Faiz Mohammad Hafidza
IF – 6B
"PROGRAMMING VISUAL"
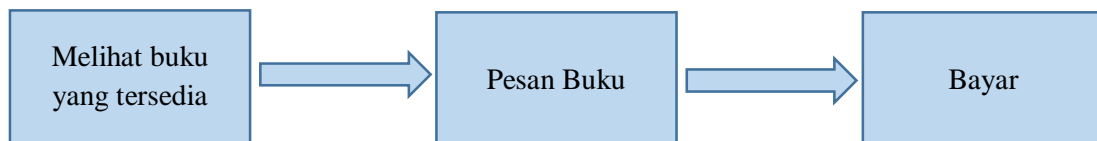

Aplikasi yang dibuat

Pada project kali ini, kita akan membuat sistem informasi toko buku bernama "Izeah Book Store" menggunakan Visual Basic 2010. Pastikan software tersebut telah terinstall. Untuk software pendukungnya adalah ODBC versi 3.51 sebagai connector database ke VB itu sendiri, lalu ada XAMPP sebagai web server untuk menyediakan layanan MySQL database, lalu yang terakhir adalah Crystal Report yaitu untuk menampilkan laporan dari Aplikasi yang dibuat.
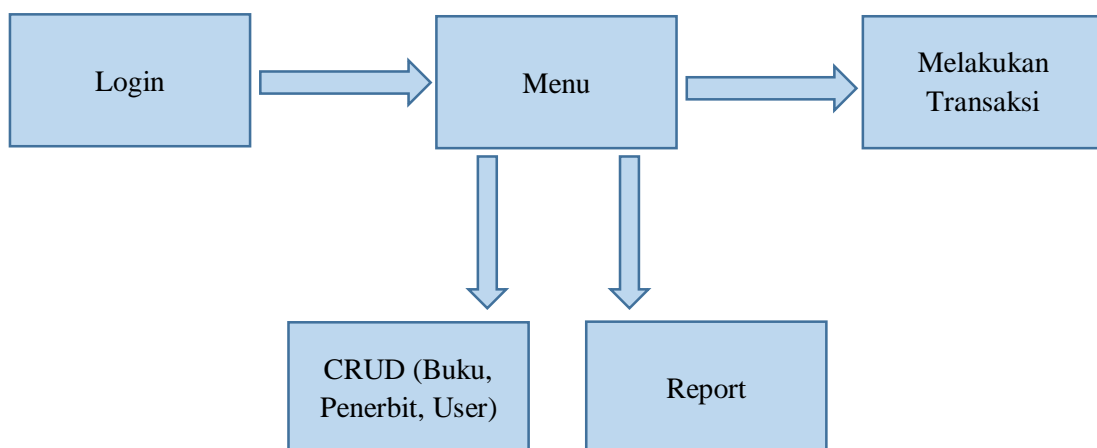
Use Case

Fitur fungsional dari aplikasi ini adalah sebagai berikut :
1. Terdapat 2 role pada aplikasi ini, yaitu Penjual dan Pembeli.
2. Penjual sebagai admin dari aplikasi.
3. Pembeli melakukan transaksi pembelian buku.
4. Penjual bisa melakukan CRUD terhadap buku, penerbit, dan user.
5. Bisa menampilkan dan mencetak laporan transaksi melalui Crystal Report

Flow Diagram Pembeli

```
┌─────────────────┐      ┌─────────────────┐      ┌─────────────────┐
│  Melihat buku   │ ──►  │   Pesan Buku    │ ──►  │     Bayar       │
│  yang tersedia  │      │                 │      │                 │
└─────────────────┘      └─────────────────┘      └─────────────────┘
```

Flow Diagram Penjual

```
┌─────────────────┐      ┌─────────────────┐      ┌─────────────────┐
│     Login       │ ──►  │      Menu       │ ──►  │   Melakukan     │
│                 │      │                 │      │   Transaksi     │
└─────────────────┘      └────────┬────────┘      └─────────────────┘
                            │           │
                            ▼           ▼
                  ┌──────────────┐  ┌──────────────┐
                  │ CRUD (Buku,  │  │    Report    │
                  │ Penerbit,    │  │              │
                  │ User)        │  │              │
                  └──────────────┘  └──────────────┘
```
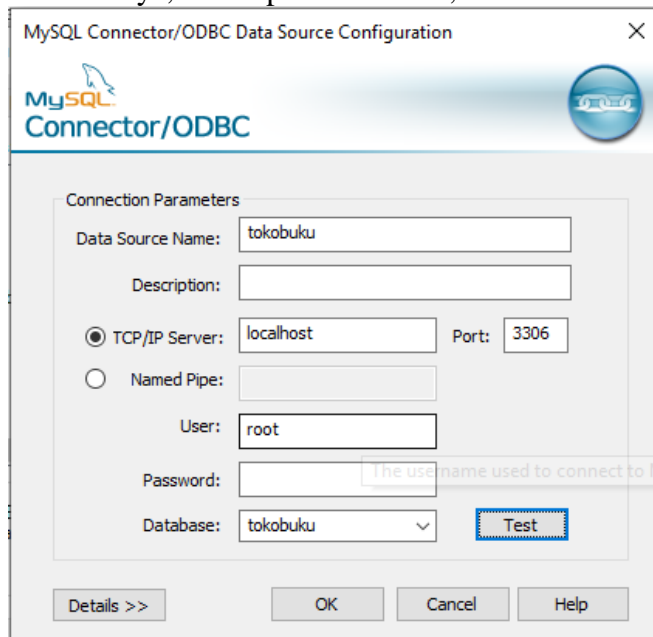
Database Design

Silahkan buka "localhost/phpmyadmin" di browser page kalian, dan buat database misal diberinama "tokobuku" kemudian buat tabelnya sesuai skema berikut :

1. Buku
   a. Id → varchar(100) **PK**
   b. Judul → varchar(100)
   c. Penulis → varchar(100)
   d. Harga → int(100)
   e. Stock → int(100)
   f. Tahun → int(100)

2. Penerbit
   a. Id → varchar(100) **PK**
   b. Nama → varchar(100)
   c. Telp → int(100)

3. User
   a. Id → varchar(100) **PK**
   b. Nama → varchar(100)
   c. Username → varchar(100)
   d. Password → varchar(100)
   e. Level → varchar(100)

4. Transaksi
   a. Id → varchar(100) **PK**
   b. Tanggal → date
   c. Waktu → time
   d. Item → int(100)
   e. Total → int(100)
   f. Bayar → int(100)
   g. Kembali → int(100)
   h. Penerbit_id → varchar(100)
   i. User_id → varchar(100)

5. Detail_transaksi
   a. Transaksi_id → varchar(100)
   b. Buku_id → varchar(100)
   c. Judul_buku → varchar(100)
   d. Harga_buku → int(100)
   e. Quantity → int(100)
   f. Subtotal → int(100)

Mulai membuat project

Kali ini, kita akan memulai project-nya. Buat project baru di Visual Basic 2010 misal "tokobuku project", saya asumsikan teman-teman sudah bisa pada tahap ini. Ikuti step di bawah ini :

