



Daftar Pustaka

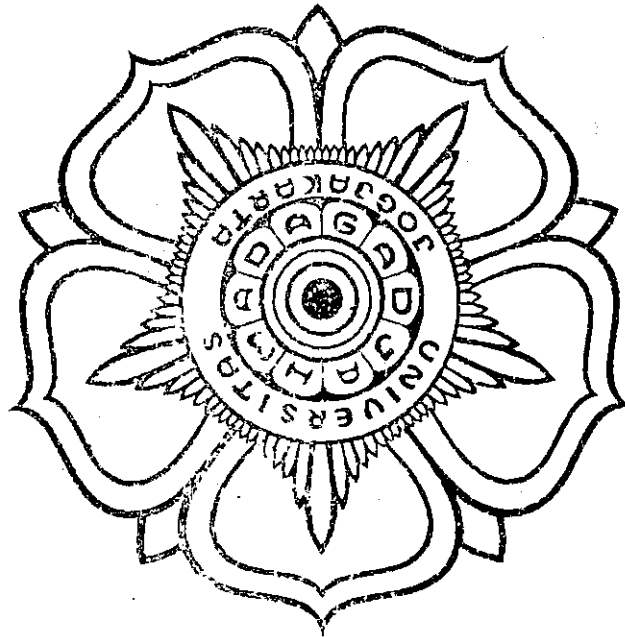
- Corvoisier, Sandrine dan Gropp, Reint, 2001, "*Contestability, Technology and Banking in Social Science Research Network*"
- Hauswald, Robert dan Marquez, Robert, 2001, "*Information Technology and Credit Market in Social Science Research Network*".
[Http://Wartahalo-1@telkomsel.co.id](http://Wartahalo-1@telkomsel.co.id)
- Indrajit, Richardus Eko, 2000, "*Manajemen Sistem Informasi dan Teknologi Informasi*", Elexmedia Komputindo
- Jordan, John dan Katz, Jane, 1999, "*Banking in the age of Information in Federal Reserve Bank of Boston Regional Review*".
- Jogiyanto. H.M,1993, *Analisis dan Desain Sistem Informasi*, Yogyakarta, Andi offset.
- Kasmir, 2002, "*Dasar-Dasar Perbankan*", Rajawali Pers, Jakarta.
- Kurniawan, B., 1997, *Belajar Sendiri Microsoft Access for Windows*, Jakarta, PT. Elex Media Komputindo.
- Khang, Bustam, 2002, *Trik Pemograman Aplikasi Berbasis SMS*, Jakarta, PT. Elex Media Komputindo.
- Kurniadi, B., 1997, *Belajar Sendiri Microsoft Visual Basic 6*, Jakarta, PT. Elex Media Komputindo.
- Kadir, A.,1998, "*Konsep dan Tuntunan Praktis Basis Data*", Yogyakarta, Andi Offset.
- Pamungkas, 2000, "*Tip dan Trik Microsoft Visual Basic 6.0*", Jakarta, PT. Elexmedia Komputindo.
- Porter, Michael E., 1985, "*Competitive Advantage- Creating a Sustaining Superior Performance*", The Free Press, New York.
- Silalahi, N., 2002, "*Layanan Informasi dan Telekomunikasi Mobil Nirkabel*", Jakarta, PT. Elexmedia Komputindo





Layanan notifikasi pemakaian kartu kredit berbasis SMS
ZERISKA, Ehrlich Stevans, Dr.Ir. Lukito E. Nugroho, MSc
Universitas Gadjah Mada, 2003 | Diunduh dari <http://etd.repository.ugm.ac.id/>

UNIVERSITAS
GADJAH MADA





UNIVERSITAS
GADJAH MADA

Layanan notifikasi pemakaian kartu kredit berbasis SMS
ZERISKA, Ehrlich Stevans, Dr.Ir. Lukito E. Nugroho, MSc
Universitas Gadjah Mada, 2003 | Diunduh dari <http://etd.repository.ugm.ac.id/>

LAMPIRAN



LAMPIRAN A

FORM

1. frmMain (rmMain.frm)

```
Private Sub MDIForm_DblClick()
    frmSetupSimulasi.Show
End Sub
```

```
Private Sub mnuActivateSMSService_Click()
    '--cek apakah parameter sudah diisikan
    ' jika belum, maka dibatalkan
    sSQL = "SELECT COUNT(*) as fn_jum_data" _
        & " FROM t_parameter"
    oRS1.Open sSQL, oConn, adOpenForwardOnly
```

```
    If oRS1.EOF Then
        MsgBox "Parameter not set yet ", vbInformation + vbOKOnly
    Else
        If oRS1!fn_jum_data = 0 Then
            MsgBox "Parameter not set yet ", vbInformation + vbOKOnly
        Else
            frmSMSService.Show
        End If
    End If
    oRS1.Close
```

```
End Sub
```

```
Private Sub mnuExit_Click()
    End
End Sub
```

```
Private Sub mnuReport_Click()
    frmReport.Show
End Sub
```

```
Private Sub mnuSetupDataNasabah_Click()
    frmSetupDataNasabah.Show
End Sub
```

```
Private Sub mnuSetupKurs_Click()
    frmSetupKurs.Show
End Sub
```

```
Private Sub mnuSetupParameter_Click()
    frmSetupParameter.Show
End Sub
```

```
Private Sub mnuSetupSMSC_Click()
    frmSetupSMSC.Show
End Sub
```



2. frmReport (frmReport.frm)

```

Dim bReceive As Boolean

Private Sub cmdExit_Click()
  Unload Me
End Sub

Function HidePassword(ByVal sStr As String) As String
  Dim sWord() As String
  Dim sRetval As String

  sWord() = Split(sStr)
  Select Case UCase(sWord(0))
    Case "LOGIN", "SALDO", "TAGIHAN", "PIN"
      For i = 0 To UBound(sWord())
        If i = 2 Then
          sRetval = sRetval & " " & "*"
        Else
          sRetval = sRetval & " " & sWord(i)
        End If
      Next i

    Case Else
      sRetval = sStr
  End Select

  HidePassword = Trim(sRetval)
End Function

Private Sub Command1_Click()
  If MsgBox("Hapus SMS Report ?", vbYesNo + vbQuestion) = vbYes Then
    sSQL = " DELETE FROM t_msg_trima WHERE fn_reply = 1 "

    oConn.Execute sSQL

    grdData.Rows = 1
  End If
End Sub

Private Sub Command2_Click()
  ' --hapus dari grid utk data terpilih
  With grdData
    If .Rows >= 3 Then
      For i = 2 To .Rows - 1
        For j = 0 To 3
          .TextMatrix(i - 1, j) = .TextMatrix(i, j)
        Next j
      Next i
    End If
    .Rows = .Rows - 1
  End With
End Sub

Private Sub Form_Load()
  Me.Top = (frmMain.Height - 950 - Me.Height) / 2
  Me.Left = (frmMain.Width - 200 - Me.Width) / 2

  AksesPort = False

  With grdData

```



UNIVERSITAS
 GADJAH MADA

```
.Cols = 5
.Rows = 2
.CoWidth(0) = 600
.CoWidth(1) = 1700
.CoWidth(2) = 2300
.CoWidth(3) = 11000

.TextMatrix(.Row - 1, 0) = "No."
.TextMatrix(.Row - 1, 1) = "Sender"
.TextMatrix(.Row - 1, 2) = "Time"
.TextMatrix(.Row - 1, 3) = "Messeges"
.TextMatrix(.Row - 1, 4) = "ID"
End With

bReceive = True

'---ambil msg di database yg belon di reply
sSQL = " SELECT      * " _
      & " FROM      t_msg_trima " _
      & " WHERE      fn_reply = 1 "
oRS.Open sSQL, oConn, adOpenForwardOnly

If Not oRS.EOF Then
  Do While Not oRS.EOF
    With grdData
      '---kasih no.urut
      If .Rows = 2 Then
        .TextMatrix(.Rows - 1, 0) = 1
      Else
        .TextMatrix(.Rows - 1, 0) = .TextMatrix(.Rows - 2, 0) + 1
      End If

      '---sender
      .TextMatrix(.Rows - 1, 1) = Trim(oRS!fs_pengirim)

      '---date time
      .TextMatrix(.Rows - 1, 2) = Trim(oRS!fd_tgl_terima_jam)

      '---msg text
      On Error Resume Next
      .TextMatrix(.Rows - 1, 3) = Trim(oRS!fs_isi)
      .TextMatrix(.Rows - 1, 3) = HidePassword(Trim(oRS!fs_isi))
      If Err.Number <> 0 Or Trim(oRS!fs_isi) = "" Then
        .TextMatrix(.Rows - 1, 3) = "#empty#"
      End If

      .Rows = .Rows + 1

    End With
    oRS.MoveNext

  Loop

End If
oRS.Close

End Sub

Private Sub grdData_KeyDown(KeyCode As Integer, Shift As Integer)
  If KeyCode = vbKeyDelete Then
    '---pindahkan row di bawahnya
  End If
End Sub
```



