trim

    info.Blood_Group = cbBloodGroup.Text

    If tbAddress.Text.Trim.Length < 1 Then
        tbAddress.Focus()
        Exit Sub
    End If
    info.Address = tbAddress.Text.Trim

    If Long.TryParse(tbPhone.Text.Trim, info.PhoneNo) = False Then
        info.PhoneNo = 0
        tbPhone.Text = info.PhoneNo.ToString
    End If

    Dim db As New BBDatabase()
    If updateId = -1 Then
        If db.AppendDonor(info) = False Then
            Throw New Exception()
        End If

        If db.AddDonorToStock(info) = False Then
            Throw New Exception()
        End If
    Else
        If db.UpdateDonor(info) = False Then
            Throw New Exception()
        End If
    End If

    MessageBox.Show("Donor information saved successfully", "Donor Information Saved",
    MessageBoxButtons.OK, MessageBoxIcon.Information)
    Me.Dispose()
Catch ex As Exception
    MessageBox.Show("Error saving Donor Information", "Error in Save", MessageBoxButtons.OK,
    MessageBoxIcon.Stop)
End Try

```

```

End Sub

Private Sub cbBloodGroup_KeyUp(ByVal sender As Object, ByVal e As System.Windows.Forms.KeyEventArgs)
Handles cbBloodGroup.KeyUp
    If e.KeyCode = Keys.Enter Then
        tbAddress.Focus()
    End If
End Sub

End Sub

Public Sub New(ByVal id As Integer)

    ' This call is required by the designer.
    InitializeComponent()

    ' Add any initialization after the InitializeComponent() call.
    updateId = id
End Sub
End Class

```

SOURCE CODE: FORMDONORUPDATE.DESIGNER.VB

```

<Global.Microsoft.VisualBasic.CompilerServices.DesignerGenerated()> _
Partial Class FormDonorUpdate
    Inherits System.Windows.Forms.Form

    'Form overrides dispose to clean up the component list.
    <System.Diagnostics.DebuggerNonUserCode()> _
    Protected Overrides Sub Dispose(ByVal disposing As Boolean)
        Try
            If disposing AndAlso components IsNot Nothing Then
                components.Dispose()
            End If
        Finally
            MyBase.Dispose(disposing)
        End Try
    End Sub

    'Required by the Windows Form Designer
    Private components As System.ComponentModel.IContainer

    'NOTE: The following procedure is required by the Windows Form Designer
    'It can be modified using the Windows Form Designer.
    'Do not modify it using the code editor.
    <System.Diagnostics.DebuggerStepThrough()> _
    Private Sub InitializeComponent()
        Me.dgvDonor = New System.Windows.Forms.DataGridView()
        CType(Me.dgvDonor, System.ComponentModel.ISupportInitialize).BeginInit()

```

```

Me.SuspendLayout()
,

'dgvDonor
,

Me.dgvDonor.AllowUserToAddRows = False
Me.dgvDonor.AllowUserToDeleteRows = False
Me.dgvDonor.AllowUserToResizeColumns = False
Me.dgvDonor.AllowUserToResizeRows = False
Me.dgvDonor.AutoSizeColumnsMode = System.Windows.Forms.DataGridViewAutoSizeColumnsMode.Fill
Me.dgvDonor.ColumnHeadersHeightSizeMode =
System.Windows.Forms.DataGridColumnHeadersHeightSizeMode.AutoSize
Me.dgvDonor.Location = New System.Drawing.Point(3, 1)
Me.dgvDonor.MultiSelect = False
Me.dgvDonor.Name = "dgvDonor"
Me.dgvDonor.ReadOnly = True
Me.dgvDonor.Size = New System.Drawing.Size(679, 315)
Me.dgvDonor.TabIndex = 0
,

'FormDonorUpdate
,

Me.AutoScaleDimensions = New System.Drawing.SizeF(6.0!, 13.0!)
Me.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font
Me.ClientSize = New System.Drawing.Size(682, 310)
Me.Controls.Add(Me.dgvDonor)
Me.Name = "FormDonorUpdate"
Me.Text = "FormDonorUpdate"
CType(Me.dgvDonor, System.ComponentModel.ISupportInitialize).EndInit()
Me.ResumeLayout(False)

End Sub

Friend WithEvents dgvDonor As System.Windows.Forms.DataGridView
End Class

```

SOURCE CODE: FORMDONORUPDATE.VB

```

Public Class FormDonorUpdate

    Private Sub FormDonorUpdate_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
MyBase.Load
        dgvDonor.ColumnHeadersVisible = True
        dgvDonor.Columns.Add("DONOR_ID", "Donor ID")
        dgvDonor.Columns.Add("DONOR_NAME", "Name")
        dgvDonor.Columns.Add("BLOOD_GROUP", "Blood Group")
        dgvDonor.Columns.Add("ADDRESS", "Address")
        dgvDonor.Columns.Add("PHONENO", "Phone Number")

        LoadData()
    End Sub

```



```

Private Sub LoadData()
    Dim db As New BBDatabase()
    Dim infolist() As BBDatabase.DonorInfo = db.EnumDonors()
    If infolist Is Nothing Then
        MessageBox.Show("No Donor list found", "Donor list empty", MessageBoxButtons.OK,
        MessageBoxIcon.Stop)
        Me.Dispose()
        Exit Sub
    End If

    dgvDonor.Rows.Clear()
    For Each info As BBDatabase.DonorInfo In infolist
        Dim sarr() As String = {info.Donor_ID.ToString(), info.Donor_Name, info.Blood_Group,
        info.Address, info.PhoneNo.ToString()}
        dgvDonor.Rows.Add(sarr)
    Next

End Sub

Private Sub FormDonorUpdate_SizeChanged(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.SizeChanged
    dgvDonor.Width = Me.Width
    dgvDonor.Height = Me.Height
End Sub

Private Sub dgvDonor_CellDoubleClick(ByVal sender As Object, ByVal e As
System.Windows.Forms.DataGridViewCellEventArgs) Handles dgvDonor.CellDoubleClick
    Try
        Dim selrow As Integer = dgvDonor.SelectedCells.Item(0).RowIndex
        Dim id As Integer = dgvDonor.Rows(selrow).Cells.Item(0).Value
        Dim frm As New FormDonorInfo(id)
        frm.ShowDialog()
        LoadData()
    Catch ex As Exception