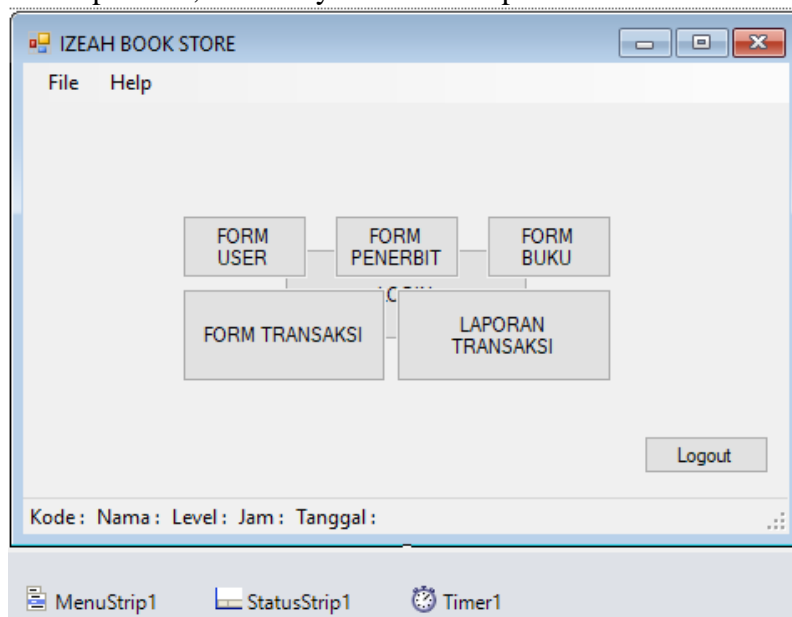1. Sebelumnya, buka aplikasi ODBC, lalu buat koneksi ke MySQL.

2. Pergi ke Project → Add Module, kemudian beri nama misal "Dbconn", lalu masukkan coding berikut :

```vbnet
Imports System.Data
Imports System.Data.Odbc
Imports System.Data.SqlClient
Imports System.Data.OleDb

Module Module1
    Public konek As OdbcConnection
    Public DA As OdbcDataAdapter
    Public DR As OdbcDataReader
    Public DS As DataSet
    Public CMD As OdbcCommand

    Sub koneksi()
        Try
            konek = New
OdbcConnection("DSN=tokobuku;MultipleActiveResultSets=True")
            If konek.State = ConnectionState.Closed Then
                konek.Open()
            End If
        Catch ex As Exception
            MsgBox("Konek Ke Database Bermasalah, Periksa Koneksi Jaringan
Anda")
        End Try
    End Sub
End Module
```

3. Kemudian buat Form baru bernama misal "Menu Utama", kemudian buat UI nya kira-kira seperti ini, selebihnya silahkan improv.

Lalu masukkan coding berikut :

```vb
Public Class Menu_Utama
    Sub Terkunci()
        ToolStripStatusLabel2.Text = ("")
        ToolStripStatusLabel4.Text = ("")
        ToolStripStatusLabel6.Text = ("")
        Button1.Visible = True
        Button2.Visible = False
        Button3.Visible = False
        Button4.Visible = False
        Button5.Visible = False
        Button6.Visible = False
        Button7.Visible = False
    End Sub
    Private Sub Menu_Utama_Load(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
        Call Terkunci()
        ToolStripStatusLabel10.Text = Today
    End Sub

    Private Sub KeluarToolStripMenuItem_Click(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles KeluarToolStripMenuItem.Click
        Dim pesan = MsgBox("Apakah Anda Ingin Keluar?",
        MsgBoxStyle.OkCancel)
        If pesan = 1 Then
            End
        End If
    End Sub

    Private Sub Timer1_Tick(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Timer1.Tick
        ToolStripStatusLabel8.Text = TimeOfDay
    End Sub

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

```vbnet
        MsgBox("APLIKASI INI DIBUAT OLEH FAIZ MOHAMMAD HAFIDZA")
    End Sub

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

    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button2.Click
        Call Terkunci()
        MsgBox("Logout Berhasil")
    End Sub

    Private Sub Button3_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button3.Click
        Me.Hide()
        FormUser.ShowDialog()
    End Sub

    Private Sub Button4_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button4.Click
        Me.Hide()
        FormPenerbit.ShowDialog()
    End Sub

    Private Sub Button5_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button5.Click
        Me.Hide()
        FormBuku.ShowDialog()
    End Sub

    Private Sub Button6_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button6.Click
        Me.Hide()
        FormTransaksiIzeahBookStore.ShowDialog()
    End Sub

    Private Sub Button7_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button7.Click
        LaporanTransaksiIzeahBookStore.ShowDialog()
    End Sub
End Class
```
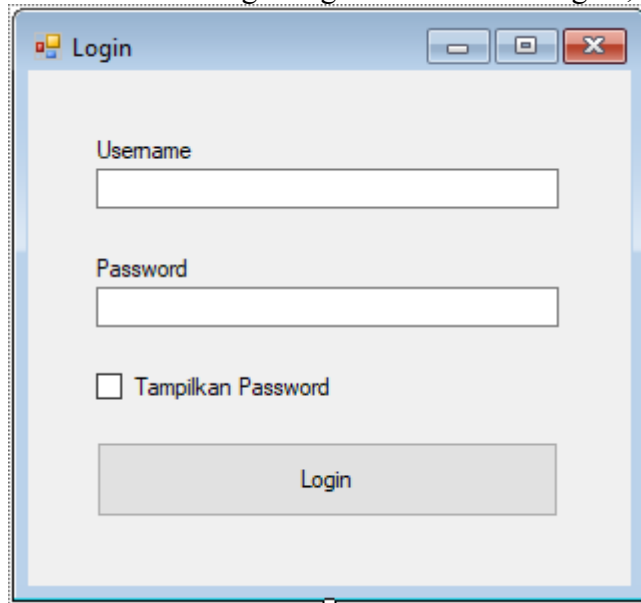
4.	Buat Form baru lagi dengan nama "FormLogin", buat UI-nya kira-kira seperti ini :

Coding :

```vb
Imports System.Data.Odbc

Public Class FormLogin
    Dim CMD As New OdbcCommand
    Dim DR As OdbcDataReader

    Private Sub FormLogin_Load(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
        TextBox1.MaxLength = 6
        TextBox2.PasswordChar = "x"
        TextBox1.Clear()
        TextBox2.Clear()
    End Sub

    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
        If TextBox1.Text = "" Or TextBox2.Text = "" Then
            MessageBox.Show("username & password kosong", "Perhatian",
MessageBoxButtons.OK, MessageBoxIcon.Warning)
            Exit Sub
        Else
            Call koneksi()
            CMD = New OdbcCommand("select * from  user where username='" &
TextBox1.Text & "' and password='" & TextBox2.Text & "'", konek)
            DR = CMD.ExecuteReader
            DR.Read()

            If DR.HasRows Then
                Me.Close()
                MessageBox.Show("LOGIN Berhasil :)!", "Sukses",
MessageBoxButtons.OK, MessageBoxIcon.Information)
                Menu_Utama.Show()
                Menu_Utama.ToolStripStatusLabel2.Text = DR!id
                Menu_Utama.ToolStripStatusLabel4.Text = DR!nama
                Menu_Utama.ToolStripStatusLabel6.Text = DR!level
                Menu_Utama.Button1.Visible = False
                Menu_Utama.Button2.Visible = True
```

