

## Lampiran C

### Kode Program Interface Menggunakan Visual Basic .Net

#### 1. Kode Program Untuk Mengubungkan Antara Database Dengan VB.

```
Imports System.Data.OleDb

Module Module1
    Public Conn As OleDbConnection
    Public da As OleDbDataAdapter
    Public ds As DataSet
    Public cmd As OleDbCommand
    Public rd As OleDbDataReader
    Public Str As String

    Public Sub Koneksi()
        Str = "Provider=Microsoft.ACE.OLEDB.12.0;Data Source=" &
Application.StartupPath & "\dbmahasiswa.accdb"
        Conn = New OleDbConnection(Str)
        If Conn.State = ConnectionState.Closed Then
            Conn.Open()
        End If
    End Sub
End Module
```

## 2. Kode Program Menu Login

```
Imports System.Data.OleDb
Public Class frmLogin

    Private Sub btnLogin_Click(ByVal sender As System.Object, ByVal
e As System.EventArgs) Handles btnLogin.Click
        If txtUsername.Text = "" Or txtPassword.Text = "" Then
            MsgBox("Username atau password masih kosong",
MsgBoxStyle.Exclamation, "Pesan")
            Exit Sub
        End If

        cmd = New OleDbCommand("select * from tbpengguna where
username='" & txtUsername.Text & "' and password='" &
txtPassword.Text & "'", Conn)
        rd = cmd.ExecuteReader
        rd.Read()

        If rd.HasRows Then
            If rd.GetString(4) = "Administrator" Then
                frmMenu.Show()
            Else
                frmViewMhs.Show()
            End If
            Me.Hide()
        Else
            MsgBox("Username dan password salah, periksa kembali",
MsgBoxStyle.Exclamation, "Gagal Login")
            txtUsername.Focus()
        End If
    End Sub

    Private Sub frmLogin_Load(ByVal sender As System.Object, ByVal
e As System.EventArgs) Handles MyBase.Load
        Call Koneksi()
    End Sub

    Private Sub btnKeluar_Click(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles btnKeluar.Click
        End
    End Sub
End Class
```

### 3. Kode Program Untuk Menu Data Mahasiswa.

```
Imports System.Data.OleDb
Public Class frmInputMhs
    Private Sub bersih()
        txtBarcode.Text = ""
        txtNpm.Text = ""
        txtNama.Text = ""
        txtTelp.Text = ""
        txtJurusan.Text = ""
        txtCari.Text = ""
    End Sub
    Private Sub aktifTeks(ByVal a As Boolean)
        txtBarcode.Enabled = a
        txtNpm.Enabled = a
        txtNama.Enabled = a
        txtTelp.Enabled = a
        txtJurusan.Enabled = a
    End Sub
    Private Sub aktifTombol(ByVal a As Boolean)
        btnTambah.Enabled = a
        btnSimpan.Enabled = a
        btnHapus.Enabled = a
        btnEdit.Enabled = a
        btnKeluar.Enabled = a
    End Sub

    Private Sub Tampil()
        da = New OleDbDataAdapter("Select
        kode,npm,nama,telp,jurusan From tbmhs", Conn)
        ds = New DataSet
        ds.Clear()
        da.Fill(ds, "tbmhs")
        dgMhs.DataSource = ds.Tables("tbmhs")
        dgMhs.Refresh()
    End Sub
    Private Sub AturGrid()
        dgMhs.Columns(0).Width = 120
        dgMhs.Columns(1).Width = 80
        dgMhs.Columns(2).Width = 130
        dgMhs.Columns(3).Width = 80
        dgMhs.Columns(4).Width = 100

        dgMhs.Columns(0).HeaderText = "Kode Barcode"
        dgMhs.Columns(1).HeaderText = "NPM"
        dgMhs.Columns(2).HeaderText = "Nama Mahasiswa"
        dgMhs.Columns(3).HeaderText = "Telp"
        dgMhs.Columns(4).HeaderText = "Konsentrasi"
    End Sub

    Private Sub frmInputMhs_Load(ByVal sender As System.Object,
    ByVal e As System.EventArgs) Handles MyBase.Load
        bersih()
        aktifTeks(False)
        aktifTombol(False)
        btnTambah.Enabled = True
        btnKeluar.Enabled = True
        Tampil()
```