' jika bukan baris terakhir

```
'sSQL = "select "
If MsgBox("Hapus Data ?", vbQuestion + vbYesNo) = vbNo Then
  Exit Sub
End If

sSQL = " DELETE   " _
      & " FROM     t_msg_trima " _
      & " WHERE    fd_tgl_terima_jam = '" & grdData.TextMatrix(grdData.Row, 2) & "' "
oConn.Execute sSQL

If grdData.Row <> grdData.Rows - 1 Then
  For i = grdData.Row To grdData.Rows - 2
    grdData.TextMatrix(i, 0) = grdData.TextMatrix(i + 1, 0)
    grdData.TextMatrix(i, 1) = grdData.TextMatrix(i + 1, 1)
    grdData.TextMatrix(i, 2) = grdData.TextMatrix(i + 1, 2)
    grdData.TextMatrix(i, 3) = grdData.TextMatrix(i + 1, 3)
  Next i

End If

grdData.Rows = grdData.Rows - 1
End If
End Sub
```

3. frmSearch (frmSearch.frm)

```
Private Sub cmdExit_Click()
  Unload Me
End Sub

Private Sub Form_Load()
  Me.Top = (frmMain.Height - 950 - Me.Height) / 2
  Me.Left = (frmMain.Width - 200 - Me.Width) / 2

  grdData.Rows = 2
  grdData.FixedRows = 1

  Select Case gSearch

    Case "MATA UANG"
      strConn = " SELECT   fs_mata_uang, fn_kurs_jual, fn_kurs_beli " _
              & " FROM     t_kurs " _

      grdData.Cols = 3
      grdData.ColWidth(0) = 1300
      grdData.ColWidth(1) = 1500
      grdData.ColWidth(2) = 1500

      grdData.TextMatrix(0, 0) = "Mata Uang"
      grdData.TextMatrix(0, 1) = "Jual"
      grdData.TextMatrix(0, 2) = "Beli"

    Case "NASABAH"
      strConn = " SELECT   fs_user_id, fs_nm_depan + ' ' + fs_nm_belakang, fs_alamat " _
              & " FROM     t_nasabah " _
```



UNIVERSITAS
 GADJAH MADA

& " ORDER BY fs_nm_depan "

```
grdData.Cols = 3
grdData.ColWidth(0) = 1300
grdData.ColWidth(1) = 2800
grdData.ColWidth(2) = 1500
```

```
grdData.TextMatrix(0, 0) = "User ID"
grdData.TextMatrix(0, 1) = "Nama Nasabah"
grdData.TextMatrix(0, 2) = "Alamat"
```

Case "SMSC"

```
strConn = " SELECT * "
& " FROM t_smsc "
& " ORDER BY fs_no_header "
```

```
grdData.Cols = 3
grdData.ColWidth(0) = 1300
grdData.ColWidth(1) = 1500
grdData.ColWidth(2) = 2800
```

```
grdData.TextMatrix(0, 0) = "Header"
grdData.TextMatrix(0, 1) = "SMSC"
grdData.TextMatrix(0, 2) = "Keterangan"
```

End Select

oRS.Open strConn, oConn, adOpenForwardOnly

If Not oRS.EOF Then

```
Do While Not oRS.EOF
  For j = 0 To oRS.Fields.Count - 1
    grdData.TextMatrix(grdData.Rows - 1, j) = oRS.Fields(j)
  Next j
  grdData.Rows = grdData.Rows + 1
  oRS.MoveNext
Loop
grdData.Rows = grdData.Rows - 1
```

End If

oRS.Close

End Sub

Private Sub grdRoute_Db1Click()

Dim i As Integer

```
'--pindahkan row di bawahnya di bawahnya
' jika bukan baris terakhir
If grdRoute.Row <> grdRoute.Rows - 1 Then
  For i = grdRoute.Row To grdRoute.Rows - 2
    grdRoute.TextMatrix(i, 0) = grdRoute.TextMatrix(i + 1, 0)
    grdRoute.TextMatrix(i, 1) = grdRoute.TextMatrix(i + 1, 1)
  Next i
End If
```

grdRoute.Rows = grdRoute.Rows - 1

End Sub



```

Private Sub grdRoute_KeyDown(KeyCode As Integer, Shift As Integer)
  If KeyCode = vbKeyDelete Then
    '—pindahkan row di bawahnya di bawahnya
    ' jika bukan baris terakhir

    If grdRoute.Row <> grdRoute.Rows - 1 Then
      For i = grdRoute.Row To grdRoute.Rows - 2
        grdRoute.TextMatrix(i, 0) = grdRoute.TextMatrix(i + 1, 0)
        grdRoute.TextMatrix(i, 1) = grdRoute.TextMatrix(i + 1, 1)
      Next i
    End If

    grdRoute.Rows = grdRoute.Rows - 1

  End If
End Sub

Private Sub txtEntry_KeyDown(Index As Integer, KeyCode As Integer, Shift As Integer)
  Call CekTombol(KeyCode)
End Sub

Private Sub grdData_DbClick()
  Select Case gSearch
    Case "NASABAH"
      gSearchReturn = grdData.TextMatrix(grdData.Row, 0)
    Case "MATA UANG"
      gSearchReturn = grdData.TextMatrix(grdData.Row, 0)
    Case "SMSC"
      gSearchReturn = grdData.TextMatrix(grdData.Row, 0)

  End Select
  Unload Me
End Sub

```

4. frmSetupDataNasabah (frmSetupDataNasabah.frm)

```

Private Sub cmdDelete_Click()
  If MsgBox(" Are you sure to delete this record ?", vbYesNo + vbQuestion) = vbYes Then

    sSQL = " DELETE FROM t_nasabah " _
      & " WHERE fs_user_id = " & txtEntry(0) & " "
    oConn.Execute sSQL

    Call ClearVariable(0)

  End If
End Sub

Private Sub cmdExit_Click()
  Unload Me
End Sub

Private Sub ClearVariable(tipe As Integer)
  If tipe = 0 Then
    txtEntry(0) = ""
  End If

```



UNIVERSITAS
 GADJAH MADA

```

For i = 1 To 10
  If (i <> 4) And (i <> 9) Then
    txtEntry(i) = ""
  End If
Next i

txtEntry(4) = TglToStr(Date)
txtEntry(9) = TglToStr(Date)

txtentryN(0) = 0
txtentryN(1) = 0

vpassword(0) = ""
vpassword(1) = ""

End Sub

Private Sub cmdSave_Click()
  Dim vOke As Boolean

  vOke = True

  '---validasi input
  If Trim(txtEntry(0)) = "" Then
    MsgBox "Data cannot empty", vbOKOnly + vbCritical
    txtEntry(0).SetFocus
    vOke = False
  End If

  If vOke And txtEntry(1) = "" Then
    MsgBox "Data cannot empty", vbOKOnly + vbCritical
    txtEntry(1).SetFocus
    vOke = False
  End If

  If vOke And txtEntry(2) = "" Then
    MsgBox "Data cannot empty", vbOKOnly + vbCritical
    txtEntry(2).SetFocus
    vOke = False
  End If

  If vOke And txtEntry(3) = "" Then
    MsgBox "Data cannot empty", vbOKOnly + vbCritical
    txtEntry(3).SetFocus
    vOke = False
  End If

  If vOke And txtEntry(9) = "" Then
    MsgBox "Data cannot empty", vbOKOnly + vbCritical
    txtEntry(9).SetFocus
    vOke = False
  End If

  If vOke And txtEntry(10) = "" Then
    MsgBox "Data cannot empty", vbOKOnly + vbCritical
    txtEntry(9).SetFocus
    vOke = False
  End If

  If vOke And vpassword(0) = "" Then
    MsgBox "Password required", vbOKOnly + vbCritical
  
```



UNIVERSITAS
 GADJAH MADA

```

txtEntry(9).SetFocus
vOke = False
End If

'---cek password
If vOke And vpassword(0) <> vpassword(1) Then
  MsgBox "Password tidak sama ", vbOKOnly + vbCritical
  txtEntry(9).SetFocus
  vOke = False
End If

On Error GoTo hell
If vOke Then
  '---simpan data
  gsSql1(0) = "fs_user_id"
  gsSql2(0) = txtEntry(0)
  gsSql1(1) = "fs_nm_depan"
  gsSql2(1) = txtEntry(1)
  gsSql1(2) = "fs_nm_belakang"
  gsSql2(2) = txtEntry(2)
  gsSql1(3) = "fs_password"
  gsSql2(3) = vpassword(0)
  gsSql1(4) = "fs_nomer_kk"
  gsSql2(4) = txtEntry(3)
  gsSql1(5) = "fd_exp_kk"
  gsSql2(5) = TglYMD(txtEntry(4))
  gsSql1(6) = "fs_alamat"
  gsSql2(6) = txtEntry(5)
  gsSql1(7) = "fs_kota"
  gsSql2(7) = txtEntry(6)
  gsSql1(8) = "fs_email"
  gsSql2(8) = txtEntry(7)
  gsSql1(9) = "fn_saldo"
  gsSql2(9) = txtentryN(0)
  gsSql1(10) = "fs_no_rek"
  gsSql2(10) = txtEntry(8)
  gsSql1(11) = "fn_tagihan"
  gsSql2(11) = txtentryN(1)
  gsSql1(12) = "fd_jatuh_tempo"
  gsSql2(12) = TglYMD(txtEntry(9))
  gsSql1(13) = "fs_hp"
  gsSql2(13) = txtEntry(10)
  gsSql1(14) = "fn_informasi"
  gsSql2(14) = 0
  gsSql1(15) = ""

  sSQL = " SELECT  fs_user_id " _
    & " FROM    t_nasabah " _
    & " WHERE   fs_user_id = " & txtEntry(0) & " "
  oRS.Open sSQL, oConn, adOpenForwardOnly

  If Not oRS.EOF Then
    sSQL = GensSql("t_nasabah", True) _
      & " WHERE fs_user_id = " & txtEntry(0) & " "
  Else
    sSQL = GensSql("t_nasabah", False)
  End If
  oConn.Execute sSQL
  oRS.Close

  Call ClearVariable(0)
  txtEntry(0).SetFocus