```
            Menu_Utama.Button3.Visible = True
            Menu_Utama.Button4.Visible = True
            Menu_Utama.Button5.Visible = True
            Menu_Utama.Button6.Visible = True
            Menu_Utama.Button7.Visible = True
        Else
            MessageBox.Show("LOGIN GAGAL! username/password salah", "Gagal",
MessageBoxButtons.OK, MessageBoxIcon.Error)
            TextBox1.Text = ""
            TextBox2.Text = ""
        End If
    End If
End Sub

Private Sub CheckBox1_CheckedChanged(ByVal sender As System.Object, ByVal e
As System.EventArgs) Handles CheckBox1.CheckedChanged
    If CheckBox1.Checked = True Then
        TextBox2.PasswordChar = ""
    Else
        TextBox2.PasswordChar = "x"
    End If
End Sub
End Class
```

5. Buat lagi Form baru dengan nama "Form Buku", kira-kira UI-nya seperti berikut :

Coding :

```vb
Imports System.Data.Odbc

Public Class FormBuku
    Dim databaru As Boolean
    Dim Conn As OdbcConnection
    Dim da As OdbcDataAdapter
    Dim ds As DataSet
    Dim str As String
    Dim CMD As OdbcCommand
    Dim DR As OdbcDataReader

    Sub isigrid()
        koneksi()
        da = New Odbc.OdbcDataAdapter("SELECT * FROM buku", konek)
        ds = New DataSet
        ds.Clear()
        da.Fill(ds, "buku")
        DataGridView1.DataSource = (ds.Tables("buku"))
        DataGridView1.Enabled = True
    End Sub

    Sub bersih()
        TextBox1.Text = ""
        TextBox2.Text = ""
        TextBox3.Text = ""
        TextBox4.Text = ""
        TextBox5.Text = ""
        TextBox6.Text = ""
    End Sub

    Sub NomorOtomatis()
        Call koneksi()
        CMD = New OdbcCommand("Select * from buku where id in (Select max(id)
from buku)", konek)
        Dim UrutanKode As String
        Dim Hitung As Long
        DR = CMD.ExecuteReader
        DR.Read()
        If Not DR.HasRows Then
            UrutanKode = "B" + "001"
        Else
            Hitung = Microsoft.VisualBasic.Right(DR.GetString(0), 3) + 1
            UrutanKode = "B" + Microsoft.VisualBasic.Right("000" & Hitung, 3)
        End If
        TextBox1.Text = UrutanKode
    End Sub

    Private Sub FormBuku_Load(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
        databaru = False
        Button1.Text = "INPUT"
        Button2.Enabled = False
        Button3.Enabled = False
        Button4.Enabled = False
        Button5.Enabled = False
        TextBox2.Enabled = False
        TextBox3.Enabled = False
        TextBox4.Enabled = False
        TextBox5.Enabled = False
        TextBox6.Enabled = False
```

```vb
            isigrid()
            NomorOtomatis()
        End Sub

    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
            If Button1.Text = "INPUT" Then
                Button2.Enabled = True
                Button5.Enabled = True
                TextBox2.Enabled = True
                TextBox3.Enabled = True
                TextBox4.Enabled = True
                TextBox5.Enabled = True
                TextBox6.Enabled = True
                Button1.Text = "SIMPAN"
            ElseIf Button1.Text = "SIMPAN" Then
                Dim simpan As String = ""
                TextBox2.Focus()
                If TextBox2.Text = "" Then
                    MsgBox("Judul Buku Kosong", vbInformation)
                ElseIf TextBox3.Text = "" Then
                    MsgBox("Penulis Kosong", vbInformation)
                ElseIf TextBox4.Text = "" Then
                    MsgBox("Harga Kosong", vbInformation)
                ElseIf TextBox5.Text = "" Then
                    MsgBox("Stock Kosong", vbInformation)
                ElseIf TextBox6.Text = "" Then
                    MsgBox("Tahun Kosong", vbInformation)
                Else
                    databaru = True
                End If
                If databaru Then
                    simpan = "INSERT INTO buku(id,judul,penulis,harga,stock,tahun)
VALUES ('" & TextBox1.Text & "','" & TextBox2.Text & "','" & TextBox3.Text &
"','" & TextBox4.Text & "','" & TextBox5.Text & "','" & TextBox6.Text & "')"
                    Dim pesan = MsgBox("Apakah Anda Yakin Data Akan ditambahkan ke
Database ?", vbYesNo + vbInformation, "Perhatian")
                    If pesan = MsgBoxResult.Yes Then
                        jalankansql(simpan)
                    End If
                End If
                Me.Cursor = Cursors.WaitCursor
                DataGridView1.Refresh()
                isigrid()
                Me.Cursor = Cursors.Default
                bersih()
                NomorOtomatis()
            End If
        End Sub

    Private Sub jalankansql(ByVal sQl As String)
        Dim objcmd As New System.Data.Odbc.OdbcCommand
        Call koneksi()
        Try
            objcmd.Connection = konek
            objcmd.CommandType = CommandType.Text
            objcmd.CommandText = sQl
            objcmd.ExecuteNonQuery()
            objcmd.Dispose()
            MsgBox("Syntax SQL berhasil", vbInformation)
        Catch ex As Exception
            MsgBox("Syntax SQL terjadi kesalahan" & ex.Message)
```

```vb
            End Try
        End Sub

        Private Sub isiTextBox(ByVal x As Integer)
            Try
                TextBox1.Text = DataGridView1.Rows(x).Cells(0).Value
                TextBox2.Text = DataGridView1.Rows(x).Cells(1).Value
                TextBox3.Text = DataGridView1.Rows(x).Cells(2).Value
                TextBox4.Text = DataGridView1.Rows(x).Cells(3).Value
                TextBox5.Text = DataGridView1.Rows(x).Cells(4).Value
                TextBox6.Text = DataGridView1.Rows(x).Cells(5).Value
            Catch ex As Exception
            End Try
        End Sub

        Private Sub DataGridView1_CellContentClick(ByVal sender As System.Object,
    ByVal e As System.Windows.Forms.DataGridViewCellEventArgs) Handles
    DataGridView1.CellContentClick
            isiTextBox(e.RowIndex)
            databaru = False
            Button3.Enabled = True
            Button4.Enabled = True
        End Sub

        Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As
    System.EventArgs) Handles Button2.Click
            NomorOtomatis()
            TextBox2.Text = ""
            TextBox3.Text = ""
            TextBox4.Text = ""
            TextBox5.Text = ""
            TextBox6.Text = ""
        End Sub

        Private Sub Button3_Click(ByVal sender As System.Object, ByVal e As
    System.EventArgs) Handles Button3.Click
            Dim ubah As String = "UPDATE  buku  SET  " + "judul  ='" & TextBox2.Text
    & "'," + "penulis  ='" & TextBox3.Text & "'," + "harga  ='" & TextBox4.Text &
    "'," + "stock  ='" & TextBox5.Text & "'," + "tahun  ='" & TextBox6.Text & "'
    WHERE  id  =  '" & TextBox1.Text & "' "
            If TextBox2.Text = "" Then
                MsgBox("Judul Buku Kosong", vbInformation)
            ElseIf TextBox3.Text = "" Then
                MsgBox("Penulis Kosong", vbInformation)
            ElseIf TextBox4.Text = "" Then
                MsgBox("Harga Kosong", vbInformation)
            ElseIf TextBox5.Text = "" Then
                MsgBox("Stock Kosong", vbInformation)
            ElseIf TextBox6.Text = "" Then
                MsgBox("Tahun Kosong", vbInformation)
            Else
                jalankansql(ubah)
            End If
            Me.Cursor = Cursors.WaitCursor
            DataGridView1.Refresh()
            isigrid()
            Me.Cursor = Cursors.Default
            bersih()
            NomorOtomatis()
            Button3.Enabled = False
            Button4.Enabled = False
        End Sub
```