    End Try

End Sub
End Class

```

SOURCE CODE: FORMLOGIN.DESIGNER.VB

```
<Global.Microsoft.VisualBasic.CompilerServices.DesignerGenerated()> _
Partial Class FormLogin
    Inherits System.Windows.Forms.Form

    'Form overrides dispose to clean up the component list.
    <System.Diagnostics.DebuggerNonUserCode()> _
    Protected Overrides Sub Dispose(ByVal disposing As Boolean)
        Try
            If disposing AndAlso components IsNot Nothing Then
                components.Dispose()
            End If
        Finally
            MyBase.Dispose(disposing)
        End Try
    End Sub

    'Required by the Windows Form Designer
    Private components As System.ComponentModel.IContainer

    'NOTE: The following procedure is required by the Windows Form Designer
    'It can be modified using the Windows Form Designer.
    'Do not modify it using the code editor.
    <System.Diagnostics.DebuggerStepThrough()> _
    Private Sub InitializeComponent()
        Me.components = New System.ComponentModel.Container()
        Me.btnLogin = New System.Windows.Forms.Button()
        Me.Label1 = New System.Windows.Forms.Label()
        Me.Label2 = New System.Windows.Forms.Label()
        Me.tbUsername = New System.Windows.Forms.TextBox()
        Me.tbPassword = New System.Windows.Forms.TextBox()
        Me.lbTime = New System.Windows.Forms.Label()
        Me.Timer1 = New System.Windows.Forms.Timer(Me.components)
        Me.SuspendLayout()
        '
        'btnLogin
        '
        Me.btnLogin.BackColor = System.Drawing.Color.FromArgb(CType(CType(0, Byte), Integer), CType(CType(0, Byte), Integer), CType(CType(192, Byte), Integer))
        Me.btnLogin.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point, CType(0, Byte))
        Me.btnLogin.ForeColor = System.Drawing.Color.FromArgb(CType(CType(255, Byte), Integer), CType(CType(255, Byte), Integer), CType(CType(128, Byte), Integer))
        Me.btnLogin.Location = New System.Drawing.Point(299, 55)
        Me.btnLogin.Name = "btnLogin"
        Me.btnLogin.Size = New System.Drawing.Size(140, 30)
        Me.btnLogin.TabIndex = 3
        Me.btnLogin.Text = "Login"
```

```

Me.btnLogin.UseVisualStyleBackColor = False
,
'Label1
,
Me.Label1.AutoSize = True
    Me.Label1.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.Label1.ForeColor = System.Drawing.Color.Blue
    Me.Label1.Location = New System.Drawing.Point(37, 15)
    Me.Label1.Name = "Label1"
    Me.Label1.Size = New System.Drawing.Size(95, 23)
    Me.Label1.TabIndex = 2
    Me.Label1.Text = "User Name:"
,
'Label2
,
Me.Label2.AutoSize = True
    Me.Label2.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.Label2.ForeColor = System.Drawing.Color.Blue
    Me.Label2.Location = New System.Drawing.Point(37, 55)
    Me.Label2.Name = "Label2"
    Me.Label2.Size = New System.Drawing.Size(86, 23)
    Me.Label2.TabIndex = 3
    Me.Label2.Text = "Password: "
,
'tbUsername
,
Me.tbUsername.BackColor = System.Drawing.Color.Black
    Me.tbUsername.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.tbUsername.ForeColor = System.Drawing.Color.White
    Me.tbUsername.Location = New System.Drawing.Point(157, 15)
    Me.tbUsername.MaxLength = 32
    Me.tbUsername.Name = "tbUsername"
    Me.tbUsername.Size = New System.Drawing.Size(282, 30)
    Me.tbUsername.TabIndex = 1
,
'tbPassword
,
Me.tbPassword.BackColor = System.Drawing.Color.Black
    Me.tbPassword.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.tbPassword.ForeColor = System.Drawing.Color.White
    Me.tbPassword.Location = New System.Drawing.Point(157, 55)
    Me.tbPassword.MaxLength = 16
    Me.tbPassword.Name = "tbPassword"
    Me.tbPassword.PasswordChar = Global.Microsoft.VisualBasic.ChrW(42)
    Me.tbPassword.Size = New System.Drawing.Size(140, 30)

```

```

Me.tbPassword.TabIndex = 2
,
'lbTime
,
Me.lbTime.AutoSize = True
Me.lbTime.Font = New System.Drawing.Font("Comic Sans MS", 12.0!,
CType((System.Drawing.FontStyle.Bold Or System.Drawing.FontStyle.Italic), System.Drawing.FontStyle),
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
Me.lbTime.ForeColor = System.Drawing.Color.Red
Me.lbTime.Location = New System.Drawing.Point(335, 97)
Me.lbTime.Name = "lbTime"
Me.lbTime.Size = New System.Drawing.Size(60, 23)
Me.lbTime.TabIndex = 6
Me.lbTime.Text = "lbTime"
,
'Timer1
,
Me.Timer1.Enabled = True
Me.Timer1.Interval = 1000
,
'FormLogin
,
Me.AutoScaleDimensions = New System.Drawing.SizeF(6.0!, 13.0!)
Me.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font
Me.BackColor = System.Drawing.Color.Tan
Me.ClientSize = New System.Drawing.Size(478, 129)
Me.ControlBox = False
Me.Controls.Add(Me.lbTime)
Me.Controls.Add(Me.tbPassword)
Me.Controls.Add(Me.tbUsername)
Me.Controls.Add(Me.Label2)
Me.Controls.Add(Me.Label1)
Me.Controls.Add(Me.btnLogin)
Me.FormBorderStyle = System.Windows.Forms.FormBorderStyle.FixedDialog
Me.Name = "FormLogin"
Me.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen
Me.Text = "Blook Bank Management System : Login"
Me.ResumeLayout(False)
Me.PerformLayout()

End Sub

Friend WithEvents btnLogin As System.Windows.Forms.Button
Friend WithEvents Label1 As System.Windows.Forms.Label
Friend WithEvents Label2 As System.Windows.Forms.Label
Friend WithEvents tbUsername As System.Windows.Forms.TextBox
Friend WithEvents tbPassword As System.Windows.Forms.TextBox
Friend WithEvents lbTime As System.Windows.Forms.Label
Friend WithEvents Timer1 As System.Windows.Forms.Timer

End Class

```

SOURCE CODE: FORMLOGIN.VB

```
Public Class FormLogin
    Dim nTries As Integer = 0

    Private Sub FormLogin_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load
        lbTime.Text = ""
        tbUsername.Focus()
    End Sub