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        AturGrid()
    End Sub

    Private Sub btnTambah_Click(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles btnTambah.Click
        If btnTambah.Text = "Tambah" Then
            btnTambah.Text = "Batal"
            aktifTeks(True)
            bersih()
            aktifTombol(False)
            btnTambah.Enabled = True
            btnSimpan.Enabled = True
            txtBarcode.Focus()
        Else
            btnTambah.Text = "Tambah"
            aktifTeks(False)
            bersih()
            aktifTombol(False)
            btnTambah.Enabled = True
            btnKeluar.Enabled = True
        End If
    End Sub

    Private Sub btnKeluar_Click(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles btnKeluar.Click
        Dispose()
    End Sub

    Private Sub btnSimpan_Click(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles btnSimpan.Click
        If txtBarcode.Text = "" Or txtNama.Text = "" Or txtNpm.Text
= "" Then
            MsgBox("Lengkapi inputan data mahasiswa",
MsgBoxStyle.Information, "Perhatian")
            Exit Sub
        End If

        'untuk simpan data
        If btnTambah.Text = "Batal" Then
            Str = "insert into tbmhs(kode,npm,nama,telp,jurusan)
values('" & txtBarcode.Text & "','" & txtNpm.Text & "','" &
txtNama.Text & "','" & txtTelp.Text & "','" & txtJurusan.Text &
"')"
            cmd = New OleDbCommand(Str, Conn)
            cmd.ExecuteNonQuery()
            MsgBox("Simpan data sukses...!",
MsgBoxStyle.Information, "Perhatian")
        End If

        'untuk edit data
        If btnEdit.Text = "Batal" Then
            Str = "update tbmhs set npm='" & txtNpm.Text &
"',nama='" & txtNama.Text & "',telp='" & txtTelp.Text &
"',jurusan='" & txtJurusan.Text & "' where kode='" &
txtBarcode.Text & "'"
            cmd = New OleDbCommand(Str, Conn)
            cmd.ExecuteNonQuery()
            MsgBox("Edit data sukses...!", MsgBoxStyle.Information,
"Perhatian")
        End If
    End Sub

```

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        bersih()
        aktifTeks(False)
        aktifTombol(False)
        btnTambah.Enabled = True
        btnKeluar.Enabled = True
        Tampil()
        btnTambah.Text = "Tambah"
        btnEdit.Text = "Edit"
    End Sub

    Private Sub btnHapus_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnHapus.Click
        Dim pesan As String
        pesan = MsgBox("Yakin data akan dihapus ?",
        MsgBoxStyle.Critical + MsgBoxStyle.YesNo, "konfirmasi")
        If pesan = vbYes Then
            Str = "delete from tbmhs where kode='" &
            txtBarcode.Text & "'"
            cmd = New OleDbCommand(Str, Conn)
            cmd.ExecuteNonQuery()
            MsgBox("Hapus data sukses...!",
            MsgBoxStyle.Information, "Perhatian")

            bersih()
            aktifTeks(False)
            aktifTombol(False)
            btnTambah.Enabled = True
            btnKeluar.Enabled = True
            Tampil()
        End If End Sub

    Private Sub btnEdit_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnEdit.Click
        If btnEdit.Text = "Edit" Then
            btnEdit.Text = "Batal"
            aktifTeks(True)
            txtBarcode.Enabled = False
            aktifTombol(False)
            btnEdit.Enabled = True
            btnSimpan.Enabled = True
            txtNpm.Focus()
        Else
            btnEdit.Text = "Edit"
            aktifTeks(False)
            bersih()
            aktifTombol(False)
            btnTambah.Enabled = True
            btnKeluar.Enabled = True
        End If
    End Sub

    Private Sub dgMhs_CellClick(ByVal sender As Object, ByVal e As System.Windows.Forms.DataGridViewCellEventArgs) Handles dgMhs.CellClick
        Dim i As Integer
        i = Me.dgMhs.CurrentRow.Index
        With dgMhs.Rows.Item(i)
            Me.txtBarcode.Text = .Cells(0).Value
            Me.txtNpm.Text = .Cells(1).Value
            Me.txtNama.Text = .Cells(2).Value
            Me.txtTelp.Text = .Cells(3).Value
        End With
    End Sub

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        Me.txtJurusan.Text = .Cells(4).Value
    End With

    aktifTombol(True)
    btnSimpan.Enabled = False
    aktifTeks(False)
End Sub

Private Sub txtCari_TextChanged(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles txtCari.TextChanged
    da = New OleDbDataAdapter("Select
kode,npm,nama,telp,jurusan From tbmhs where npm like '%" &
txtCari.Text & "%' or nama like '%" & txtCari.Text & "%' ", Conn)
    ds = New DataSet
    ds.Clear()
    da.Fill(ds, "tbmhs")
    dgMhs.DataSource = ds.Tables("tbmhs")
    dgMhs.Refresh()

    AturGrid()
End Sub

Private Sub txtTelp_KeyPress(ByVal sender As Object, ByVal e As
System.Windows.Forms.KeyPressEventArgs) Handles txtTelp.KeyPress

End Sub

Private Sub txtTelp_TextChanged(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles txtTelp.TextChanged

End Sub

End Class