```vb
    Private Sub Button4_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button4.Click
        Dim hapussql As String
        Dim pesan As Integer
        pesan = MsgBox("Apakah anda yakin akan menghapus Data pada server  ...
" + TextBox2.Text, vbExclamation + vbYesNo, "perhatian")
        If pesan = vbNo Then Exit Sub
        hapussql = "DELETE  FROM  buku  WHERE  id='" & TextBox1.Text & "'"
        jalankansql(hapussql)
        Me.Cursor = Cursors.WaitCursor
        DataGridView1.Refresh()
        isigrid()
        Me.Cursor = Cursors.Default
        Call bersih()
        NomorOtomatis()
        Button3.Enabled = False
        Button4.Enabled = False
    End Sub

    Private Sub Button5_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button5.Click
        Me.Close()
        Menu_Utama.Show()
    End Sub
End Class
```

6.   Lalu buat form baru lagi "FormPenerbit", dengan UI seperti ini :

Coding :

```vb
Imports System.Data.Odbc

Public Class FormPenerbit
    Dim databaru As Boolean
    Dim Conn As OdbcConnection
    Dim da As OdbcDataAdapter
    Dim ds As DataSet
    Dim str As String
    Dim CMD As OdbcCommand
    Dim DR As OdbcDataReader

    Sub isigrid()
        koneksi()
        da = New Odbc.OdbcDataAdapter("SELECT * FROM penerbit", konek)
        ds = New DataSet
        ds.Clear()
        da.Fill(ds, "penerbit")
        DataGridView1.DataSource = (ds.Tables("penerbit"))
        DataGridView1.Enabled = True
    End Sub

    Sub bersih()
        TextBox1.Text = ""
        TextBox2.Text = ""
        TextBox3.Text = ""
    End Sub

    Sub NomorOtomatis()
        Call koneksi()
        CMD = New OdbcCommand("Select * from penerbit where id in (Select
max(id) from penerbit)", konek)
        Dim UrutanKode As String
        Dim Hitung As Long
        DR = CMD.ExecuteReader
        DR.Read()
        If Not DR.HasRows Then
            UrutanKode = "P" + "001"
        Else
            Hitung = Microsoft.VisualBasic.Right(DR.GetString(0), 3) + 1
            UrutanKode = "P" + Microsoft.VisualBasic.Right("000" & Hitung, 3)
        End If
        TextBox1.Text = UrutanKode
    End Sub

    Private Sub FormPenerbit_Load(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
        databaru = False
        Button1.Text = "INPUT"
        Button2.Enabled = False
        Button3.Enabled = False
        Button4.Enabled = False
        Button5.Enabled = False
        TextBox2.Enabled = False
        TextBox3.Enabled = False
        isigrid()
        NomorOtomatis()
    End Sub

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

```vb
        If Button1.Text = "INPUT" Then
            Button2.Enabled = True
            Button5.Enabled = True
            TextBox2.Enabled = True
            TextBox3.Enabled = True
            Button1.Text = "SIMPAN"
        ElseIf Button1.Text = "SIMPAN" Then
            Dim simpan As String = ""
            TextBox2.Focus()
            If TextBox2.Text = "" Then
                MsgBox("Nama Kosong", vbInformation)
            ElseIf TextBox3.Text = "" Then
                MsgBox("No. Telepon Kosong", vbInformation)
            Else
                databaru = True
            End If
            If databaru = True Then
                simpan = "INSERT INTO penerbit(id,nama,telp) VALUES ('" &
TextBox1.Text & "','" & TextBox2.Text & "','" & TextBox3.Text & "')"
                Dim pesan = MsgBox("Apakah Anda Yakin Data Akan ditambahkan ke
Database ?", vbYesNo + vbInformation, "Perhatian")
                If pesan = MsgBoxResult.Yes Then
                    jalankansql(simpan)
                End If
            End If
            Me.Cursor = Cursors.WaitCursor
            DataGridView1.Refresh()
            isigrid()
            Me.Cursor = Cursors.Default
            bersih()
            NomorOtomatis()
        End If
    End Sub

    Private Sub jalankansql(ByVal sQl As String)
        Dim objcmd As New System.Data.Odbc.OdbcCommand
        Call koneksi()
        Try
            objcmd.Connection = konek
            objcmd.CommandType = CommandType.Text
            objcmd.CommandText = sQl
            objcmd.ExecuteNonQuery()
            objcmd.Dispose()
            MsgBox("Syntax SQL berhasil", vbInformation)
        Catch ex As Exception
            MsgBox("Syntax SQL terjadi kesalahan" & ex.Message)
        End Try
    End Sub

    Private Sub isiTextBox(ByVal x As Integer)
        Try
            TextBox1.Text = DataGridView1.Rows(x).Cells(0).Value
            TextBox2.Text = DataGridView1.Rows(x).Cells(1).Value
            TextBox3.Text = DataGridView1.Rows(x).Cells(2).Value
        Catch ex As Exception
        End Try
    End Sub

    Private Sub DataGridView1_CellContentClick(ByVal sender As System.Object,
ByVal e As System.Windows.Forms.DataGridViewCellEventArgs) Handles
DataGridView1.CellContentClick
        isiTextBox(e.RowIndex)
```

```vb
            databaru = False
            Button3.Enabled = True
            Button4.Enabled = True
        End Sub

    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button2.Click
            NomorOtomatis()
            TextBox2.Text = ""
            TextBox3.Text = ""
        End Sub

    Private Sub Button3_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button3.Click
            Dim ubah As String = "UPDATE  penerbit  SET  " + "nama  ='" &
TextBox2.Text & "'," + "telp  ='" & TextBox3.Text & "'  WHERE  id  =  '" &
TextBox1.Text & "'"
            If TextBox2.Text = "" Then
                MsgBox("Nama Kosong", vbInformation)
            ElseIf TextBox3.Text = "" Then
                MsgBox("No. Telepon Kosong", vbInformation)
            Else
                jalankansql(ubah)
            End If
            Me.Cursor = Cursors.WaitCursor
            DataGridView1.Refresh()
            isigrid()
            Me.Cursor = Cursors.Default
            bersih()
            NomorOtomatis()
            Button3.Enabled = False
            Button4.Enabled = False
        End Sub

    Private Sub Button4_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button4.Click
            Dim hapussql As String
            Dim pesan As Integer
            pesan = MsgBox("Apakah anda yakin akan menghapus Data pada server  ...
" + TextBox2.Text, vbExclamation + vbYesNo, "perhatian")
            If pesan = vbNo Then Exit Sub
            hapussql = "DELETE  FROM  penerbit  WHERE  id='" & TextBox1.Text & "'"
            jalankansql(hapussql)
            Me.Cursor = Cursors.WaitCursor
            DataGridView1.Refresh()
            isigrid()
            Me.Cursor = Cursors.Default
            Call bersih()
            NomorOtomatis()
            Button3.Enabled = False
            Button4.Enabled = False
        End Sub

    Private Sub Button5_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button5.Click
            Me.Close()
            Menu_Utama.Show()
        End Sub
End Class
```
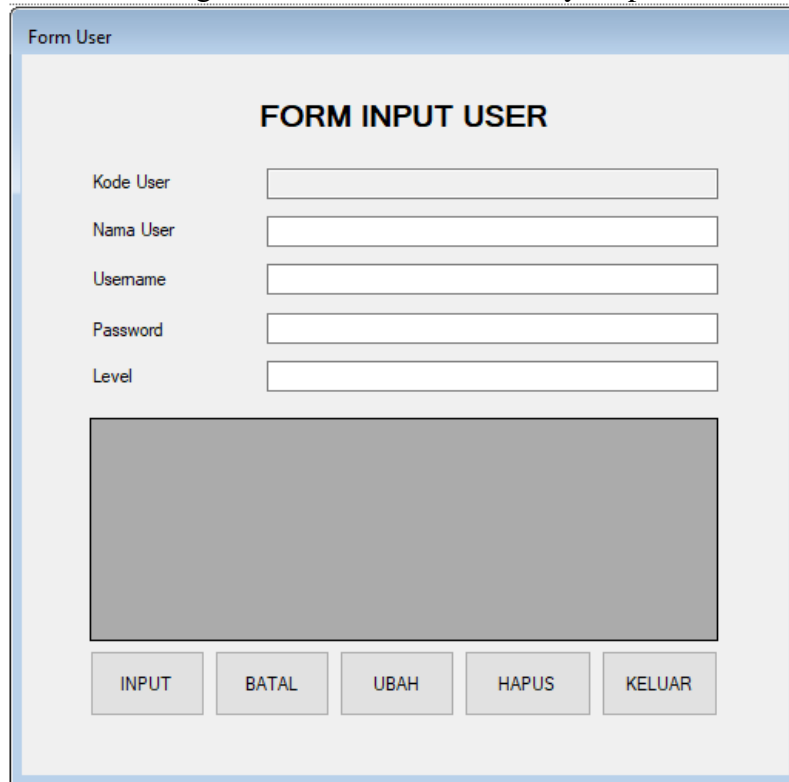
7. Form baru dengan nama "FormUser", UI-nya seperti ini :