    Private Sub Timer1_Tick(ByVal sender As Object, ByVal e As System.EventArgs) Handles Timer1.Tick
        Dim tm As Date = Date.Now
        lbTime.Text = tm.ToString()
    End Sub

    Private Sub tbUsername_KeyUp(ByVal sender As Object, ByVal e As System.Windows.Forms.KeyEventArgs) Handles
tbUsername.KeyUp
        If e.KeyCode = Keys.Enter Then
            tbPassword.Focus()
            tbPassword.Text = ""
        End If
    End Sub

    Private Sub tbPassword_KeyUp(ByVal sender As Object, ByVal e As System.Windows.Forms.KeyEventArgs) Handles
tbPassword.KeyUp
        If e.KeyCode = Keys.Enter Then
            btnLogin.PerformClick()
        End If
    End Sub

    Private Sub btnLogin_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
btnLogin.Click
        Dim db As New BBDatabase
        If db.VerifyUser(tbUsername.Text, tbPassword.Text) = True Then
            Me.DialogResult = DialogResult.OK
            Me.Close()
            Exit Sub
        Else
            If nTries > 5 Then
                Me.DialogResult = DialogResult.Cancel
                Me.Close()
                Exit Sub
            End If
            nTries += 1
            MessageBox.Show("The Username or Password do not match. Please re-enter the username and password",
"Invalid Username and Password", MessageBoxButtons.OK, MessageBoxIcon.Hand)
            tbUsername.Focus()
            tbUsername.Text = ""
            tbPassword.Text = ""
        End If
    End Sub
End Class
```

```
End Sub
End Class
```

SOURCE CODE: FORMMAIN.DESIGNER.VB

```
<Global.Microsoft.VisualBasic.CompilerServices.DesignerGenerated()> _
Partial Class FormMain
    Inherits System.Windows.Forms.Form

    'Form overrides dispose to clean up the component list.
    <System.Diagnostics.DebuggerNonUserCode()> _
    Protected Overrides Sub Dispose(ByVal disposing As Boolean)
        Try
            If disposing AndAlso components IsNot Nothing Then
                components.Dispose()
            End If
        Finally
            MyBase.Dispose(disposing)
        End Try
    End Sub

    'Required by the Windows Form Designer
    Private components As System.ComponentModel.IContainer

    'NOTE: The following procedure is required by the Windows Form Designer
    'It can be modified using the Windows Form Designer.
    'Do not modify it using the code editor.
    <System.Diagnostics.DebuggerStepThrough()> _
    Private Sub InitializeComponent()
        Me.components = New System.ComponentModel.Container()
        Me.Timer1 = New System.Windows.Forms.Timer(Me.components)
        Me.MenuStrip1 = New System.Windows.Forms.MenuStrip()
        Me.SystemToolStripMenuItem = New System.Windows.Forms.ToolStripItem()
        Me.AddUserToolStripMenuItem = New System.Windows.Forms.ToolStripItem()
        Me.ExitToolStripMenuItem = New System.Windows.Forms.ToolStripItem()
        Me.StockToolStripMenuItem = New System.Windows.Forms.ToolStripItem()
        Me.ViewStockListToolStripMenuItem = New System.Windows.Forms.ToolStripItem()
        Me.PrintTodaysBloodStockToolStripMenuItem = New System.Windows.Forms.ToolStripItem()
        Me.DonorToolStripMenuItem = New System.Windows.Forms.ToolStripItem()
        Me.AddDonorToolStripMenuItem = New System.Windows.Forms.ToolStripItem()
        Me.ListDonorsToolStripMenuItem = New System.Windows.Forms.ToolStripItem()
        Me.CustomerToolStripMenuItem = New System.Windows.Forms.ToolStripItem()
        Me.NewToolStripMenuItem = New System.Windows.Forms.ToolStripItem()
        Me.ViewCustomersToolStripMenuItem = New System.Windows.Forms.ToolStripItem()
        Me.AboutToolStripMenuItem = New System.Windows.Forms.ToolStripItem()
        Me.AboutBloodBankManagementSystemToolStripMenuItem = New System.Windows.Forms.ToolStripItem()
        Me.StatusStrip1 = New System.Windows.Forms.StatusStrip()
        Me.tsTimer = New System.Windows.Forms.ToolStripStatusLabel()
        Me.MenuStrip1.SuspendLayout()
```

```

Me.StatusStrip1.SuspendLayout()
Me.SuspendLayout()
,
'Timer1
,
Me.Timer1.Interval = 1000
,
'MenuStrip1
,
    Me.MenuStrip1.Items.AddRange(New System.Windows.Forms.ToolStripItem() {Me.SystemToolStripMenuItem,
Me.StockToolStripMenuItem, Me.DonorToolStripMenuItem, Me.CustomerToolStripMenuItem,
Me.AboutToolStripMenuItem})
    Me.MenuStrip1.Location = New System.Drawing.Point(0, 0)
    Me.MenuStrip1.Name = "MenuStrip1"
    Me.MenuStrip1.Size = New System.Drawing.Size(789, 25)
    Me.MenuStrip1.TabIndex = 1
    Me.MenuStrip1.Text = "MenuStrip1"
,
'SystemToolStripMenuItem
,
    Me.SystemToolStripMenuItem.DropDownItems.AddRange(New System.Windows.Forms.ToolStripItem()
{Me.AddUserToolStripMenuItem, Me.ExitToolStripMenuItem})
    Me.SystemToolStripMenuItem.Name = "SystemToolStripMenuItem"
    Me.SystemToolStripMenuItem.Size = New System.Drawing.Size(70, 21)
    Me.SystemToolStripMenuItem.Text = "System"
,
'AddUserToolStripMenuItem
,
    Me.AddUserToolStripMenuItem.Name = "AddUserToolStripMenuItem"
    Me.AddUserToolStripMenuItem.Size = New System.Drawing.Size(162, 22)
    Me.AddUserToolStripMenuItem.Text = "Manage User"
,
'ExitToolStripMenuItem
,
    Me.ExitToolStripMenuItem.Name = "ExitToolStripMenuItem"
    Me.ExitToolStripMenuItem.Size = New System.Drawing.Size(162, 22)
    Me.ExitToolStripMenuItem.Text = "Exit"
,
'StockToolStripMenuItem
,
    Me.StockToolStripMenuItem.DropDownItems.AddRange(New System.Windows.Forms.ToolStripItem()
{Me.ViewStockListToolStripMenuItem, Me.PrintTodaysBloodStockToolStripMenuItem})
    Me.StockToolStripMenuItem.Name = "StockToolStripMenuItem"
    Me.StockToolStripMenuItem.Size = New System.Drawing.Size(57, 21)
    Me.StockToolStripMenuItem.Text = "Stock"
,
'ViewStockListToolStripMenuItem
,
    Me.ViewStockListToolStripMenuItem.Name = "ViewStockListToolStripMenuItem"

```