```



UNIVERSITAS
 GADJAH MADA

```

End If
Exit Sub
hell:
  MsgBox "Harap isikan semua field"
  oRS.Close
End Sub

Private Sub Command1_Click()
  txtEntry(0).SetFocus
  SendKeys "{F12}"
End Sub

Private Sub Form_Load()
  Me.Top = (frmMain.Height - 950 - Me.Height) / 2
  Me.Left = (frmMain.Width - 200 - Me.Width) / 2

  'txtentryN(0).Format = gFormat1(2)
  'txtentryN(0).DisplayFormat = gFormat2(2)

  'txtentryN(1).Format = gFormat1(2)
  'txtentryN(1).DisplayFormat = gFormat2(2)

  Call ClearVariable(0)
End Sub

Private Sub txtEntry_GotFocus(Index As Integer)
  If gSearchReturn <> "" Then
    txtEntry(Index) = gSearchReturn
    SendKeys "{TAB}"
    gSearchReturn = ""
  End If
End Sub

Private Sub txtEntry_KeyDown(Index As Integer, KeyCode As Integer, Shift As Integer)
  Call CekTombol(KeyCode)

  Select Case KeyCode
    Case vbKeyF12
      gSearch = "NASABAH"
      frmSearch.Show
  End Select
End Sub

Private Sub txtEntry_Validate(Index As Integer, Cancel As Boolean)
  txtEntry(Index) = Trim(txtEntry(Index))

  Select Case Index
    Case 0
      If Trim(txtEntry(0)) <> "" Then
        sSQL = "SELECT * " _
          & " FROM t_nasabah " _
          & " WHERE fs_user_id = " & txtEntry(0) & " "
        oRS.Open sSQL, oConn, adOpenStatic

        If Not oRS.EOF Then
          txtEntry(0) = oRS!fs_user_id
          txtEntry(1) = oRS!fs_nm_depan

          txtEntry(2) = oRS!fs_nm_belakang
          vpassword(0) = oRS!fs_password
        End If
      End If
    End Select
End Sub

```



```

vpassword(1) = oRS!fs_password
txtEntry(3) = oRS!fs_nomer_kk
txtEntry(4) = TglDMY(oRS!fd_exp_kk)
txtEntry(5) = oRS!fs_alamat
txtEntry(6) = oRS!fs_kota
txtEntry(7) = oRS!fs_email
txtentryN(0) = oRS!fn_saldo
txtentryN(1) = oRS!fn_tagihan
txtEntry(8) = oRS!fs_no_rek
txtEntry(9) = TglDMY(oRS!fd_jatuh_tempo)
txtEntry(10) = oRS!fs_hp
Else
  Call ClearVariable(1)
End If
oRS.Close
Else
  Call ClearVariable(1)
End If
End Select
End Sub

```

5. frmSetupKurs (frmSetupKurs.frm)

```

Private Sub cmdExit_Click()
  Unload Me
End Sub

```

```

Private Sub cmdSave_Click()
  Dim vOke As Boolean

  '—simpan data parent
  gsSql1(0) = "fn_kurs_beli"
  gsSql2(0) = txtentryN(0)
  gsSql1(1) = "fn_kurs_jual"
  gsSql2(1) = txtentryN(1)
  gsSql1(2) = "fs_mata_uang"
  gsSql2(2) = txtEntry(0)
  gsSql1(3) = ""

  sSQL = " SELECT  fs_mata_uang " _
    & " FROM    t_kurs " _
    & " WHERE   fs_mata_uang = " & txtEntry(0) & " "
  oRS.Open sSQL, oConn, adOpenForwardOnly
  If Not oRS.EOF Then
    sSQL = GensSql("t_kurs", True) _
      & " WHERE fs_mata_uang = " & txtEntry(0) & " "
  Else
    sSQL = GensSql("t_kurs", False)
  End If
  oRS.Close

  oConn.Execute sSQL

  txtEntry(0).SetFocus
  MsgBox "Data Saved"
  Call ClearVariable(0)

```



End Sub

Sub ClearVariable(ByVal tipe As Integer)

```
If tipe = 0 Then
  txtEntry(0) = ""
End If
txtentryN(0) = 0
txtentryN(1) = 0
```

End Sub

Private Sub Command1_Click()

```
txtEntry(0).SetFocus
SendKeys "{F12}"
```

End Sub

Private Sub Form_Load()

```
Me.Top = (frmMain.Height - 950 - Me.Height) / 2
Me.Left = (frmMain.Width - 200 - Me.Width) / 2
```

End Sub

Private Sub txtEntry_GotFocus(Index As Integer)

```
If gSearchReturn <> "" Then
  txtEntry(Index) = gSearchReturn
  SendKeys "{TAB}"
  gSearchReturn = ""
End If
```

End Sub

Private Sub txtEntry_KeyDown(Index As Integer, KeyCode As Integer, Shift As Integer)

```
If KeyCode = vbKeyF12 And Index = 0 Then
  gSearch = "MATA UANG"
  frmSearch.Show
```

End If

End Sub

Private Sub txtEntry_Validate(Index As Integer, Cancel As Boolean)

```
txtEntry(Index) = Trim(txtEntry(Index))
```

Select Case Index

Case 0

```
sSQL = " SELECT * FROM t_kurs " _
  & " WHERE fs_mata_uang = " & txtEntry(0) & " "
```

```
oRS.Open sSQL, oConn, adOpenForwardOnly
```

```
If Not oRS.EOF Then
```

```
txtentryN(0) = oRS!fn_kurs_jual
```

```
txtentryN(1) = oRS!fn_kurs_beli
```

```
Else
```

```
Call ClearVariable(1)
```

```
End If
```

```
oRS.Close
```

End Select

End Sub



6. frmSetupParameter (rmSetupParameter.frm)

```
Private Sub cmdExit_Click()
  Unload Me
End Sub
```

```
Private Sub ClearVariable(tipe As Integer)
  If tipe = 0 Then
    txtEntry(0) = ""
  End If
```

```
txtEntry(1) = ""
txtEntry(2) = ""
grdRoute.Rows = 0
```

```
End Sub
```

```
Private Sub cmdExit_KeyDown(KeyCode As Integer, Shift As Integer)
```

```
End Sub
```

```
Private Sub cmdExit_OLESetData(Data As DataObject, DataFormat As Integer)
```

```
End Sub
```

```
Private Sub cmdExit_OLEStartDrag(Data As DataObject, AllowedEffects As Long)
```

```
End Sub
```

```
Private Sub cmdSave_Click()
```

```
Dim nCom As Integer
Dim nBaudrate As Long
```

```
On Error GoTo hell
nCom = Val(txtEntry(1))
nBaudrate = Val(txtEntry(0))
```

```
gsSql1(0) = "fn_com"
gsSql2(0) = txtEntry(1)
gsSql1(1) = "fn_baudrate"
gsSql2(1) = txtEntry(0)
gsSql1(2) = ""
```

```
sSQL = GensSql("t_parameter", True)
oConn.Execute sSQL
```

```
MsgBox "Data saved", vbInformation + vbOKOnly
```

```
txtEntry(0).SetFocus
Exit Sub
```

```
hell:
```

```
MsgBox "Invalid data", vbInformation + vbOKOnly
```

```
End Sub
```

```
Private Sub Form_Load()
```

```
Me.Top = (frmMain.Height - 950 - Me.Height) / 2
```



UNIVERSITAS
 GADJAH MADA

```
Me.Left = (frmMain.Width - 200 - Me.Width) / 2
```

```
sSQL = " SELECT    fn_com, fn_baudrate " _
      & " FROM      t_parameter "
oRS.Open sSQL, oConn, adOpenForwardOnly
```

```
If Not oRS.EOF Then
  txtEntry(0) = oRS!fn_baudrate
  txtEntry(1) = oRS!fn_com
End If
oRS.Close
```

```
End Sub
```

```
Private Sub txtEntry_KeyDown(Index As Integer, KeyCode As Integer, Shift As Integer)
  Call CekTombol(KeyCode)
End Sub
```