Form User

FORM INPUT USER

Kode User	
Nama User	
Username	
Password	
Level	

INPUT	BATAL	UBAH	HAPUS	KELUAR

Coding :

```vbnet
Imports System.Data.Odbc

Public Class FormUser
    Dim databaru As Boolean
    Dim Conn As OdbcConnection
    Dim da As OdbcDataAdapter
    Dim ds As DataSet
    Dim str As String
    Dim CMD As OdbcCommand
    Dim DR As OdbcDataReader

    Sub isigrid()
        koneksi()
        da = New Odbc.OdbcDataAdapter("SELECT * FROM user", konek)
        ds = New DataSet
        ds.Clear()
        da.Fill(ds, "user")
        DataGridView1.DataSource = (ds.Tables("user"))
        DataGridView1.Enabled = True
    End Sub

    Sub bersih()
        TextBox1.Text = ""
        TextBox2.Text = ""
        TextBox3.Text = ""
        TextBox4.Text = ""
        TextBox5.Text = ""
    End Sub

    Sub NomorOtomatis()
        Call koneksi()
```

```vbnet
        CMD = New OdbcCommand("Select * from user where id in (Select max(id)
from user)", konek)
        Dim UrutanKode As String
        Dim Hitung As Long
        DR = CMD.ExecuteReader
        DR.Read()
        If Not DR.HasRows Then
            UrutanKode = "U" + "001"
        Else
            Hitung = Microsoft.VisualBasic.Right(DR.GetString(0), 3) + 1
            UrutanKode = "U" + Microsoft.VisualBasic.Right("000" & Hitung, 3)
        End If
        TextBox1.Text = UrutanKode
    End Sub

    Private Sub FormUser_Load(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
        databaru = False
        Button1.Text = "INPUT"
        Button2.Enabled = False
        Button3.Enabled = False
        Button4.Enabled = False
        Button5.Enabled = False
        TextBox2.Enabled = False
        TextBox3.Enabled = False
        TextBox4.Enabled = False
        TextBox5.Enabled = False
        isigrid()
        NomorOtomatis()
    End Sub

    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
        If Button1.Text = "INPUT" Then
            Button2.Enabled = True
            Button5.Enabled = True
            TextBox2.Enabled = True
            TextBox3.Enabled = True
            TextBox4.Enabled = True
            TextBox5.Enabled = True
            Button1.Text = "SIMPAN"
        ElseIf Button1.Text = "SIMPAN" Then
            Dim simpan As String = ""
            TextBox2.Focus()
            If TextBox2.Text = "" Then
                MsgBox("Nama User Kosong", vbInformation)
            ElseIf TextBox3.Text = "" Then
                MsgBox("Username Kosong", vbInformation)
            ElseIf TextBox4.Text = "" Then
                MsgBox("Password Kosong", vbInformation)
            ElseIf TextBox5.Text = "" Then
                MsgBox("Level Kosong", vbInformation)
            Else
                databaru = True
            End If
            If databaru = True Then
                simpan = "INSERT INTO user(id,nama,username,password,level)
VALUES ('" & TextBox1.Text & "','" & TextBox2.Text & "','" & TextBox3.Text &
"','" & TextBox4.Text & "','" & TextBox5.Text & "')"
                Dim pesan = MsgBox("Apakah Anda Yakin Data Akan ditambahkan ke
Database ?", vbYesNo + vbInformation, "Perhatian")
                If pesan = MsgBoxResult.Yes Then
```

```vb
                    jalankansql(simpan)
                End If
            End If
            Me.Cursor = Cursors.WaitCursor
            DataGridView1.Refresh()
            isigrid()
            Me.Cursor = Cursors.Default
            bersih()
            NomorOtomatis()
        End If
    End Sub

    Private Sub jalankansql(ByVal sQl As String)
        Dim objcmd As New System.Data.Odbc.OdbcCommand
        Call koneksi()
        Try
            objcmd.Connection = konek
            objcmd.CommandType = CommandType.Text
            objcmd.CommandText = sQl
            objcmd.ExecuteNonQuery()
            objcmd.Dispose()
            MsgBox("Syntax SQL berhasil", vbInformation)
        Catch ex As Exception
            MsgBox("Syntax SQL terjadi kesalahan" & ex.Message)
        End Try
    End Sub

    Private Sub isiTextBox(ByVal x As Integer)
        Try
            TextBox1.Text = DataGridView1.Rows(x).Cells(0).Value
            TextBox2.Text = DataGridView1.Rows(x).Cells(1).Value
            TextBox3.Text = DataGridView1.Rows(x).Cells(2).Value
            TextBox4.Text = DataGridView1.Rows(x).Cells(3).Value
            TextBox5.Text = DataGridView1.Rows(x).Cells(4).Value
        Catch ex As Exception
        End Try
    End Sub

    Private Sub DataGridView1_CellContentClick(ByVal sender As System.Object, _
ByVal e As System.Windows.Forms.DataGridViewCellEventArgs) Handles _
DataGridView1.CellContentClick
        isiTextBox(e.RowIndex)
        databaru = False
        Button3.Enabled = True
        Button4.Enabled = True
    End Sub

    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As _
System.EventArgs) Handles Button2.Click
        NomorOtomatis()
        TextBox2.Text = ""
        TextBox3.Text = ""
        TextBox4.Text = ""
        TextBox5.Text = ""
    End Sub

    Private Sub Button3_Click(ByVal sender As System.Object, ByVal e As _
System.EventArgs) Handles Button3.Click
        Dim ubah As String = "UPDATE  user  SET  " + "nama  ='" & TextBox2.Text _
& "'," + "username  ='" & TextBox3.Text & "'," + "password  ='" & TextBox4.Text _
& "'," + "level  ='" & TextBox5.Text & "'  WHERE  id  =  '" & TextBox1.Text & "'
"
```

```vb
        If TextBox2.Text = "" Then
            MsgBox("Nama User Kosong", vbInformation)
        ElseIf TextBox3.Text = "" Then
            MsgBox("Username Kosong", vbInformation)
        ElseIf TextBox4.Text = "" Then
            MsgBox("Password Kosong", vbInformation)
        ElseIf TextBox5.Text = "" Then
            MsgBox("Level Kosong", vbInformation)
        Else
            jalankansql(ubah)
        End If
        Me.Cursor = Cursors.WaitCursor
        DataGridView1.Refresh()
        isigrid()
        Me.Cursor = Cursors.Default
        bersih()
        NomorOtomatis()
        Button3.Enabled = False
        Button4.Enabled = False
    End Sub

    Private Sub Button4_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button4.Click
        Dim hapussql As String
        Dim pesan As Integer
        pesan = MsgBox("Apakah anda yakin akan menghapus Data pada server  ...
" + TextBox2.Text, vbExclamation + vbYesNo, "perhatian")
        If pesan = vbNo Then Exit Sub
        hapussql = "DELETE  FROM  user  WHERE  id='" & TextBox1.Text & "'"
        jalankansql(hapussql)
        Me.Cursor = Cursors.WaitCursor
        DataGridView1.Refresh()
        isigrid()
        Me.Cursor = Cursors.Default
        Call bersih()
        NomorOtomatis()
        Button3.Enabled = False
        Button4.Enabled = False
    End Sub

    Private Sub Button5_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button5.Click
        Me.Close()
        Menu_Utama.Show()
    End Sub
End Class
```