```

Me.ViewStockListToolStripMenuItem.Size = New System.Drawing.Size(271, 22)
Me.ViewStockListToolStripMenuItem.Text = "View Stock List"
,
'PrintTodaysBloodStockToolStripMenuItem
,
Me.PrintTodaysBloodStockToolStripMenuItem.Name = "PrintTodaysBloodStockToolStripMenuItem"
Me.PrintTodaysBloodStockToolStripMenuItem.Size = New System.Drawing.Size(271, 22)
Me.PrintTodaysBloodStockToolStripMenuItem.Text = "Report of Today's Blood Stock"
,
'DonorToolStripMenuItem
,
Me.DonorToolStripMenuItem.DropDownItems.AddRange(New System.Windows.Forms.ToolStripItem()
{Me.AddDonorToolStripMenuItem, Me.ListDonorsToolStripMenuItem})
Me.DonorToolStripMenuItem.Name = "DonorToolStripMenuItem"
Me.DonorToolStripMenuItem.Size = New System.Drawing.Size(60, 21)
Me.DonorToolStripMenuItem.Text = "Donor"
,
'AddDonorToolStripMenuItem
,
Me.AddDonorToolStripMenuItem.Name = "AddDonorToolStripMenuItem"
Me.AddDonorToolStripMenuItem.Size = New System.Drawing.Size(151, 22)
Me.AddDonorToolStripMenuItem.Text = "New Donor"
,
'ListDonorsToolStripMenuItem
,
Me.ListDonorsToolStripMenuItem.Name = "ListDonorsToolStripMenuItem"
Me.ListDonorsToolStripMenuItem.Size = New System.Drawing.Size(151, 22)
Me.ListDonorsToolStripMenuItem.Text = "List Donors"
,
'CustomerToolStripMenuItem
,
Me.CustomerToolStripMenuItem.DropDownItems.AddRange(New System.Windows.Forms.ToolStripItem()
{Me.NewToolStripMenuItem, Me.ViewCustomersToolStripMenuItem})
Me.CustomerToolStripMenuItem.Name = "CustomerToolStripMenuItem"
Me.CustomerToolStripMenuItem.Size = New System.Drawing.Size(85, 21)
Me.CustomerToolStripMenuItem.Text = "Customer"
,
'NewToolStripMenuItem
,
Me.NewToolStripMenuItem.Name = "NewToolStripMenuItem"
Me.NewToolStripMenuItem.Size = New System.Drawing.Size(318, 22)
Me.NewToolStripMenuItem.Text = "New Customer"
,
'ViewCustomersToolStripMenuItem
,
Me.ViewCustomersToolStripMenuItem.Name = "ViewCustomersToolStripMenuItem"
Me.ViewCustomersToolStripMenuItem.Size = New System.Drawing.Size(318, 22)
Me.ViewCustomersToolStripMenuItem.Text = "Show Purchase And Donation Report"
,

```



```

        'AboutToolStripMenuItem
    ,

        Me.AboutToolStripMenuItem.DropDownItems.AddRange(New System.Windows.Forms.ToolStripItem()
{Me.AboutBloodBankManagementSystemToolStripMenuItem})
    Me.AboutToolStripMenuItem.Name = "AboutToolStripMenuItem"
    Me.AboutToolStripMenuItem.Size = New System.Drawing.Size(57, 21)
    Me.AboutToolStripMenuItem.Text = "About"
    ,

    'AboutBloodBankManagementSystemToolStripMenuItem
    ,

        Me.AboutBloodBankManagementSystemToolStripMenuItem.Name =
"AboutBloodBankManagementSystemToolStripMenuItem"
    Me.AboutBloodBankManagementSystemToolStripMenuItem.Size = New System.Drawing.Size(333, 22)
    Me.AboutBloodBankManagementSystemToolStripMenuItem.Text = "About Blood Bank Management System"
    ,

    'StatusStrip1
    ,

    Me.StatusStrip1.BackColor = System.Drawing.SystemColors.ActiveBorder
    Me.StatusStrip1.Items.AddRange(New System.Windows.Forms.ToolStripItem() {Me.tsTimer})
    Me.StatusStrip1.Location = New System.Drawing.Point(0, 373)
    Me.StatusStrip1.Name = "StatusStrip1"
    Me.StatusStrip1.Size = New System.Drawing.Size(789, 22)
    Me.StatusStrip1.TabIndex = 2
    Me.StatusStrip1.Text = "StatusStrip1"
    ,

    'tsTimer
    ,

    Me.tsTimer.Name = "tsTimer"
    Me.tsTimer.Size = New System.Drawing.Size(149, 17)
    Me.tsTimer.Text = "ToolStripStatusLabel1"
    ,

    'FormMain
    ,

    Me.AutoScaleDimensions = New System.Drawing.SizeF(9.0!, 19.0!)
    Me.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font
    Me.BackColor = System.Drawing.Color.Black
    Me.ClientSize = New System.Drawing.Size(789, 395)
    Me.Controls.Add(Me.StatusStrip1)
    Me.Controls.Add(Me.MenuStrip1)

    Me.Font = New System.Drawing.Font("Times New Roman", 12.0!, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.ForeColor = System.Drawing.SystemColors.ActiveCaption
    Me.FormBorderStyle = System.Windows.Forms.FormBorderStyle.FixedDialog
    Me.IsMdiContainer = True
    Me.MainMenuStrip = Me.MenuStrip1
    Me.Margin = New System.Windows.Forms.Padding(4)
    Me.Name = "FormMain"
    Me.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen
    Me.Text = "Blood Bank Management System"

```

```

        Me.WindowState = System.Windows.Forms.FormWindowState.Maximized
        Me.MenuStrip1.ResumeLayout(False)
        Me.MenuStrip1.PerformLayout()
        Me.StatusStrip1.ResumeLayout(False)
        Me.StatusStrip1.PerformLayout()
        Me.ResumeLayout(False)
        Me.PerformLayout()