```

#### 4. Kode Program Untuk Menu Cek Kode.

```
Imports System.Data.OleDb
Imports System.IO.Ports

Public Class frmViewMhs
    Shared _continue As Boolean
    Shared _serialPort As SerialPort

    Private Sub txtKode_KeyDown(ByVal sender As Object, ByVal e As
System.Windows.Forms.KeyEventArgs) Handles txtKode.KeyDown
        If e.KeyCode = Keys.Enter Then
            If txtKode.Text <> "" Then
                cmd = New OleDbCommand("select * from tbmhs where
kode='" & txtKode.Text & "' or npm='" & txtKode.Text & "'", Conn)
                rd = cmd.ExecuteReader
                rd.Read()

                If rd.HasRows Then
                    Str = "insert into transaksi (npm,nama,waktu)
values ('" & rd.GetString(2) & "', '" & rd.GetString(3) & "', '" &
Now & "')"

                    cmd = New OleDbCommand(Str, Conn)
                    cmd.ExecuteNonQuery()
                    SerialPort1.Write("C")
                    MsgBox("Mahasiswa dengan Npm " &
rd.GetString(2) & " Ditemukan", MsgBoxStyle.Information, "Sukses")
                    txtKode.Text = ""

                Else
                    MsgBox("Mahasiswa tidak Ditemukan, periksa
kembali", MsgBoxStyle.Information, "Gagal")
                    txtKode.Text = ""
                End If
            End If
        End If
    End Sub

    Private Sub frmViewMhs_Load(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles MyBase.Load
        SerialPort1.Close()
        SerialPort1.PortName = "com11"
        SerialPort1.BaudRate = 9600
        SerialPort1.DataBits = 8
        SerialPort1.Parity = Parity.None
        SerialPort1.StopBits = StopBits.One
        SerialPort1.Handshake = Handshake.None
        SerialPort1.Encoding = System.Text.Encoding.Default 'very
important!
        SerialPort1.Open()
    End Sub

    Private Sub txtKode_TextChanged(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles txtKode.TextChanged

    End Sub
End Class
```