8. Buat satu form terakhir yaitu "Form Transaksi", UI-nya seperti ini :

Coding :

```vbnet
Imports System.Data.Odbc
Public Class FormTransaksiIzeahBookStore
    Dim TglMySQL As String
    Sub KondisiAwal()
        LBLNamaPenerbit.Text = ""
        LBLTelp.Text = ""
        LBLTanggal.Text = Today
        LBLAdmin.Text = Menu_Utama.ToolStripStatusLabel4.Text
        LBLKembali.Text = ""
        LBLJudulBuku.Text = ""
        LBLHargaBuku.Text = ""
        TextBox3.Text = ""
        TextBox3.Enabled = False
        LBLItem.Text = ""
        Call MunculKodePenerbit()
        Call MunculKodeBuku()
        Call NomorOtomatis()
        Call BuatKolom()
        Label9.Text = ""
        TextBox1.Text = ""
        ComboBox1.Text = ""
        ComboBox2.Text = ""
    End Sub

    Private Sub Timer1_Tick(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Timer1.Tick
        LBLJam.Text = TimeOfDay
    End Sub

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

    Sub MunculKodePenerbit()
```

```vb
        Call koneksi()
        ComboBox1.Items.Clear()
        CMD = New OdbcCommand("Select * From penerbit", konek)
        DR = CMD.ExecuteReader
        Do While DR.Read
            ComboBox1.Items.Add(DR.Item(0))
        Loop
    End Sub

    Sub MunculKodeBuku()
        Call koneksi()
        ComboBox2.Items.Clear()
        CMD = New OdbcCommand("Select * From buku", konek)
        DR = CMD.ExecuteReader
        Do While DR.Read
            ComboBox2.Items.Add(DR.Item(0))
        Loop
    End Sub

    Private Sub ComboBox1_SelectedIndexChanged(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles ComboBox1.SelectedIndexChanged
        Call koneksi()
        CMD = New OdbcCommand("Select * From penerbit where id ='" &
ComboBox1.Text & "'", konek)
        DR = CMD.ExecuteReader
        DR.Read()
        If DR.HasRows Then
            LBLNamaPenerbit.Text = DR!nama
            LBLTelp.Text = DR!telp
        End If
    End Sub

    Private Sub ComboBox2_SelectedIndexChanged(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles ComboBox2.SelectedIndexChanged
        Call koneksi()
        CMD = New OdbcCommand("Select * From buku where id ='" & ComboBox2.Text
& "'", konek)
        DR = CMD.ExecuteReader
        DR.Read()
        If DR.HasRows Then
            LBLJudulBuku.Text = DR.Item("judul")
            LBLHargaBuku.Text = DR.Item("harga")
            TextBox3.Enabled = True
        End If
    End Sub

    Sub NomorOtomatis()
        Call koneksi()
        CMD = New OdbcCommand("Select * from transaksi where id in (Select
max(id) from transaksi)", konek)
        Dim UrutanKode As String
        Dim Hitung As Long
        DR = CMD.ExecuteReader
        DR.Read()
        If Not DR.HasRows Then
            UrutanKode = "T" + Format(Now, "yyMMdd") + "001"
        Else
            Hitung = Microsoft.VisualBasic.Right(DR.GetString(0), 9) + 1
            UrutanKode = "T" + Format(Now, "yyMMdd") +
Microsoft.VisualBasic.Right("000" & Hitung, 3)
        End If
        LBLNotransaksi.Text = UrutanKode
```

```vbnet
        End Sub

    Sub BuatKolom()
        DataGridView1.Columns.Clear()
        DataGridView1.Columns.Add("Kode Buku", "Kode Buku")
        DataGridView1.Columns.Add("Judul Buku", "Judul Buku")
        DataGridView1.Columns.Add("Harga Buku", "Harga Buku")
        DataGridView1.Columns.Add("Quantity", "Quantity")
        DataGridView1.Columns.Add("Subtotal", "Subtotal")
    End Sub

    Private Sub TextBox2_KeyPress(ByVal sender As Object, ByVal e As
System.Windows.Forms.KeyPressEventArgs)
        If e.KeyChar = Chr(13) Then
            Call koneksi()
            CMD = New OdbcCommand("Select * From buku where id ='" &
ComboBox2.Text & "'", konek)
            DR = CMD.ExecuteReader
            DR.Read()
            If Not DR.HasRows Then
                MsgBox("Kode Buku Tidak Ada")
            Else
                ComboBox2.Text = DR.Item("id")
                LBLJudulBuku.Text = DR.Item("judul")
                LBLHargaBuku.Text = DR.Item("harga")
                TextBox3.Enabled = True
            End If
        End If
    End Sub

    Private Sub Button4_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button4.Click
        If LBLJudulBuku.Text = "" Or TextBox3.Text = "" Then
            MsgBox("Silahkan Masukan Kode Buku Dan Tekan Enter")
        Else
            DataGridView1.Rows.Add(New String() {ComboBox2.Text,
LBLJudulBuku.Text, LBLHargaBuku.Text, TextBox3.Text, Val(LBLHargaBuku.Text) *
Val(TextBox3.Text)})
            Call RumusSubTotal()