End Sub

Friend WithEvents Timer1 As System.Windows.Forms.Timer
Friend WithEvents MenuStrip1 As System.Windows.Forms.MenuStrip
Friend WithEvents SystemToolStripMenuItem As System.Windows.Forms.ToolStripItem
Friend WithEvents AddUserToolStripMenuItem As System.Windows.Forms.ToolStripItem
Friend WithEvents ExitToolStripMenuItem As System.Windows.Forms.ToolStripItem
Friend WithEvents StockToolStripMenuItem As System.Windows.Forms.ToolStripItem
Friend WithEvents ViewStockListToolStripMenuItem As System.Windows.Forms.ToolStripItem
Friend WithEvents DonorToolStripMenuItem As System.Windows.Forms.ToolStripItem
Friend WithEvents AddDonorToolStripMenuItem As System.Windows.Forms.ToolStripItem
Friend WithEvents ListDonorsToolStripMenuItem As System.Windows.Forms.ToolStripItem
Friend WithEvents CustomerToolStripMenuItem As System.Windows.Forms.ToolStripItem
Friend WithEvents NewToolStripMenuItem As System.Windows.Forms.ToolStripItem
Friend WithEvents ViewCustomersToolStripMenuItem As System.Windows.Forms.ToolStripItem
Friend WithEvents AboutToolStripMenuItem As System.Windows.Forms.ToolStripItem
Friend WithEvents AboutBloodBankManagementSystemToolStripMenuItem As
System.Windows.Forms.ToolStripItem

Friend WithEvents StatusStrip1 As System.Windows.Forms.StatusStrip
Friend WithEvents tsTimer As System.Windows.Forms.ToolStripStatusLabel
Friend WithEvents PrintTodaysBloodStockToolStripMenuItem As System.Windows.Forms.ToolStripItem

End Class

```

SOURCE CODE: FORMREPORTVIEWER.DESIGNER.VB

```

<Global.Microsoft.VisualBasic.CompilerServices.DesignerGenerated()> _
Partial Class FormReportViewer
    Inherits System.Windows.Forms.Form

    'Form overrides dispose to clean up the component list.
    <System.Diagnostics.DebuggerNonUserCode()> _
    Protected Overrides Sub Dispose(ByVal disposing As Boolean)
        Try
            If disposing AndAlso components IsNot Nothing Then
                components.Dispose()
            End If
        Finally
            MyBase.Dispose(disposing)
        End Try
    End Sub

```

'Required by the Windows Form Designer

Private components As System.ComponentModel.IContainer

'NOTE: The following procedure is required by the Windows Form Designer

'It can be modified using the Windows Form Designer.

'Do not modify it using the code editor.

<System.Diagnostics.DebuggerStepThrough()> _

Private Sub InitializeComponent()

Me.wbReport = New System.Windows.Forms.WebBrowser()

Me.SuspendLayout()

,

'wbReport

,

Me.wbReport.Dock = System.Windows.Forms.DockStyle.Fill

Me.wbReport.Location = New System.Drawing.Point(0, 0)

Me.wbReport.MinimumSize = New System.Drawing.Size(20, 20)

Me.wbReport.Name = "wbReport"

Me.wbReport.Size = New System.Drawing.Size(292, 270)

Me.wbReport.TabIndex = 0

,

'FormReportViewer

,

Me.AutoScaleDimensions = New System.Drawing.SizeF(6.0!, 13.0!)

Me.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font

Me.ClientSize = New System.Drawing.Size(292, 270)

Me.Controls.Add(Me.wbReport)

Me.Name = "FormReportViewer"

Me.Text = "ReportViewer"

Me.ResumeLayout(False)

End Sub

Friend WithEvents wbReport As System.Windows.Forms.WebBrowser

End Class

SOURCE CODE: FORMREPORTVIEWER.VB

Public Class FormReportViewer

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

Me.WindowState = FormWindowState.Maximized

End Sub

Public Sub ShowReportWindow(ByVal mdiForm As Form, ByVal strPath As String)

wbReport.Url = New Uri(strPath)

If mdiForm Is Nothing Then

Me.ShowDialog()

Exit Sub

End If

```

        If mdiForm.IsMdiContainer = True Then
            Me.MdiParent = mdiForm
            Me.Show()
        Else
            Me.ShowDialog()
        End If
    End Sub
End Class

```

End Class

SOURCE CODE: FORMSTOCKLIST.DESIGNER.VB

```

<Global.Microsoft.VisualBasic.CompilerServices.DesignerGenerated()> _
Partial Class FormStockList
    Inherits System.Windows.Forms.Form

    'Form overrides dispose to clean up the component list.
    <System.Diagnostics.DebuggerNonUserCode()> _
    Protected Overrides Sub Dispose(ByVal disposing As Boolean)
        Try
            If disposing AndAlso components IsNot Nothing Then
                components.Dispose()
            End If
        Finally
            MyBase.Dispose(disposing)
        End Try
    End Sub

    'Required by the Windows Form Designer
    Private components As System.ComponentModel.IContainer

    'NOTE: The following procedure is required by the Windows Form Designer
    'It can be modified using the Windows Form Designer.
    'Do not modify it using the code editor.
    <System.Diagnostics.DebuggerStepThrough()> _
    Private Sub InitializeComponent()
        Me.dgvStock = New System.Windows.Forms.DataGridView()
        CType(Me.dgvStock, System.ComponentModel.ISupportInitialize).BeginInit()
        Me.SuspendLayout()
        ,
        'dgvStock
        ,
        Me.dgvStock.AllowUserToAddRows = False
        Me.dgvStock.AllowUserToDeleteRows = False
        Me.dgvStock.AllowUserToResizeColumns = False
        Me.dgvStock.AllowUserToResizeRows = False
        Me.dgvStock.AutoSizeColumnsMode = System.Windows.Forms.DataGridViewAutoSizeColumnsMode.Fill
        Me.dgvStock.ColumnHeadersHeightSizeMode =
    
```

```

System.Windows.Forms.DataGridViewColumnHeadersHeightSizeMode.AutoSize
    Me.dgvStock.Dock = System.Windows.Forms.DockStyle.Fill
    Me.dgvStock.Location = New System.Drawing.Point(0, 0)
    Me.dgvStock.MultiSelect = False
    Me.dgvStock.Name = "dgvStock"
    Me.dgvStock.ReadOnly = True
    Me.dgvStock.Size = New System.Drawing.Size(425, 300)
    Me.dgvStock.TabIndex = 0
    ,
    'FormStockList
    ,