7. frmSetupSimulasi (frmSetupSimulasi.frm)

```
Private Sub cmdDelete_Click()
  '---gen reply
  Dim sWord() As String

  sPesan = UCase(Trim(sPesan))
  sWord() = Split(sPesan)

  '---gen reply
  Select Case sWord(0)
    Case "HELP"
      sReply = GenHelp(sWord())
    Case "SALDO"
      sReply = GenSaldo(sWord())
    Case "TAGIHAN"
      sReply = GenTagihan(sWord())
    Case "KURS"
      sReply = GenKurs(sWord())
    Case Else
      sReply = "ESZ-SMS Banking. Silahkan kirim pesan HELP untuk menggunakannya"
  End Select
```

```
Text1 = sReply
End Sub
```

```
Private Sub cmdExit_Click()
  Unload Me
End Sub
```

```
Private Sub ClearVariable(tipe As Integer)
  If tipe = 0 Then
    txtEntry(0) = ""
  End If
  txtEntry(1) = ""
  txtEntry(2) = ""
End Sub
```



```

Private Sub cmdSave_Click()
  Dim vOke As Boolean

  vOke = True

  '--validasi input
  If Trim(txtEntry(0)) = "" Then
    MsgBox "Data cannot empty", vbOKOnly + vbCritical
    txtEntry(0).SetFocus
    vOke = False
  End If

  If vOke And txtEntry(1) = "" Then
    MsgBox "Data cannot empty", vbOKOnly + vbCritical
    txtEntry(1).SetFocus
    vOke = False
  End If

  '--simpan data parent
  gsSql1(0) = "fs_no_header"
  gsSql2(0) = txtEntry(0)
  gsSql1(1) = "fs_no_smsc"
  gsSql2(1) = txtEntry(1)
  gsSql1(2) = "fs_keterangan"
  gsSql2(2) = txtEntry(2)
  gsSql1(3) = ""

  sSQL = " SELECT  fs_no_header " _
    & " FROM    t_smsc " _
    & " WHERE   fs_no_header = " & txtEntry(0) & " "
  oRS.Open sSQL, oConn, adOpenForwardOnly

  If Not oRS.EOF Then
    sSQL = GensSql("t_smsc", True) _
      & " WHERE fs_no_header = " & txtEntry(0) & " "
  Else
    sSQL = GensSql("t_smsc", False)
  End If
  oConn.Execute sSQL
  oRS.Close

  Call ClearVariable(0)
  txtEntry(0).SetFocus
End Sub

Private Sub Command1_Click()
  txtEntry(0).SetFocus
  SendKeys "{F12}"
End Sub

Private Sub Form_Load()
  Me.Top = (frmMain.Height - 950 - Me.Height) / 2
  Me.Left = (frmMain.Width - 200 - Me.Width) / 2

End Sub

Private Sub txtEntry_GotFocus(Index As Integer)
  If gSearchReturn <> "" Then
    txtEntry(Index) = gSearchReturn
    SendKeys "{TAB}"
  End If
End Sub

```



UNIVERSITAS
 GADJAH MADA

```

    gSearchReturn = ""
  End If
End Sub

Private Sub txtEntry_KeyDown(Index As Integer, KeyCode As Integer, Shift As Integer)
  Call CekTombol(KeyCode)

  Select Case KeyCode
    Case vbKeyF12
      gSearch = "SMSC"
      frmSearch.Show
    End Select

End Sub

Private Sub txtEntry_Validate(Index As Integer, Cancel As Boolean)
  txtEntry(Index) = FixString(Trim(txtEntry(Index)) & "12")

  Dim sWord() As String

  sWord() = Split(txtEntry(2).Text)

  sPesan = UCase(Trim(FixString(txtEntry(2) & "12")))
  txtEntry(2) = sPesan
  '---gen reply
  Select Case sWord(0)
    Case "HELP"
      sReply = GenHelp(sWord())
    Case "SALDO"
      sReply = GenSaldo(sWord())
    Case "TAGIHAN"
      sReply = GenTagihan(sWord())
    Case "KURS"
      sReply = GenKurs(sWord())
    Case Else
      sReply = "ESZ-SMS Banking. Silahkan kirim pesan HELP untuk menggunakannya"
  End Select
  Text1 = sReply

End Sub

```

8. frmSMSService (frmSMSService.frm)

```

Dim bReceive As Boolean

Private Sub cmdExit_Click()
  Unload Me
End Sub

Function HidePassword(ByVal sStr As String) As String
  Dim sWord() As String
  Dim sRetval As String

  sWord() = Split(sStr)
  Select Case UCase(sWord(0))
    Case "LOGIN", "SALDO", "TAGIHAN", "PIN"
      For i = 0 To UBound(sWord())
        If i = 2 Then

```



```

    sRetVal = sRetVal & " " & """"
  Else
    sRetVal = sRetVal & " " & sWord(i)
  End If
Next i

Case Else
  sRetVal = sStr
End Select

HidePassword = Trim(sRetVal)
End Function

Private Sub Form_Load()
  Me.Top = (frmMain.Height - 950 - Me.Height) / 2
  Me.Left = (frmMain.Width - 200 - Me.Width) / 2

  AksesPort = False

  With grdData
    .Cols = 5
    .Rows = 2
    .ColWidth(0) = 600
    .ColWidth(1) = 1700
    .ColWidth(2) = 2300
    .ColWidth(3) = 11000

    .TextMatrix(.Row - 1, 0) = "No."
    .TextMatrix(.Row - 1, 1) = "Sender"
    .TextMatrix(.Row - 1, 2) = "Time"
    .TextMatrix(.Row - 1, 3) = "Messegas"
    .TextMatrix(.Row - 1, 4) = "ID"
  End With

  bReceive = True

  '—ambil msg di database yg belum di reply
  sSQL = " SELECT      * " _
    & " FROM      t_msg_trima " _
    & " WHERE      fn_reply = 0 "
  oRS.Open sSQL, oConn, adOpenForwardOnly

  If Not oRS.EOF Then
    Do While Not oRS.EOF
      With grdData
        '—kasih no.urut
        If .Rows = 2 Then
          .TextMatrix(.Rows - 1, 0) = 1
        Else
          .TextMatrix(.Rows - 1, 0) = .TextMatrix(.Rows - 2, 0) + 1
        End If

        '—sender
        .TextMatrix(.Rows - 1, 1) = Trim(oRS!fs_pengirim)

        '—date time
        .TextMatrix(.Rows - 1, 2) = Trim(oRS!fd_tgl_terima_jam)

        On Error Resume Next

        '—msg text
        'On Error Resume Next
      End With
    Loop
  End If
End Sub

```



```
.TextMatrix(.Rows - 1, 3) = HidePassword(Trim(oRS!fs_isi))
```

```
If Err.Number <> 0 Or Trim(oRS!fs_isi) = "" Then
```

```
  .TextMatrix(.Rows - 1, 3) = "#empty#"
```

```
End If
```

```
On Error GoTo 0
```

```
.Rows = .Rows + 1
```

```
End With
```

```
oRS.MoveNext
```

```
Loop
```

```
End If
```

```
oRS.Close
```

```
End Sub
```

```
Private Sub Replying()
```

```
  Dim sNoTujuan As String
```

```
  Dim sPesan As String
```

```
  Dim sReply As String
```

```
  Dim nCom As Integer
```

```
  Dim nBaudrate As Long
```

```
  Dim nSMSid As String
```

```
  Dim sWord() As String
```

```
sNoTujuan = grdData.TextMatrix(1, 1)
```

```
sPesan = grdData.TextMatrix(1, 3)
```

```
nSMSid = grdData.TextMatrix(1, 4)
```

```
'---ambil setting port
```

```
sSQL = "SELECT fn_com, fn_baudrate " _
```

```
  & " FROM t_parameter "
```

```
oRS.Open sSQL, oConn, adOpenForwardOnly
```

```
If Not oRS.EOF Then
```

```
  nCom = oRS!fn_com
```

```
  nBaudrate = oRS!fn_baudrate
```

```
Else
```

```
  nCom = 5 '---nilai default
```

```
  nBaudrate = 57600
```

```
End If
```

```
oRS.Close
```

```
sCom = "COM" & nCom
```

```
If sNoTujuan = "" Then
```

```
  Call SendAktifSMS(sCom)
```

```
  Exit Sub
```

```
End If
```

```
sPesan = UCase(Trim(sPesan))
```

```
sWord() = Split(sPesan)
```

```
'---gen reply
```

```
Select Case sWord(0)
```

```
  Case "HELP"
```

```
    sReply = GenHelp(sWord())
```



```

Case "SALDO"
  sReply = GenSaldo(sWord())
Case "TAGIHAN"
  sReply = GenTagihan(sWord())
Case "PIN"
  sReply = GenGantiPin(sWord())
Case "KURS"
  sReply = GenKurs(sWord())
Case Else
  sReply = "ESZ-SMS Banking. Silahkan kirim pesan HELP untuk menggunakannya"
End Select

'---jika lebih dari 160 karakter, maka di pecah
nJumSMS = Int(Len(sReply) / 160) + 1
'For i = 1 To nJumSMS
'  sKirim = Mid(sReply, (i - 1) * 160, 160)
  berhasil = SendSMS(sReply, sNoTujuan, sCom)
'Next i

If berhasil Then
  '---update database
  sSQL = " UPDATE   t_msg_trima " _
    & " SET   fn_reply = fn_reply + 1 " _
    & " WHERE   fs_id = " & nSMSid & " "
  oConn.Execute sSQL

  '---jika sudah direply, hapus dari grid
  With grdData
    If .Rows >= 3 Then
      For i = 2 To .Rows - 1
        For j = 0 To 3
          .TextMatrix(i - 1, j) = .TextMatrix(i, j)
        Next j
      Next i
    End If
    .Rows = .Rows - 1
  End With

End If

End Sub

Sub Receiving()
  Dim sStr As String
  Dim nJumData As Integer
  Dim sData() As String
  Dim sCom As String
  Dim oRSLocal As New ADODB.Recordset

  '---ambil setting port
  sSQL = " SELECT   fn_com, fn_baudrate " _
    & " FROM   t_parameter "
  oRS.Open sSQL, oConn, adOpenForwardOnly

  If Not oRS.EOF Then
    nCom = oRS!fn_com
    nBaudrate = oRS!fn_baudrate
  Else
    '---nilai default
    nCom = 5
  End If