## 5. Kode Program Untuk Menu Laporan Mahasiswa.

```
Public Class frmLaporan

    Private Sub btnCetak_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnCetak.Click
        frmCetak.lapMhs1.SetParameterValue("awal", dtTgl1.Text)
        frmCetak.lapMhs1.SetParameterValue("akhir", dtTgl2.Text)
        frmCetak.Show()
    End Sub

    Private Sub btnKeluar_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnKeluar.Click

    End Sub
End Class
```

## 6. Kode Program Untuk Menu Data Pengguna.

```
Imports System.Data.OleDb
Public Class frmPengguna
    Private Sub bersih()
        txtNoId.Text = ""
        txtUlangiPass.Text = ""
        txtNama.Text = ""
        txtPassword.Text = ""
        txtUsername.Text = ""
        cmbAkses.Text = ""
    End Sub
    Private Sub aktifTeks(ByVal a As Boolean)
        txtNoId.Enabled = a
        txtUlangiPass.Enabled = a
        txtNama.Enabled = a
        txtPassword.Enabled = a
        txtUsername.Enabled = a
        cmbAkses.Enabled = a
    End Sub
    Private Sub aktifTombol(ByVal a As Boolean)
        btnTambah.Enabled = a
        btnSimpan.Enabled = a
        btnHapus.Enabled = a
        btnEdit.Enabled = a
        btnKeluar.Enabled = a
    End Sub
    Private Sub Tampil()
        da = New OleDbDataAdapter("Select * From tbpengguna", Conn)
        ds = New DataSet
        ds.Clear()
        da.Fill(ds, "tbpengguna")
        dgMhs.DataSource = ds.Tables("tbpengguna")
        dgMhs.Refresh()
    End Sub
End Class
```



```

Private Sub AturGrid()
    dgMhs.Columns(0).Width = 120
    dgMhs.Columns(1).Width = 80
    dgMhs.Columns(2).Width = 130
    dgMhs.Columns(3).Width = 80
    dgMhs.Columns(4).Width = 100

    dgMhs.Columns(0).HeaderText = "No ID"
    dgMhs.Columns(1).HeaderText = "Nama"
    dgMhs.Columns(2).HeaderText = "Username"
    dgMhs.Columns(3).HeaderText = "Password"
    dgMhs.Columns(4).HeaderText = "Hak Akses"
End Sub

Private Sub frmPengguna_Load(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles MyBase.Load
    bersih()
    aktifTeks(False)
    aktifTombol(False)
    btnTambah.Enabled = True
    btnKeluar.Enabled = True
    Tampil()
    AturGrid()
End Sub

Private Sub btnTambah_Click_1(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles btnTambah.Click
    If btnTambah.Text = "Tambah" Then
        btnTambah.Text = "Batal"
        aktifTeks(True)
        bersih()
        aktifTombol(False)
        btnTambah.Enabled = True
        btnSimpan.Enabled = True
        txtNoId.Focus()
    Else
        btnTambah.Text = "Tambah"
        aktifTeks(False)
        bersih()
        aktifTombol(False)
        btnTambah.Enabled = True
        btnKeluar.Enabled = True
    End If
End Sub

Private Sub dgMhs_CellClick(ByVal sender As Object, ByVal e As
System.Windows.Forms.DataGridViewCellEventArgs) Handles
dgMhs.CellClick
    Dim i As Integer
    i = Me.dgMhs.CurrentRow.Index
    With dgMhs.Rows.Item(i)
        Me.txtNoId.Text = .Cells(0).Value
        Me.txtNama.Text = .Cells(1).Value
        Me.txtUsername.Text = .Cells(2).Value
        Me.txtPassword.Text = .Cells(3).Value
        Me.txtUlangiPass.Text = .Cells(3).Value
        Me.cmbAkses.Text = .Cells(4).Value
    End With