    Me.AutoScaleDimensions = New System.Drawing.SizeF(6.0!, 13.0!)
    Me.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font
    Me.ClientSize = New System.Drawing.Size(425, 300)
    Me.Controls.Add(Me.dgvStock)
    Me.Name = "FormStockList"
    Me.Text = "Stock List"
    CType(Me.dgvStock, System.ComponentModel.ISupportInitialize).EndInit()
    Me.ResumeLayout(False)

End Sub

Friend WithEvents dgvStock As System.Windows.Forms.DataGridView
End Class

```

SOURCE CODE: FORMSTOCKLIST.VB

```

Public Class FormStockList

    Private Sub FormStockList_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load
        dgvStock.Columns.Add("STOCK_ID", "Stock ID")
        dgvStock.Columns.Add("BLOOD_GROUP", "Blood Group")
        dgvStock.Columns.Add("PACKETS", "Packets")
        dgvStock.Columns.Add("RATE", "Rate")
        dgvStock.Columns.Add("PURCHASE_DATE", "Purchase Date")
        dgvStock.Columns.Add("EXP_DATE", "Expiry Date")

        LoadStockData()
    End Sub

    Private Sub LoadStockData()
        Dim db As New BBDatabase()
        Dim sinfo() As BBDatabase.StockInfo = db.EnumStock()
        If sinfo Is Nothing Then
            MessageBox.Show("No Stock list found", "Stock list empty", MessageBoxButtons.OK, MessageBoxIcon.Stop)
            Me.Dispose()
            Exit Sub
        End If
    End If

```

```

dgvStock.Rows.Clear()
For Each info In sinfo
    Dim sarr() As String = {info.Stock_ID.ToString(), info.Blood_Group, info.Packets.ToString,
info.Rate.ToString(), info.Purchase_Date.ToString("dd-MMM-yyyy"), info.Exp_Date.ToString("dd-MMM-yyyy")}
    dgvStock.Rows.Add(sarr)
Next
End Sub

```

```

Private Sub dgvStock_CellDoubleClick(ByVal sender As Object, ByVal e As
System.Windows.Forms.DataGridViewCellEventArgs) Handles dgvStock.CellDoubleClick
    Dim row As Integer = dgvStock.SelectedCells.Item(0).RowIndex
    Dim col As Integer = dgvStock.SelectedCells.Item(0).ColumnIndex
    If (row = -1) Or (col = -1) Then
        Exit Sub
    End If

    Dim id As Integer = -1
    Integer.TryParse(dgvStock.Rows(row).Cells.Item("STOCK_ID").Value.ToString(), id)
    If id = -1 Then
        Exit Sub
    End If

    Dim colName As String = dgvStock.Columns.Item(col).HeaderText.ToLower().Trim()
    If colName = "rate" Then
        UpdateRateOf(id, dgvStock.Rows(row).Cells.Item("RATE").Value.ToString())
    ElseIf colName = "expiry date" Then
        UpdateExpiryDateOf(id, _
            dgvStock.Rows(row).Cells.Item("PURCHASE_DATE").Value.ToString(), _
            dgvStock.Rows(row).Cells.Item("EXP_DATE").Value.ToString())
    End If
End Sub

```

```

Private Sub UpdateRateOf(ByVal id As Integer, ByVal defVal As String)
    Try
        Dim s As String
        s = InputBox("Enter new rate: ", "Modify Rate", defVal)
        Dim rt As Double = 0
        Double.TryParse(defVal, rt)
        Double.TryParse(s, rt)

        Dim db As New BBDatabase()
        If db.UpdateStockRate(id, rt) = False Then
            MessageBox.Show("Cannot update the Rate of the Selected Stock #" + id.ToString(), "Error:
Update Denied", MessageBoxButtons.OK, MessageBoxIcon.Hand)
        End If
    End If
End Sub

```

```

        LoadStockData()
    Catch ex As Exception

    End Try

End Sub

Private Sub UpdateExpiryDateOf(ByVal id As Integer, ByVal s_purchasedate As String, ByVal s_expdate As
String)
    Try
        Dim purchaseDate As Date = Date.Today
        Date.TryParse(s_purchasedate, purchaseDate)
        Dim expDate As Date = purchaseDate
        Date.TryParse(s_expdate, expDate)

        Dim nYears, nMonths As Integer
        nYears = expDate.Year - purchaseDate.Year
        nMonths = expDate.Month - purchaseDate.Month

        Dim tMonths As Integer
        tMonths = nYears * 12 + nMonths

        Dim s As String
        s = InputBox("Enter total number of months before the Sample Expires: ", "Blood Sample Life
Settings (in Month)", tMonths.ToString())
        Integer.TryParse(s, tMonths)

        expDate = purchaseDate
        expDate = expDate.AddMonths(tMonths)

        Dim db As New BBDatabase()
        If db.UpdateStockExpDate(id, expDate) = False Then
            MessageBox.Show("Cannot update the Expiry Date of the Selected Stock #" + id.ToString(),
"Error: Update Denied", MessageBoxButtons.OK, MessageBoxIcon.Hand)
            Exit Sub
        End If
        LoadStockData()
    Catch ex As Exception

    End Try
End Sub
End Class

```

SOURCE CODE: FORMUSERACCOUNT.DESIGNER.VB

```
<Global.Microsoft.VisualBasic.CompilerServices.DesignerGenerated()> _
Partial Class FormUserAccount
    Inherits System.Windows.Forms.Form

    'Form overrides dispose to clean up the component list.
    <System.Diagnostics.DebuggerNonUserCode()> _
    Protected Overrides Sub Dispose(ByVal disposing As Boolean)
        Try
            If disposing AndAlso components IsNot Nothing Then
                components.Dispose()
            End If
        Finally
            MyBase.Dispose(disposing)
        End Try
    End Sub

    'Required by the Windows Form Designer
    Private components As System.ComponentModel.IContainer