```



Layanan notifikasi pemakaian kartu kredit berbasis SMS
 ZERISKA, Ehrlich Stevans, Dr.Ir. Lukito E. Nugroho, MSc
 Universitas Gadjah Mada, 2003 | Diunduh dari <http://etd.repository.ugm.ac.id/>

```
nBaudrate = 57600
End If
oRS.Close
```

```
sCom = "COM" & Trim(nCom)
sStr = readSMSfromHP(sCom)
```

```
'---cari jumlah data
nJumData = Parsing(sStr)
```

```
' On Error Resume Next
```

```
For i = 1 To nJumData
  sData() = Split(sSMSReceived(i), Chr(34))
```

```
  With grdData
```

```
    '---kasih no.urut
```

```
    If .Rows = 2 Then
```

```
      .TextMatrix(.Rows - 1, 0) = 1
```

```
    Else
```

```
      .TextMatrix(.Rows - 1, 0) = .TextMatrix(.Rows - 2, 0) + 1
```

```
    End If
```

```
    '---sender
```

```
    .TextMatrix(.Rows - 1, 1) = Trim(sData(3))
```

```
    '---date time
```

```
    .TextMatrix(.Rows - 1, 2) = Trim(sData(5))
```

```
    '---msg text
```

```
    sData(6) = FixString(sData(6))
```

```
    .TextMatrix(.Rows - 1, 3) = Trim(sData(6))
```

```
    '---no urut sms
```

```
    'sData(6) = FixString(sData(6))
```

```
    .TextMatrix(.Rows - 1, 4) = GetSMSid(sSMSReceived(i))
```

```
  End With
```

```
  '---ambil no urut
```

```
  sSQL = " SELECT   fn_urut_terima " _
```

```
    & " FROM     t_parameter "
```

```
  oRSLocal.Open sSQL, oConnExec, adOpenForwardOnly
```

```
  iUrut = oRSLocal!fn_urut_terima
```

```
  grdData.TextMatrix(grdData.Rows - 1, 4) = iUrut
```

```
  grdData.Rows = grdData.Rows + 1
```

```
  sSQL = " UPDATE   t_parameter " _
```

```
    & " SET     fn_urut_terima = fn_urut_terima + 1 "
```

```
  oConnExec.Execute sSQL
```

```
  oRSLocal.Close
```

```
  '---simpan di database
```

```
  gsSql1(0) = "fs_id"
```

```
  gsSql2(0) = iUrut
```

```
  gsSql1(1) = "fd_tgl_terima_jam"
```

```
  gsSql2(1) = sData(5)
```

```
  gsSql1(2) = "fs_pengirim"
```

```
  gsSql2(2) = sData(3)
```

```
  gsSql1(3) = "fs_isi"
```



UNIVERSITAS
 GADJAH MADA

```
gsSql2(3) = If(sData(6) = "", "", sData(6))
gsSql1(4) = "fn_reply"
gsSql2(4) = 0
gsSql1(5) = ""
```

```
sSQL = GensSql("t_msg_trima", False)
oConn.Execute sSQL
```

```
'--hapus sms di inbox HP
'nID = GetSMSid(sSMSReceived(i))
'If nID <> -1 Then
' dummy = DeleteSMS(sCOM, nIndex)
'End If
```

```
Next i
```

```
End Sub
```

```
Private Sub Timer1_Timer()
```

```
grdData.Rows = 2
'--ambil msg di database yg belum di reply
sSQL = "SELECT * "
& " FROM t_msg_trima "
& " WHERE fn_reply = 0 "
oRS1.Open sSQL, oConn, adOpenForwardOnly
```

```
If Not oRS1.EOF Then
Do While Not oRS1.EOF
With grdData
'--kasih no.urut
If .Rows = 2 Then
.TextMatrix(.Rows - 1, 0) = 1
Else
.TextMatrix(.Rows - 1, 0) = .TextMatrix(.Rows - 2, 0) + 1
End If
```

```
'--sender
.TextMatrix(.Rows - 1, 1) = Trim(oRS1!fs_pengirim)
```

```
'--date time
.TextMatrix(.Rows - 1, 2) = Trim(oRS1!fd_tgl_terima_jam)
```

```
'--msg text
On Error Resume Next
.TextMatrix(.Rows - 1, 3) = HidePassword(Trim(oRS1!fs_isi))
If Err.Number <> 0 Or Trim(oRS1!fs_isi) = "" Then
.TextMatrix(.Rows - 1, 3) = "#empty#"
End If
On Error GoTo 0
```

```
'--SMS ID
.TextMatrix(.Rows - 1, 4) = Trim(oRS1!fs_id)
.Rows = .Rows + 1
```

```
End With
oRS1.MoveNext
```

```
Loop
```

```
End If
oRS1.Close
```



UNIVERSITAS
GADJAH MADA

```
DoEvents
If bReceive Then
  '—simulasi query
  Call Receiving
  DoEvents
Else
  Call Replying
  DoEvents
End If

bReceive = Not bReceive
```

End Sub



LAMPIRAN B MODULES

1. modMain (modMain.bas)

'Option Explicit

Global oConn As New ADODB.Connection
 Global oConnExec As New ADODB.Connection
 Global oRS As New ADODB.Recordset
 Global oRS1 As New ADODB.Recordset
 Global oRStemp As New ADODB.Recordset

Global gFormat(10) As String
 Global gFormat1(10) As String
 Global gFormat2(10) As String

Global gTanggal As String
 Global gSearch As String
 Global gSearchReturn As String
 Global sSQL As String
 Global gsSql1(100) As String
 Global gsSql2(100) As String

Sub AmbilGlobal()

gFormat(0) = "#,##0"
 gFormat(1) = "#,##0.0"
 gFormat(2) = "#,##0.00"
 gFormat(3) = "#,##0.000"
 gFormat(4) = "#,##0.0000"
 gFormat(5) = "#,##0.00000"
 gFormat(6) = "#,##0.000000"
 gFormat(7) = "#,##0.0000000"
 gFormat(8) = "#,##0.00000000"
 gFormat(9) = "#,##0.000000000"
 gFormat(10) = "#,##0.0000000000"

gFormat1(0) = "###,###,###,###,###"
 gFormat1(1) = "#,###,###,###,###.#"
 gFormat1(2) = "#,###,###,###,###.##"
 gFormat1(3) = "###,###,###,###,###.###"
 gFormat1(4) = "##,###,###,###,###.####"
 gFormat1(5) = "#,###,###,###,###.#####"
 gFormat1(6) = "###,###,###,###.#####"
 gFormat1(7) = "#,###,###,###.#####"
 gFormat1(8) = "###,###,###.#####"
 gFormat1(9) = "###,###,###.#####"
 gFormat1(10) = "##,###,###.#####"

gFormat2(0) = "###,###,###,###,###"
 gFormat2(1) = "#,###,###,###,###.0"
 gFormat2(2) = "#,###,###,###,###.00"
 gFormat2(3) = "###,###,###,###.000"
 gFormat2(4) = "##,###,###,###.0000"
 gFormat2(5) = "#,###,###,###.00000"
 gFormat2(6) = "###,###,###.000000"



UNIVERSITAS
 GADJAH MADA

```
gFormat2(7) = "#,###,###.0000000"
gFormat2(8) = "###,###.00000000"
gFormat2(9) = "###,###.000000000"
gFormat2(10) = "##,###.0000000000"
```

```
gMainKeyCari = ""
gSendTab = False
gTanggal = TglToStr(Date)
```

End Sub

Public Sub CekTombol(Akey As Integer)

```
Select Case Akey
Case vbKeyF1
  Akey = 0
  SendKeys ("0")
Case vbKeyF2
  Akey = 0
  SendKeys ("00")
Case vbKeyF3
  Akey = 0
  SendKeys ("000")
Case vbKeyF4
  Akey = 0
  SendKeys ("0000")
Case 38
  Akey = 0
  SendKeys ("+{TAB}")
Case 40, 13
  Akey = 0
  SendKeys (" {TAB}")
End Select
```