            ComboBox2.Text = ""
            LBLJudulBuku.Text = ""
            LBLHargaBuku.Text = ""
            TextBox3.Text = ""
            TextBox3.Enabled = False
            Call RumusCariItem()
        End If
    End Sub
    Sub RumusSubTotal()
        Dim hitung As Integer = 0
        For i As Integer = 0 To DataGridView1.Rows.Count - 1
            hitung = hitung + DataGridView1.Rows(i).Cells(4).Value
            Label9.Text = hitung
        Next
    End Sub
    Sub RumusCariItem()
        Dim HitungItem As Integer = 0
        For i As Integer = 0 To DataGridView1.Rows.Count - 1
            HitungItem = HitungItem + DataGridView1.Rows(i).Cells(3).Value
            LBLItem.Text = HitungItem
        Next
    End Sub
```

```vbnet
    Private Sub TextBox1_KeyPress(ByVal sender As Object, ByVal e As
System.Windows.Forms.KeyPressEventArgs) Handles TextBox1.KeyPress
        If e.KeyChar = Chr(13) Then
            If Val(TextBox1.Text) < Val(Label9.Text) Then
                MsgBox("Pembayaran Kurang!")
            ElseIf Val(TextBox1.Text) = Val(Label9.Text) Then
                LBLKembali.Text = 0
            ElseIf Val(TextBox1.Text) > Val(Label9.Text) Then
                LBLKembali.Text = Val(TextBox1.Text) - Val(Label9.Text)
                Button1.Focus()
            End If
        End If
    End Sub

    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
        If LBLKembali.Text = "" Or LBLNamaPenerbit.Text = "" Or Label9.Text = ""
Then
            MsgBox("Transaksi Tidak Ada, Silahkan Lakukan Transaksi Terlebih
Dahulu")
        Else
            Dim CekStockBuku As String = "Select * From buku where stock <=3"
            CMD = New OdbcCommand(CekStockBuku, konek)
            DR = CMD.ExecuteReader
            DR.Read()
            If DR.HasRows Then
                MsgBox("Stock Buku kurang dari 3, silahkan lakukan re-stock!",
vbInformation)
            Else
                TglMySQL = Format(Today, "yyyy-MM-dd")
                Dim Simpantransaksi As String = "Insert into transaksi values
('" & LBLNoTransaksi.Text & "','" & TglMySQL & "','" & LBLJam.Text & "','" &
LBLItem.Text & "','" & Label9.Text & "','" & TextBox1.Text & "','" &
LBLKembali.Text & "','" & ComboBox1.Text & "','" &
Menu_Utama.ToolStripStatusLabel2.Text & "')"
                CMD = New OdbcCommand(Simpantransaksi, konek)
                CMD.ExecuteNonQuery()

                For Baris As Integer = 0 To DataGridView1.Rows.Count - 2
                    Dim SimpanDetail As String = "Insert into detail_transaksi
values('" & LBLNoTransaksi.Text & "','" &
DataGridView1.Rows(Baris).Cells(0).Value & "','" &
DataGridView1.Rows(Baris).Cells(1).Value & "','" &
DataGridView1.Rows(Baris).Cells(2).Value & "','" &
DataGridView1.Rows(Baris).Cells(3).Value & "','" &
DataGridView1.Rows(Baris).Cells(4).Value & "')"
                    CMD = New OdbcCommand(SimpanDetail, konek)
                    CMD.ExecuteNonQuery()
                    Dim CariBuku As String = "Select * From buku where id ='" &
DataGridView1.Rows(Baris).Cells(0).Value & "'"
                    CMD = New OdbcCommand(CariBuku, konek)
                    DR = CMD.ExecuteReader
                    DR.Read()
                    If DR.HasRows Then
                        Dim UpdateBuku As String = "update buku set stock = '" &
DR!stock - DataGridView1.Rows(Baris).Cells(3).Value & "' where id = '" &
DataGridView1.Rows(Baris).Cells(0).Value & "'"
                        CMD = New OdbcCommand(UpdateBuku, konek)
                        CMD.ExecuteNonQuery()
                    End If
                Next
                MsgBox("Transaksi Telah Berhasil Disimpan")
```

```
                End If
                Call KondisiAwal()
            End If
        End Sub

        Private Sub Button3_Click(ByVal sender As System.Object, ByVal e As
    System.EventArgs) Handles Button3.Click
            Me.Close()
            Menu_Utama.Show()
        End Sub

        Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As
    System.EventArgs) Handles Button2.Click
            KondisiAwal()
        End Sub
    End Class
```
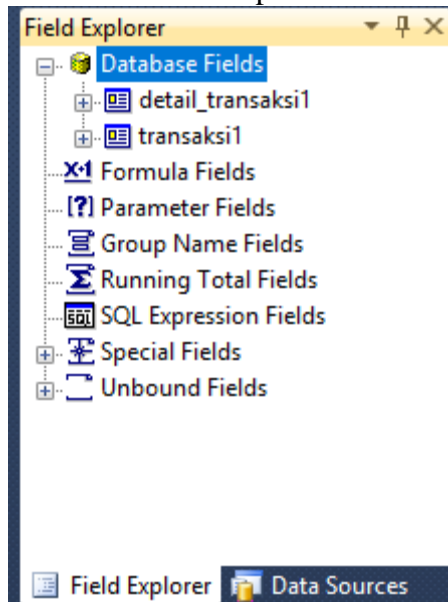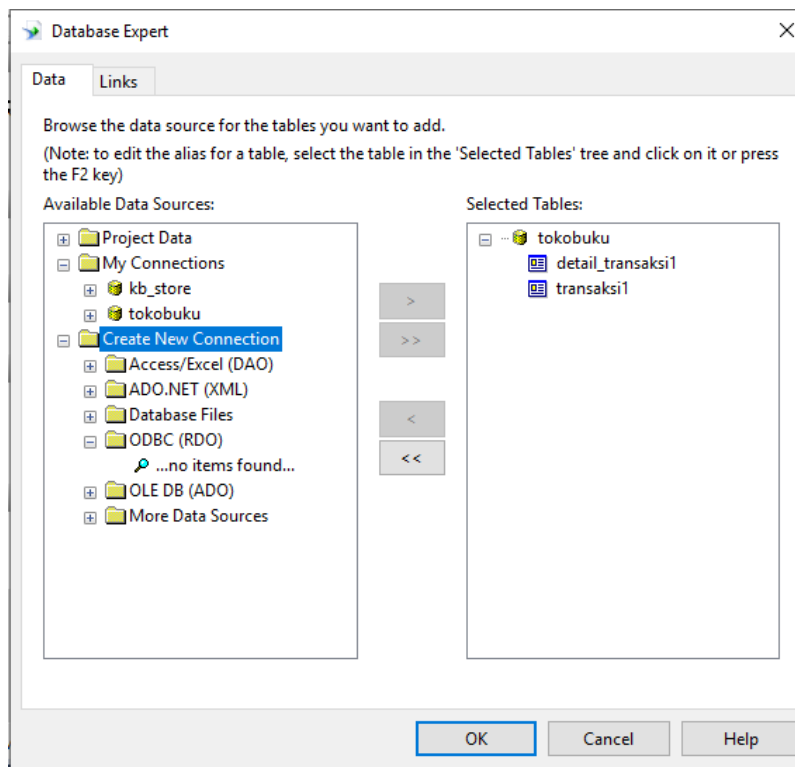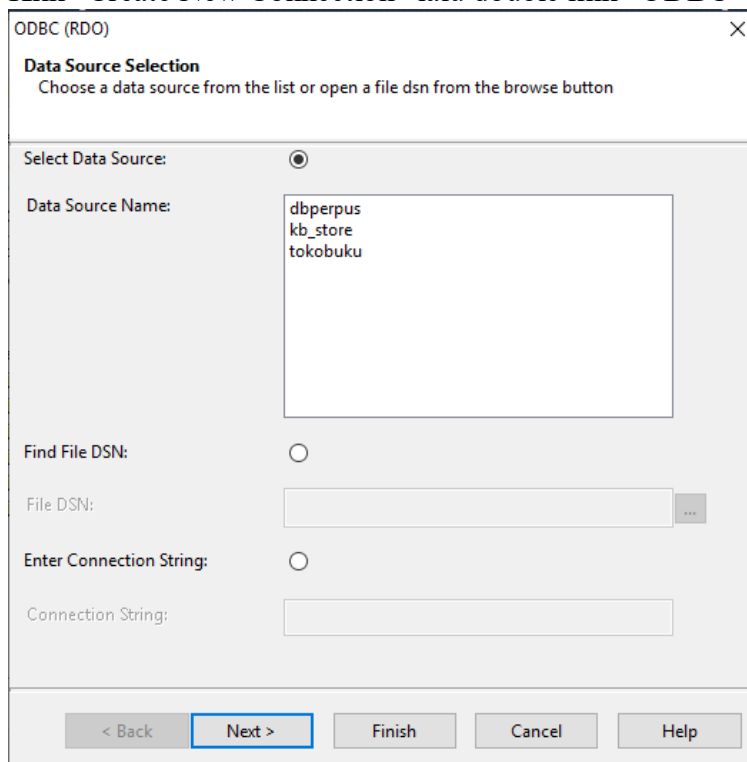
9. Pada step ini, pastikan sudah terinstall Crystal Report, jika sudah. Maka otomatis termuat di Visual Basic 2010. Jadi cukup drag saja ke Form baru yang dibuat bernama "LaporanTransaksi" terletak pada toolbox di bagian reporting. Setelah itu klik panah kecil pada tool Crystal Report Viewer lalu pilih "Create a new Crystal Report"