    'NOTE: The following procedure is required by the Windows Form Designer
    'It can be modified using the Windows Form Designer.
    'Do not modify it using the code editor.
    <System.Diagnostics.DebuggerStepThrough()> _
    Private Sub InitializeComponent()
        Me.Label1 = New System.Windows.Forms.Label()
        Me.Label2 = New System.Windows.Forms.Label()
        Me.tbUsername = New System.Windows.Forms.TextBox()
        Me.tbPassword = New System.Windows.Forms.TextBox()
        Me.btnNew = New System.Windows.Forms.Button()
        Me.btnAdd = New System.Windows.Forms.Button()
        Me.btnUpdate = New System.Windows.Forms.Button()
        Me.btnDelete = New System.Windows.Forms.Button()
        Me.lbUsers = New System.Windows.Forms.ListBox()
        Me.SuspendLayout()
        '
        'Label1
        '
        Me.Label1.AutoSize = True
        Me.Label1.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
        Me.Label1.ForeColor = System.Drawing.Color.Lime
        Me.Label1.Location = New System.Drawing.Point(15, 14)
        Me.Label1.Name = "Label1"
        Me.Label1.Size = New System.Drawing.Size(92, 23)
        Me.Label1.TabIndex = 0
        Me.Label1.Text = "Username:"
    End Sub
```



```

'Label2
,

Me.Label2.AutoSize = True
    Me.Label2.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.Label2.ForeColor = System.Drawing.Color.Lime
    Me.Label2.Location = New System.Drawing.Point(15, 55)
    Me.Label2.Name = "Label2"
    Me.Label2.Size = New System.Drawing.Size(87, 23)
    Me.Label2.TabIndex = 1
    Me.Label2.Text = "Password:"
,

'tbUsername
,

    Me.tbUsername.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.tbUsername.Location = New System.Drawing.Point(113, 14)
    Me.tbUsername.MaxLength = 32
    Me.tbUsername.Name = "tbUsername"
    Me.tbUsername.Size = New System.Drawing.Size(266, 30)
    Me.tbUsername.TabIndex = 2
,

'tbPassword
,

    Me.tbPassword.Font = New System.Drawing.Font("Comic Sans MS", 12.0!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.tbPassword.Location = New System.Drawing.Point(113, 55)
    Me.tbPassword.MaxLength = 16
    Me.tbPassword.Name = "tbPassword"
    Me.tbPassword.PasswordChar = Global.Microsoft.VisualBasic.ChrW(42)
    Me.tbPassword.Size = New System.Drawing.Size(266, 30)
    Me.tbPassword.TabIndex = 3
,

'btnNew
,

Me.btnNew.BackColor = System.Drawing.Color.RosyBrown
    Me.btnNew.Font = New System.Drawing.Font("Comic Sans MS", 14.25!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
    Me.btnNew.ForeColor = System.Drawing.Color.White
    Me.btnNew.Location = New System.Drawing.Point(19, 110)
    Me.btnNew.Name = "btnNew"
    Me.btnNew.Size = New System.Drawing.Size(166, 44)
    Me.btnNew.TabIndex = 4
    Me.btnNew.Text = "New"
    Me.btnNew.UseVisualStyleBackColor = False
,

'btnAdd
,

Me.btnAdd.BackColor = System.Drawing.Color.RosyBrown

```

```

        Me.btnAdd.Font = New System.Drawing.Font("Comic Sans MS", 14.25!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
        Me.btnAdd.ForeColor = System.Drawing.Color.White
        Me.btnAdd.Location = New System.Drawing.Point(213, 110)
        Me.btnAdd.Name = "btnAdd"
        Me.btnAdd.Size = New System.Drawing.Size(166, 44)
        Me.btnAdd.TabIndex = 5
        Me.btnAdd.Text = "Add"
        Me.btnAdd.UseVisualStyleBackColor = False
        ,
        'btnUpdate
        ,
        Me.btnUpdate.BackColor = System.Drawing.Color.RosyBrown
        Me.btnUpdate.Font = New System.Drawing.Font("Comic Sans MS", 14.25!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
        Me.btnUpdate.ForeColor = System.Drawing.Color.White
        Me.btnUpdate.Location = New System.Drawing.Point(19, 181)
        Me.btnUpdate.Name = "btnUpdate"
        Me.btnUpdate.Size = New System.Drawing.Size(166, 44)
        Me.btnUpdate.TabIndex = 6
        Me.btnUpdate.Text = "Update"
        Me.btnUpdate.UseVisualStyleBackColor = False
        ,
        'btnDelete
        ,
        Me.btnDelete.BackColor = System.Drawing.Color.RosyBrown
        Me.btnDelete.Font = New System.Drawing.Font("Comic Sans MS", 14.25!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
        Me.btnDelete.ForeColor = System.Drawing.Color.White
        Me.btnDelete.Location = New System.Drawing.Point(213, 181)
        Me.btnDelete.Name = "btnDelete"
        Me.btnDelete.Size = New System.Drawing.Size(166, 44)
        Me.btnDelete.TabIndex = 7
        Me.btnDelete.Text = "Delete"
        Me.btnDelete.UseVisualStyleBackColor = False
        ,
        'lbUsers
        ,
        Me.lbUsers.BackColor = System.Drawing.Color.Black
        Me.lbUsers.Font = New System.Drawing.Font("Courier New", 9.75!, System.Drawing.FontStyle.Bold,
System.Drawing.GraphicsUnit.Point, CType(0, Byte))
        Me.lbUsers.ForeColor = System.Drawing.Color.Cyan
        Me.lbUsers.FormattingEnabled = True
        Me.lbUsers.ItemHeight = 16
        Me.lbUsers.Location = New System.Drawing.Point(395, 14)
        Me.lbUsers.Name = "lbUsers"
        Me.lbUsers.Size = New System.Drawing.Size(208, 212)
        Me.lbUsers.TabIndex = 8
        ,

```

```

'FormUserAccount
'
Me.AutoScaleDimensions = New System.Drawing.SizeF(6.0!, 13.0!)
Me.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font
Me.BackColor = System.Drawing.Color.DarkGray
Me.ClientSize = New System.Drawing.Size(623, 242)
Me.Controls.Add(Me.lbUsers)
Me.Controls.Add(Me.btnDelete)
Me.Controls.Add(Me.btnUpdate)
Me.Controls.Add(Me.btnAdd)
Me.Controls.Add(Me.btnNew)
Me.Controls.Add(Me.tbPassword)
Me.Controls.Add(Me.tbUsername)
Me.Controls.Add(Me.Label2)
Me.Controls.Add(Me.Label1)
Me.FormBorderStyle = System.Windows.Forms.FormBorderStyle.FixedDialog
Me.MaximizeBox = False
Me.Name = "FormUserAccount"
Me.Text = "User Account Management"
Me.ResumeLayout(False)
Me.PerformLayout()