End Sub

Public Function FixString(ByVal sStr As String) As String

```
Dim sRetVal As String
Dim nSpcCount As Integer
```

```
nSpcCount = 0
sRetVal = ""
For i = 1 To Len(sStr)
  If (Asc(Mid(sStr, i, 1)) >= 33 And
    Asc(Mid(sStr, i, 1)) <= 122) Or (Asc(Mid(sStr, i, 1)) = 32) Then

    sTemp = Mid(sStr, i, 1)
    If sTemp = " " Then
      nSpcCount = nSpcCount + 1
      If nSpcCount > 1 Then
        sTemp = ""
      End If
    Else
      nSpcCount = 0
    End If

    sRetVal = sRetVal & sTemp
```

```
  End If
Next i
sRetVal = Left(sRetVal, Len(sRetVal) - 2)
FixString = sRetVal
```



End Function

```
Public Function GensSql(xTabel As String, xUpdate As Boolean) As String
```

```
Dim aa As String
```

```
Dim xHasil As String
```

```
Dim i As Integer
```

```
xHasil = ""
```

```
If xUpdate Then
```

```
    xHasil = "UPDATE " + xTabel + " SET "
```

```
    i = 0
```

```
    Do While gsSql1(i) <> ""
```

```
        If i <> 0 Then
```

```
            xHasil = xHasil + ","
```

```
        End If
```

```
        aa = UCase(Left(gsSql1(i), 2))
```

```
        Select Case aa
```

```
            Case "FN", "FB"
```

```
                xHasil = xHasil + gsSql1(i) + " = " + gsSql2(i)
```

```
            Case Else
```

```
                xHasil = xHasil + gsSql1(i) + " = " & gsSql2(i) & ""
```

```
            End Select
```

```
            i = i + 1
```

```
    Loop
```

```
Else
```

```
    xHasil = "INSERT INTO " + xTabel + " ("
```

```
    i = 0
```

```
    Do While gsSql1(i) <> ""
```

```
        If i <> 0 Then
```

```
            xHasil = xHasil + ","
```

```
        End If
```

```
        xHasil = xHasil + gsSql1(i)
```

```
        i = i + 1
```

```
    Loop
```

```
    xHasil = xHasil + ") VALUES ("
```

```
    i = 0
```

```
    Do While gsSql1(i) <> ""
```

```
        If i <> 0 Then
```

```
            xHasil = xHasil + ","
```

```
        End If
```

```
        aa = UCase(Left(gsSql1(i), 2))
```

```
        Select Case aa
```

```
            Case "FN", "FB"
```

```
                xHasil = xHasil + gsSql2(i)
```

```
            Case Else
```

```
                xHasil = xHasil & "" & gsSql2(i) & ""
```

```
            End Select
```

```
            i = i + 1
```

```
    Loop
```

```
    xHasil = xHasil + ")"
```

```
End If
```

```
GensSql = xHasil
```

```
End Function
```

```
Public Function CharPos(ByVal sString As String, _
```

```
    ByVal sSearched As String, _
```

```
    Optional ByVal nIndex As Integer = 1) As Integer
```

```
Dim iStrLength As Integer
```



UNIVERSITAS
 GADJAH MADA

```
Dim nRetVal As Integer
Dim nIndexKe As Integer
Dim i As Integer
```

```
sString = Trim(sString)
iStrLength = Len(sString)
nRetVal = -1
```

```
nIndexKe = 0
```

```
For i = 1 To iStrLength - Len(Trim(sSearched))
  If Mid(sString, i, Len(sSearched)) = sSearched Then
    nIndexKe = nIndexKe + 1
    If nIndexKe = nIndex Then
      nRetVal = i
      Exit For
    End If
  End If
End For
Next
```

```
CharPos = nRetVal
```

```
End Function
```

```
Public Function TglToStr(ByVal kata As Date) As String
  TglToStr = Format(Day(kata), "00") + "-" + Format(Month(kata), "00") + "-" + Trim(Str(Year(kata)))
End Function
```

```
Public Function TglIDMY(ByVal kata As String) As String
  TglIDMY = Right(kata, 2) + "-" + Mid(kata, 6, 2) + "-" + Left(kata, 4)
End Function
```

```
Public Function TglYMD(ByVal kata As String) As String
  TglYMD = Right(kata, 4) + "-" + Mid(kata, 4, 2) + "-" + Left(kata, 2)
End Function
```

```
Sub Koneksi()
```

```
  Dim LogonStr As String
  Dim sPath As String
```

```
  sPath = App.Path
```

```
  'Provider=Microsoft.Jet.OLEDB.4.0;Data Source=INFO_KKxp.mdb;Persist Security Info=False
```

```
  LogonStr = "Provider=Microsoft.Jet.OLEDB.4.0;Persist Security Info=False;Data Source=" &
```

```
sPath & "info_kkxp.mdb"
```

```
  oConn.ConnectionString = LogonStr
```

```
  oConn.Open
```

```
  oConnExec.ConnectionString = LogonStr
```

```
  oConnExec.Open
```

```
End Sub
```

```
Sub Main()
```

```
  Call AmbilGlobal
```

```
  Call Koneksi
```

```
  frmMain.Show
```

```
End Sub
```



2. modSMS_KK (modSMS_KK.bas)

```
Public Function IsUserValid(sWord() As String) As String
  Dim loRS1 As New ADODB.Recordset
  Dim bRetval As Boolean
  Dim sDummy As String

  On Error GoTo hell

  '---tentukan kata kedua
  sSQL = " SELECT   fs_user_id, fs_password " _
    & " FROM     t_nasabah " _
    & " WHERE    fs_user_id = " & sWord(1) & " " _
    & "      AND fs_password = " & sWord(2) & " " _
  loRS1.Open sSQL, oConn, adopenforwadonly

  '---jika ditemukan
  If Not loRS1.EOF Then
    bRetval = True
  Else
    '---jika tidak
    bRetval = False
  End If
  loRS1.Close

  IsUserValid = bRetval
  Exit Function

hell:
  IsUserValid = False

End Function

Function BerapaKali(ByVal ID As String, ByVal Layanan As String, Tanggal As String) As Integer
  Dim loRS1 As New ADODB.Recordset
  Dim nJum As Integer
  Dim sUser() As String

  nJum = 0

  sSQL = " SELECT   fs_password " _
    & " FROM     t_nasabah " _
    & " WHERE    fs_user_id = " & ID & " "
  loRS1.Open sSQL, oConn, adOpenForwardOnly
  If Not loRS1.EOF Then
    sPassword = loRS1!fs_password
  Else
    sPassword = " "
    BerapaKali = 20
    Exit Function
  End If
  loRS1.Close

  sUser() = Split(Tanggal, "/")

  'If Len(sUser(2)) = 1 Then
    Tanggal = Right(sUser(2), 2)
```



```
'Else
' Tanggal = sUser(2)
'End If

If Len(sUser(0)) = 1 Then
  Tanggal = Tanggal & "/" & "0" & sUser(0)
Else
  Tanggal = Tanggal & "/" & sUser(0)
End If

If Len(sUser(1)) = 1 Then
  Tanggal = Tanggal & "/" & "0" & sUser(1)
Else
  Tanggal = Tanggal & "/" & sUser(1)
End If

sSQL = " SELECT fs_isi " _
& " FROM t_msg_trima " _
& " WHERE fs_isi like '" & Layanan & "' & ID & '%" _
& " AND left(fd_tgl_terima_jam,8) = '" & Tanggal & "' " _
& " AND fn_reply = 1 "

loRS1.Open sSQL, oConn, adOpenStatic

If Not loRS1.EOF Then
  Do While Not loRS1.EOF

    sUser() = Split(loRS1.fs_isi)
    If UBound(sUser()) >= 2 Then
      If sUser(2) <> sPassword Then
        nJum = nJum + 1
      End If
    End If

    loRS1.MoveNext
  Loop

Else
  nJum = 0
End If

loRS1.Close

BerapaKali = nJum

End Function

Public Function GenHelp(sWord() As String) As String
  Dim sRetval As String

  sRetval = "Ketik HELP <SALDO/TAGIHAN/PIN/KURS> utk mengetahui format pengiriman SMS"

  On Error Resume Next
  If UBound(sWord()) = 1 Then

    Select Case sWord(1)
      Case "SALDO"
        sRetval = "ketik SALDO <userID> <password>"
    End Select
  End If
End Function
```



UNIVERSITAS
 GADJAH MADA

```

Case "TAGIHAN"
  sRetval = "ketik TAGIHAN <userID> <password>"
Case "TEMPO"
  sRetval = "ketik TEMPO <userID> <password>"
Case "KURS"
  sRetval = "ketik KURS <DAFTAR> utk mengetahui daftar mata uang atau " _
    & "KURS <mata uang> untuk mengetahui nilai kurs mata uang tertentu"
Case "PIN"
  sRetval = " ketik PIN <userID> <password lama> <password baru> "
Case Else
  sRetval = "ESZ-SMS Banking. Silahkan kirim pesan HELP untuk menggunakannya"
End Select
End If

```

On Error GoTo 0

```

GenHelp = sRetval
End Function

```

```

Public Function GenSaldo(sWord() As String) As String
  Dim loRS1 As New ADODB.Recordset
  Dim sRetval As String
  Dim sDummy As String
  Dim bValid As Boolean

```

```

  bValid = IsUserValid(sWord())

```

```

  nJum = BerapaKali(sWord(1), sWord(0), Date)

```

```

  If nJum >= 5 Then

```

```

    GenSaldo = "Maaf anda sudah lebih dari 5 kali salah password"