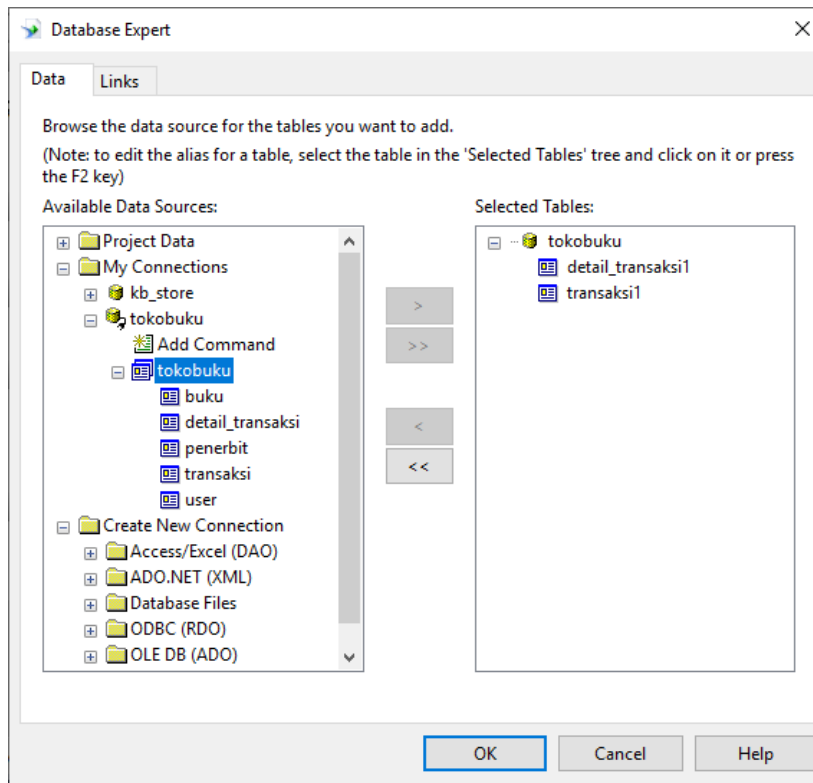10. Setelah itu buka LaporanTransaksi.rpt nya, lalu lakukan step ini :

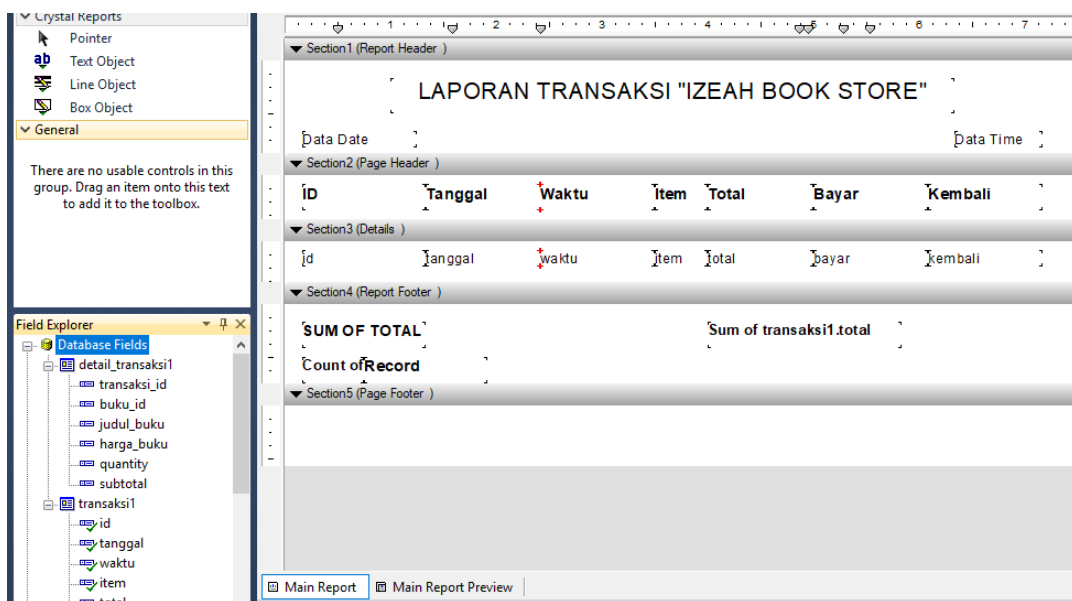Klik kanan pada "Database Fields" lalu pilih "Database Expert".

Klik "Create New Connection" lalu double klik "ODBC"

Kemudian pilih databasenya "tokobuku", lalu masukkan User_id "root" untuk password kosongkan, dan klik Finish.

Sisipkan tabel yang diperlukan, disini adalah "transaksi" dan "detail_transaksi" lalu klik OK.

Cukup drag field yang ada di "Field Explorer", lalu atur UI Reportnya sesuka hati kalian.

11. Project telah selesai dibuat, silahkan running programnya dan periksa masing-masing fungsionalitasnya. DONE.