End Sub

Friend WithEvents Label1 As System.Windows.Forms.Label
Friend WithEvents Label2 As System.Windows.Forms.Label
Friend WithEvents tbUsername As System.Windows.Forms.TextBox
Friend WithEvents tbPassword As System.Windows.Forms.TextBox
Friend WithEvents btnNew As System.Windows.Forms.Button
Friend WithEvents btnAdd As System.Windows.Forms.Button
Friend WithEvents btnUpdate As System.Windows.Forms.Button
Friend WithEvents btnDelete As System.Windows.Forms.Button
Friend WithEvents lbUsers As System.Windows.Forms.ListBox
End Class

```

SOURCE CODE: FORMUSERACCOUNT.VB

```

Public Class FormUserAccount

    Private Sub FormUserAccount_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load
        tbUsername.Enabled = False
        tbPassword.Enabled = False
        btnNew.Enabled = True
        btnAdd.Enabled = False
        btnUpdate.Enabled = False
        btnDelete.Enabled = False
        lbUsers.Enabled = True
        Dim db As New BBDatabase()
        db.EnumAccounts(AddressOf LoadAllAccounts, Nothing)
    End Sub

```

```

Private Sub LoadAllAccounts(ByVal username As String, ByVal pass As String, ByVal obj As Object)
    lbUsers.Items.Add(username)
End Sub

Private Sub btnNew_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
btnNew.Click
    tbUsername.Enabled = True
    tbPassword.Enabled = True
    lbUsers.SelectedIndex = -1
    btnUpdate.Enabled = False
    btnDelete.Enabled = False
    tbUsername.Text = ""
    tbPassword.Text = ""
    tbUsername.Focus()
End Sub

Private Sub btnAdd_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
btnAdd.Click
    Dim db As New BBDatabase()
    Dim username As String = tbUsername.Text.Trim
    Dim password As String = tbPassword.Text.Trim
    Dim tPass As String = ""
    If db.GetPassword(username, tPass) = True Then
        MessageBox.Show("Username already exist", "Cannot add user", MessageBoxButtons.OK,
        MessageBoxIcon.Hand)
        tbUsername.Text = ""
        tbPassword.Text = ""
        tbUsername.Focus()
        Exit Sub
    End If

    If db.AppendUser(username, password) = False Then
        MessageBox.Show("User account cannot be created. Please try again later.", "Cannot add user",
        MessageBoxButtons.OK, MessageBoxIcon.Hand)
        tbUsername.Focus()
        Exit Sub
    End If

    MessageBox.Show("User account created successfully", "New User Added", MessageBoxButtons.OK,
    MessageBoxIcon.Information)
    lbUsers.SelectedIndex = lbUsers.Items.Add(username)
End Sub

Private Sub btnUpdate_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
btnUpdate.Click
    Dim db As New BBDatabase()
    Dim username As String = lbUsers.Items(lbUsers.SelectedIndex)
    Dim password As String = tbPassword.Text

```

```

        If db.UpdateUser(username, password) = False Then
            MessageBox.Show("Cannot update the user", "Failed to update user", MessageBoxButtons.OK,
MessageBoxIcon.Error)
            Exit Sub
        End If
        MessageBox.Show("User account updated successfully", "User account updated", MessageBoxButtons.OK,
MessageBoxIcon.Information)

    End Sub

    Private Sub btnDelete_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
btnDelete.Click
        Dim db As New BBDatabase()
        Dim username As String = lbUsers.Items(lbUsers.SelectedIndex)
        If db.DeleteUser(username) = False Then
            MessageBox.Show("Cannot delete the user", "Failed to remove user", MessageBoxButtons.OK,
MessageBoxIcon.Error)
            Exit Sub
        End If
        lbUsers.Items.RemoveAt(lbUsers.SelectedIndex)
        If lbUsers.Items.Count < 1 Then
            lbUsers.SelectedIndex = -1
        Else
            lbUsers.SelectedIndex = 0
        End If

        MessageBox.Show("User account deleted successfully", "User removed", MessageBoxButtons.OK,
MessageBoxIcon.Information)
    End Sub

    Private Sub lbUsers_SelectedIndexChanged(ByVal sender As Object, ByVal e As System.EventArgs) Handles
lbUsers.SelectedIndexChanged
        If lbUsers.SelectedIndex = -1 Then
            btnNew.Enabled = True
            btnAdd.Enabled = False
            btnUpdate.Enabled = False
            btnDelete.Enabled = False
            Exit Sub
        End If

        tbUsername.Enabled = False
        tbPassword.Enabled = True
        btnAdd.Enabled = False
        btnDelete.Enabled = True
        btnUpdate.Enabled = True

        Dim username As String = lbUsers.Items(lbUsers.SelectedIndex)
        Dim pass As String = ""

```

```

        Dim db As New BBDatabase()
        If db.GetPassword(username, pass) = False Then
            MessageBox.Show("Cannot get the user account details. ", "Severe Error with database",
                MessageBoxButtons.OK, MessageBoxIcon.Stop)
            Me.Close()
            Exit Sub
        End If

        tbUsername.Text = username
        tbPassword.Text = pass
        tbPassword.Focus()
    End Sub

    Private Sub tbUsername_KeyUp(ByVal sender As Object, ByVal e As System.Windows.Forms.KeyEventArgs)
        Handles tbUsername.KeyUp
        If e.KeyCode = Keys.Enter Then
            tbPassword.Focus()
            tbPassword.Text = ""
        End If
    End Sub

    Private Sub tbUsername_TextChanged(ByVal sender As Object, ByVal e As System.EventArgs) Handles
        tbUsername.TextChanged
        If btnDelete.Enabled = False Then
            ' New user is being added
            If tbUsername.Text.Trim.Length > 0 Then
                btnAdd.Enabled = True
            Else
                btnAdd.Enabled = False
            End If
        End If
    End Sub

    Private Sub tbPassword_KeyUp(ByVal sender As Object, ByVal e As System.Windows.Forms.KeyEventArgs)
        Handles tbPassword.KeyUp
        If e.KeyCode = Keys.Enter Then
            If btnUpdate.Enabled = True Then
                btnUpdate.PerformClick()
            Exit Sub
            End If

            If btnAdd.Enabled = True Then
                btnAdd.PerformClick()
            Exit Sub
            End If
        End If
    End Sub

```

End Class