```

```

    Exit Function

```

```

  End If

```

```

  If Not bValid Then

```

```

    GenSaldo = "User ID atau Password salah"

```

```

    Exit Function

```

```

  End If

```

```

  '---jika cuma satu kata beri help syntax

```

```

  If UBound(sWord()) = 0 Then

```

```

    sRetval = GenHelp(sWord())

```

```

    GenJadwal = sRetval

```

```

    Exit Function

```

```

  End If

```

```

  '---tentukan kata kedua

```

```

  sSQL = " SELECT   fn_saldo " _

```

```

    & " FROM     t_nasabah " _

```

```

    & " WHERE    fs_user_id = " & sWord(1) & " "

```

```

  loRS1.Open sSQL, oConn, adopenforwardonly

```

```

  If Not loRS1.EOF Then

```

```

    sRetval = "Saldo anda = " & loRS1!fn_saldo

```

```

  Else

```

```

    sRetval = "Maaf, saldo anda habis"

```

```

  End If

```

```

  loRS1.Close

```

```

  GenSaldo = sRetval

```



UNIVERSITAS
GADJAH MADA

Layanan notifikasi pemakaian kartu kredit berbasis SMS
ZERISKA, Ehrlich Stevans, Dr.Ir. Lukito E. Nugroho, MSc
Universitas Gadjah Mada, 2003 | Diunduh dari <http://etd.repository.ugm.ac.id/>

End Function

```
Public Function GenGantiPin(sWord() As String) As String
```

```
Dim loRS1 As New ADODB.Recordset
```

```
Dim sRetval As String
```

```
Dim sDummy As String
```

```
Dim bValid As Boolean
```

```
bValid = IsUserValid(sWord())
```

```
If Not bValid Then
```

```
    GenGantiPin = "User ID atau Password salah"
```

```
    Exit Function
```

```
End If
```

```
'---jika cuma satu kata beri help syntax
```

```
If UBound(sWord()) = 0 Then
```

```
    sRetval = GenHelp(sWord())
```

```
    GenJadwal = sRetval
```

```
    Exit Function
```

```
End If
```

```
If UBound(sWord()) = 2 Then
```

```
    sRetval = GenHelp(sWord())
```

```
    GenJadwal = sRetval
```

```
    Exit Function
```

```
End If
```

```
gsSql1(0) = "fs_password"
```

```
gsSql2(0) = sWord(3)
```

```
gsSql1(1) = ""
```

```
sSQL = "SELECT fs_user_id " _
```

```
    & " FROM t_nasabah " _
```

```
    & " WHERE fs_user_id = " & sWord(1) & " " _
```

```
loRS1.Open sSQL, oConn, adopenforwadonly
```

```
If Not loRS1.EOF Then
```

```
    sSQL = GensSql("t_nasabah", True) _
```

```
    & " WHERE fs_user_id = " & sWord(1) & " " _
```

```
    oConn.Execute sSQL
```

```
    sRetval = "Password anda sudah diganti"
```

```
Else
```

```
    sRetval = "Maaf, anda tidak terdaftar"
```

```
End If
```

```
loRS1.Close
```

```
GenGantiPin = sRetval
```

End Function

```
Public Function GenTagihan(sWord() As String) As String
```

```
Dim loRS1 As New ADODB.Recordset
```

```
Dim sRetval As String
```

```
Dim sDummy As String
```

```
Dim bValid As Boolean
```



UNIVERSITAS
 GADJAH MADA

```

bValid = IsUserValid(sWord())
If Not bValid Then
  GenTagihan = "User ID atau Password salah"
  Exit Function
End If

'---jika cuma satu kata beri help syntax
If UBound(sWord()) = 0 Then
  sRetval = GenHelp(sWord())
  GenJadwal = sRetval
  Exit Function
End If

'---tentukan kata kedua
sSQL = " SELECT   fn_tagihan, fd_jatuh_tempo " _
  & " FROM     t_nasabah " _
  & " WHERE    fs_user_id = " & sWord(1) & " "
loRS1.Open sSQL, oConn, adopenforwadonly

If Not loRS1.BOF Then
  sRetval = "Tagihan s/d tgl " & TglToStr(Date) & " = " & Format(loRS1!fn_tagihan, gFormat(0))
  & " Jatuh tempo = " & TglDMY(loRS1!fd_jatuh_tempo)
Else
  sRetval = "Maaf, informasi tagihan tidak ditemukan"
End If
loRS1.Close

GenTagihan = sRetval

End Function

Public Function Conv2Hari(ByVal sTgl As String) As Long
  '---cari jumlah hari dalam 1 tahun
  If Val(Left(sTgl, 4)) Mod 4 = 0 Then
    nHari = 365
  Else
    nHari = 366
  End If
  nTahun = Val(Left(sTgl, 4)) * nHari

  '---cari jumlah hari dalam 1 bulan
  Select Case Mid(sTgl, 6, 2)
    Case "02"
      If Val(Left(sTgl, 4)) Mod 4 = 0 Then
        nHari = 29
      Else
        nHari = 28
      End If
    Case "01", "03", "05", "07", "08", "10", "12"
      nHari = 31
    Case Else
      nHari = 30
  End Select
  nBulan = Val(Mid(sTgl, 6, 2)) * nHari

  '---cari jumlah hari
  nHari = Mid(sTgl, 9, 2)

  '---jumlahkan
  Conv2Hari = nTahun + nBulan + nHari
End Function

```



UNIVERSITAS
GADJAH MADA

Layanan notifikasi pemakaian kartu kredit berbasis SMS
ZERISKA, Ehrlich Stevans, Dr.Ir. Lukito E. Nugroho, MSc
Universitas Gadjah Mada, 2003 | Diunduh dari <http://etd.repository.ugm.ac.id/>

```
Public Function SendAktifSMS(ByVal sCom As String) As String
    Dim loRS1 As New ADODB.Recordset
    Dim loRS2 As New ADODB.Recordset
```

```
Public Function SendAktifSMS(ByVal sCom As String) As String
    Dim loRS1 As New ADODB.Recordset
    Public Function SendAktifSMS(ByVal sCom As String) As String
    Dim loRS1 As New ADODB.Recordset
    Dim loRS2 As New ADODB.Recordset
```

```
If TglYMD = sTmpTanggal(TglToStr(Date - 7)) Then
    sendsms()
Elseif TglYMD = sTmpTanggal(TglToStr(Date - 5)) Then
    sendsms()
Elseif TglYMD = sTmpTanggal(TglToStr(Date - 3)) Then
    sendsms()
Elseif TglYMD = sTmpTanggal(TglToStr(Date - 0)) Then
    sendsms()
End If
```

```
'--cek pengiriman aktif (tanpa request)
sSQL = " SELECT fs_hp, fs_nm_depan, fs_nm_belakang, " _
    & " fd_jatuh_tempo, fn_tagihan, fs_user_id " _
    & " FROM t_nasabah " _
    & " WHERE fn_informasi = 0 "
loRS1.Open sSQL, oConn, adOpenForwardOnly
```

```
If Not loRS1.EOF Then
    Do While Not loRS1.EOF
```

```
        nTgl1 = Conv2Hari(loRS1!fd_jatuh_tempo)
        nTgl2 = Conv2Hari(sTmpTanggal)
```

```
        berhasil = False
```

```
If nTgl2 >= nTgl1 Then
    sPesan = loRS1!fs_nm_depan & " " & loRS1!fs_nm_belakang & " " & "yth " _
        & "jatuh tempo tagihan k.kredit=" & TglDMY(loRS1!fd_jatuh_tempo) _
        & " dg jumlah tagihan=" & loRS1!fn_tagihan
    berhasil = SendSMS(sPesan, loRS1!fs_hp, sCom)
End If
```

```
If berhasil Then
```

```
    '--update informasi nasabah
    gsSql1(0) = "fn_informasi"
    gsSql2(0) = 1
    gsSql1(1) = "fs_jam"
    gsSql2(1) = Time
    gsSql1(2) = "fd_tgl_terima"
    gsSql2(2) = Date
    gsSql1(3) = ""
    sSQL = GensSql("t_nasabah", True) _
        & " WHERE fs_user_id = " & loRS1!fs_user_id & " "
    oConn.Execute sSQL
```



```
'---munculkan di report

'---ambil id terakhir
sSQL = " SELECT max(fs_id) as fs_idx FROM t_msg_trima "
loRS2.Open sSQL, oConn, adOpenForwardOnly

If Not loRS2.EOF Then
    xMax = Trim(Str(Val(loRS2!fs_idx) + 1))
Else
    xMax = "1"
End If
loRS2.Close

gsSql1(0) = "fs_id"
gsSql2(0) = xMax
gsSql1(1) = "fd_tgl_terima_jam"
gsSql2(1) = Date & " " & Time
gsSql1(2) = "fs_pengirim"
gsSql2(2) = "SMS Gateway"
gsSql1(3) = "fs_isi"
gsSql2(3) = sPesan
gsSql1(4) = "fn_reply"
gsSql2(4) = 1
gsSql1(5) = ""
sSQL = GensSql("t_msg_trima", False)
oConn.Execute sSQL

End If

loRS1.MoveNext
Loop
End If
loRS1.Close

End Function

Public Function GenKurs(sWord() As String) As String
Dim loRS1 As New ADODB.Recordset
Dim sRetval As String
Dim sDummy As String

On Error GoTo hell

If sWord(1) = "DAFTAR" Then
    sSQL = " SELECT fs_mata_uang " _
        & " FROM t_kurs " _
        & " ORDER BY fs_mata_uang "
    loRS1.Open sSQL, oConn, adOpenForwardOnly
    If Not loRS1.EOF Then
        sRetval = "Daftar Mata Uang yg ada = "
        Do While Not loRS1.EOF
            sRetval = sRetval & loRS1!fs_mata_uang & ", "
            loRS1.MoveNext
        Loop
        sRetval = Left(Trim(sRetval), Len(Trim(sRetval)) - 1)
    Else
        sRetval = "Daftar Mata Uang tidak ditemukan"
    End If
    loRS1.Close
    GenKurs = sRetval
```