```

```

        aktifTombol(True)
        btnSimpan.Enabled = False
        aktifTeks(False)
    End Sub

    Private Sub btnEdit_Click(ByVal sender As System.Object, ByVal
e As System.EventArgs) Handles btnEdit.Click
        If btnEdit.Text = "Edit" Then
            btnEdit.Text = "Batal"
            aktifTeks(True)
            txtNoId.Enabled = False
            aktifTombol(False)
            btnEdit.Enabled = True
            btnSimpan.Enabled = True
            txtUsername.Focus()
        Else
            btnEdit.Text = "Edit"
            aktifTeks(False)
            bersih()
            aktifTombol(False)
            btnTambah.Enabled = True
            btnKeluar.Enabled = True
        End If
    End Sub

    Private Sub btnHapus_Click(ByVal sender As System.Object, ByVal
e As System.EventArgs) Handles btnHapus.Click
        Dim pesan As String
        pesan = MsgBox("Yakin data akan dihapus ?",
MsgBoxStyle.Critical + MsgBoxStyle.YesNo, "konfirmasi")
        If pesan = vbYes Then
            Str = "delete from tbpengguna where noid='" &
txtNoId.Text & "'"
            cmd = New OleDbCommand(Str, Conn)
            cmd.ExecuteNonQuery()
            MsgBox("Hapus data sukses...!",
MsgBoxStyle.Information, "Perhatian")

            bersih()
            aktifTeks(False)
            aktifTombol(False)
            btnTambah.Enabled = True
            btnKeluar.Enabled = True
            Tampil()
        End If
    End Sub

    Private Sub btnSimpan_Click(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles btnSimpan.Click
        If txtNoId.Text = "" Or txtNama.Text = "" Or
txtUsername.Text = "" Then
            MsgBox("Lengkapi inputan data pengguna",
MsgBoxStyle.Information, "Perhatian")
            Exit Sub
        End If

        'untuk simpan data coy
        If btnTambah.Text = "Batal" Then

```

```

        Str = "insert into tbpengguna values('" & txtNoId.Text
& "','" & txtNama.Text & "','" & txtUsername.Text & "','" &
txtPassword.Text & "','" & cmbAkses.Text & "')"
        cmd = New OleDbCommand(Str, Conn)
        cmd.ExecuteNonQuery()
        MsgBox("Simpan data sukses...!",
MsgBoxStyle.Information, "Perhatian")
    End If

    'untuk edit data coy
    If btnEdit.Text = "Batal" Then
        Str = "update tbpengguna set username='" &
txtUsername.Text & "',nama='" & txtNama.Text & "',password='" &
txtPassword.Text & "',akses='" & cmbAkses.Text & "' where noid='" &
txtNoId.Text & "'"
        cmd = New OleDbCommand(Str, Conn)
        cmd.ExecuteNonQuery()
        MsgBox("Edit data sukses...!", MsgBoxStyle.Information,
"Perhatian")
    End If

    bersih()
    aktifTeks(False)
    aktifTombol(False)
    btnTambah.Enabled = True
    btnKeluar.Enabled = True
    Tampil()
    btnTambah.Text = "Tambah"
    btnEdit.Text = "Edit"
End Sub
End Class

```

## 7. KodeProgram Untuk Menu Kunci Aplikasi.

```
Imports System.Data.OleDb
Public Class frmKunci

    Private Sub TextBox1_KeyDown(ByVal sender As Object, ByVal e As
System.Windows.Forms.KeyEventArgs) Handles txtKode.KeyDown
        If e.KeyCode = Keys.Enter Then
            If txtKode.Text <> "" Then
                cmd = New OleDbCommand("select * from tbpengguna
where password='" & txtKode.Text & "'", Conn)
                rd = cmd.ExecuteReader
                rd.Read()

                If rd.HasRows Then
                    Dispose()
                Else
                    MsgBox("Password salah, periksa kembali",
MsgBoxStyle.Exclamation, "Gagal")
                    txtKode.Text = ""
                End If
            End If
        End If
    End Sub

    Private Sub TextBox1_TextChanged(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles txtKode.TextChanged

    End Sub
End Class
```