UNIVERSITAS
 GADJAH MADA
 Exit Function

Else

```
'---cari informasi kurs
sSQL = " SELECT   fn_kurs_jual, fn_kurs_beli " _
      & " FROM     t_kurs " _
      & " WHERE    fs_mata_uang = " & sWord(1) & " "
loRS1.Open sSQL, oConn, adopenforwadonly

If Not loRS1.EOF Then
  sRetval = "Kurs Jual=" & Format(loRS1!fn_kurs_jual, gFormat(0)) _
    & " Kurs Beli=" & Format(loRS1!fn_kurs_beli, gFormat(0)) _
    & " Tgl:" & TglToStr(Date) & " Jam:" & Time
Else
  sRetval = "Maaf, informasi kurs tidak ditemukan"
End If
loRS1.Close

GenKurs = sRetval
Exit Function
End If
```

hell:

```
GenKurs = "Mata uang belum di masukkan"
End Function
```

3. modSMSText (modSMSText.bas)

```
Global sSMSReceived() As String
Global AksesPort As Boolean
```

```
Function GetSMSid(sStr) As Integer
  Dim sDummy As String
```

```
nCommapos = CharPos(sStr, ",")
'sDummy = Mid(sStr, 1, nCommaPOS - 1)
sDummy = Left(sStr, nCommapos)
```

```
'If Left(Trim(sStr), 6) <> "+CMGL:" Then
'  sDummy = -1
'Else
'  nCommaPOS = CharPos(sStr, ",")
'  sDummy = Mid(sStr, 8, nCommaPOS - 8)
'End If
GetSMSid = Val(sDummy)
```

End Function

```
Public Function DeleteSMS(ByVal sPort As String, ByVal nIndex As Integer) As Boolean
```

```
Dim strData As String
Dim oData As String
Dim bRetval As String
```

```
'On Error GoTo err_gagalPort
If AksesPort Then
  DeleteSMS = False
```



UNIVERSITAS
 GADJAH MADA

Exit Function
 End If

Open sPort For Binary As #1
 AksesPort = True

bRetval = False

'--- test AT Command

oData = ""

Put #1, , "AT" + vbCrLf

Do

DoEvents

Line Input #1, strData

oData = oData & strData

Loop Until (Right(strData, 2) = vbCrLf) Or InStr(oData, "OK") Or InStr(oData, "ERROR")

If InStr(oData, "OK") Then

'--- Set Mode ke SMS

Put #1, , "AT+CMGF=1" & vbCrLf

oData = ""

Do

DoEvents

Get #1, , strData

oData = oData & strData

DoEvents

Loop Until (Right(strData, 2) = vbCrLf) Or InStr(oData, "OK") Or InStr(oData, "ERROR")

If InStr(oData, "OK") Then

'--- Read SMS from GSM Modem

Put #1, , "AT+CMGD=" & nIndex & vbCrLf

oData = ""

Do

DoEvents

Get #1, , strData

oData = oData & strData

DoEvents

Loop Until InStr(oData, "OK") Or InStr(oData, "ERROR")

If InStr(oData, "OK") Then

bRetval = True

End If

End If

End If

Close #1

AksesPort = False

DeleteSMS = bRetval

End Function

Public Function SendSMS(ByVal sMsg As String, sNoTujuan As String _
 , ByVal sPort As String) As Boolean

Dim strData As String

Dim oData As String

Dim bProses As Boolean

Dim bRetval As Boolean

bRetval = False



UNIVERSITAS
 GADJAH MADA

```
'On Error GoTo err_gagalPort
If AksesPort Then
  Exit Function
End If
```

```
Open sPort For Binary As #1
AksesPort = True
```

```
'— test AT Command
oData = ""
Put #1, , "AT" + vbCrLf
Do
  DoEvents
  Line Input #1, strData
  oData = oData & strData
Loop Until (Right(strData, 2) = vbCrLf) Or InStr(oData, "OK") Or InStr(oData, "ERROR")
```

```
If InStr(oData, "OK") Then
  '— Set Mode ke SMS
  Put #1, , "AT+CMGF=1" & vbCrLf
  oData = ""
  Do
    DoEvents
    Get #1, , strData
    oData = oData & strData
    DoEvents
  Loop Until (Right(strData, 2) = vbCrLf) Or InStr(oData, "OK") Or InStr(oData, "ERROR")
```

```
If InStr(oData, "OK") Then
```

```
  '— Read SMS from GSM Modem
  Put #1, , "AT+CMGS=" & Chr$(34) & sNoTujuan & Chr$(34) & vbCrLf
  oData = ""
  Do
    DoEvents
    Get #1, , strData
    oData = oData & strData
    DoEvents
  Loop Until InStr(oData, ">") Or InStr(oData, "ERROR")
```

```
If InStr(oData, ">") Then
  Put #1, , sMsg & Chr$(26) & vbCrLf
End If
```

```
'—tunggu respon dari ComPort
oData = ""
Do
  DoEvents
  Get #1, , strData
  oData = oData & strData
  DoEvents
Loop Until InStr(oData, "OK") Or InStr(oData, "ERROR")
```

```
If InStr(oData, "OK") Then
  bRetval = True
End If
```

```
End If
End If
```

```
Close #1
```



UNIVERSITAS
 GADJAH MADA

```
AksesPort = False
SendSMS = bRetVal
End Function
```

```
Public Function readSMSfromHP(ByVal xPort As String) As String
  Dim strData As String
  Dim oData As String
  Dim sTmp() As String

  If AksesPort Then
    readSMSfromHP = ""
    Exit Function
  End If
  On Error GoTo hell

  Open xPort For Binary As #1

  If Err.Number <> 0 Then
    MsgBox "Port Error, silahkan cek kembali Port yang digunakan"
    readSMSfromHP = ""
    Close #1
    Exit Function
  End If

  On Error GoTo 0

  AksesPort = True

  '--- test AT Command
  oData = ""
  Put #1, , "AT" + vbCrLf
  Do
    DoEvents
    Line Input #1, strData
    oData = oData & strData
  Loop Until (Right(strData, 2) = vbCrLf) Or InStr(oData, "OK") Or InStr(oData, "ERROR")

  If InStr(oData, "OK") Then

    '--- Set Mode ke SMS
    Put #1, , "AT+CMGF=1" & vbCrLf
    oData = ""
    Do
      DoEvents
      Get #1, , strData
      oData = oData & strData
      DoEvents
    Loop Until (Right(strData, 2) = vbCrLf) Or InStr(oData, "OK") Or InStr(oData, "ERROR")

    If InStr(oData, "OK") Then

      '--- Read SMS from GSM Modem
      Put #1, , "AT+CMGL=" & Chr$(34) & "REC UNREAD" & Chr$(34) & vbCrLf
      oData = ""
      Do
        DoEvents
        Get #1, , strData
        oData = oData & strData
        DoEvents
      Loop Until InStr(oData, "OK") Or InStr(oData, "ERROR")
    End If
  End If
End Function
```



UNIVERSITAS
 GADJAH MADA

```
readSMSfromHP = oData
```

```
If InStr(oData, "OK") Then
  sTmp() = Split(oData, "+CMGL:")
  For i = 1 To UBound(sTmp())
    x = GetSMSid(sTmp(i))
    If x = -1 Then
      x = 1
    End If
```

```
Close #1
AksesPort = False
```

```
aa = DeleteSMS(xPort, x)
Next i
End If
```

```
If InStr(oData, "OK") Then
  readSMSfromHP = oData
Elseif InStr(oData, "ERROR") Then
  readSMSfromHP = "ERROR_READ"
Else
  readSMSfromHP = "NO_MSG"
End If
```

```
Else
  readSMSfromHP = "ERROR_NOT_SUPP_SMS"
End If
```

```
Else
  readSMSfromHP = "ERROR_AT_CMD"
```

```
End If
```

```
On Error Resume Next
Close #1
On Error GoTo 0
```

```
AksesPort = False
```

```
Exit Function
```

```
err_gagalPort:
```

```
readSMSfromHP = "PORT_NOT_EXIST"
Close #1
Exit Function
```

```
hell:
```

```
readSMSfromHP = ""
Close #1
End Function
```

```
Function Parsing(ByVal sStr As String) As Integer
```

```
sSMSReceived() = Split(sStr, "+CMGL:")
Parsing = UBound(sSMSReceived())
```

```
End Function
```