

## **BAB III**

### **LANDASAN TEORI**

#### **3.1 Konsep Dasar Pemikiran Sistem Informasi**

##### **3.1.1 Sistem**

Menurut Herlambang (2005), definisi sistem dapat dibagi menjadi dua pendekatan, yaitu pendekatan secara prosedur dan pendekatan secara komponen. Berdasarkan pendekatan prosedur, sistem didefinisikan sebagai kumpulan dari beberapa prosedur yang mempunyai tujuan tertentu. Sedangkan berdasarkan pendekatan komponen, sistem merupakan kumpulan dari komponen-komponen yang saling berkaitan untuk mencapai tujuan tertentu.

Dalam perkembangan sistem yang ada, sistem dibedakan menjadi dua jenis, yaitu sistem terbuka dan sistem tertutup. Sistem terbuka merupakan sistem yang dihubungkan dengan arus sumber daya luar dan tidak mempunyai elemen pengendali. Sedangkan sistem tertutup tidak mempunyai elemen pengontrol dan dihubungkan pada lingkungan sekitarnya.

##### **3.1.2 Sistem Informasi**

Menurut Herlambang (2005), data adalah fakta-fakta atau kejadian-kejadian yang dapat berupa angka-angka atau kode-kode tertentu. Data masih belum mempunyai arti bagi penggunanya. Untuk dapat mempunyai arti data diolah sedemikian rupa sehingga dapat digunakan oleh penggunanya. Hasil pengolahan data inilah yang disebut sebagai informasi.

Secara ringkas, Informasi adalah data yang telah diolah dan mempunyai arti bagi penggunanya. Sehingga sistem informasi dapat didefinisikan sebagai prosedur-prosedur yang digunakan untuk mengolah data sehingga dapat digunakan oleh penggunanya.

Menurut Jogiyanto(1990:87), sistem informasi secara umum memiliki tiga kegiatan utama, yaitu menerima data sebagai masukan atau input, kemudian memprosesnya dengan penggunaan unsur data dan akhirnya memperoleh informasi ataupun output.

Sistem informasi manajemen berfungsi untuk mengelola suatu sistem dengan penerapan manajemen yang baik sehingga menghasilkan suatu informasi yang dibutuhkan. Data-data yang sudah terkumpul kemudian diproses secara matang sehingga akan dihasilkan informasi yang baik. Informasi yang dikeluarkan berupa laporan-laporan yang lengkap seputar data yang ada dan melalui beberapa proses, seperti pengumpulan data, pemrosesan data dan sampai menghasilkan suatu output data yang diinginkan sesuai dengan tujuan akhir dari sistem informasi yang dikerjakan(McLeod, 2001).

Namun komputer sebagai suatu sarana penunjang memiliki pula keterbatasan, karena hanya berfungsi sebagai pengolah data berdasarkan program atau instruksi yang diberikan. Dalam hal ini peranan manusia masih tetap penting yaitu sebagai pengendali atas pengolahan data yang dilakukan komputer.

### 3.1.3 Sistem Aplikasi Komputer Berbasis Web

Aplikasi dalam bahasa awam sering disebut sebagai sebuah kumpulan program atau *script*. Aplikasi web yang dibangun dengan menggunakan *Struts framework* terdiri dari komponen-komponen individual yang digabungkan menjadi satu aplikasi. Aplikasi tersebut dapat diinstal dan dieksekusi oleh *web container*. Komponen-komponen tersebut dapat digabungkan karena mereka terletak dalam sebuah konteks *web* yang sama, yang menjadikan mereka bergantung satu dengan yang lainnya, baik secara langsung ataupun tidak langsung.

### 3.1.4 Analisis dan Perancangan Sistem

Menurut Kendall dan Kendall (2003), Analisis sistem dilakukan dengan tujuan untuk dapat mengidentifikasi dan mengevaluasi permasalahan yang terjadi dan kebutuhan yang diharapkan, sehingga dapat diusulkan perbaikannya.

Perancangan sistem merupakan penguraian suatu sistem informasi yang utuh ke dalam bagian komputerisasi yang dimaksud, mengidentifikasi dan mengevaluasi permasalahan, menentukan kriteria, menghitung konsistensi terhadap kriteria yang ada, serta mendapatkan hasil atau tujuan dari masalah tersebut serta mengimplementasikan seluruh kebutuhan operasional dalam membangun aplikasi.

Analisa dan Perancangan Sistem dipergunakan untuk menganalisis, merancang, dan mengimplementasikan peningkatan-peningkatan fungsi bisnis yang dapat dicapai melalui penggunaan sistem informasi terkomputerisasi.

Berikut ini adalah proses dalam analisis dan perancangan sistem:

## 1) Entity Relationship Diagram

*Entity Relationship Diagram* (ERD) adalah gambaran pada sistem dimana di dalamnya terdapat hubungan antara *entity* beserta relasinya. *Entity* merupakan sesuatu yang ada dan terdefiniskan di dalam suatu organisasi, dapat abstrak dan nyata. Untuk setiap *entity* biasanya mempunyai *attribute* yang merupakan ciri *entity* tersebut. Relasi adalah hubungan antar *entity* yang berfungsi sebagai hubungan yang mewujudkan pemetaan antar *entity*.

## 2) Data Flow Diagram

Pada tahap ini, penggunaan notasi dapat membantu komunikasi dengan pemakai/*user* sistem untuk memahami sistem tersebut secara logika. Diagram yang menggunakan notasi-notasi untuk menggambarkan arus dari data sistem ini dikenal dengan nama Diagram Arus Data (*Data Flow Diagram*). DFD berfungsi untuk menggambarkan proses aliran data yang terjadi di dalam sistem dari tingkat yang tertinggi sampai yang terendah, yang memungkinkan untuk melakukan dekomposisi, mempartisi atau membagi sistem kedalam bagian-bagian yang lebih kecil dan yang lebih sederhana.

DFD fokus pada aliran data dari dan ke dalam sistem serta memproses data tersebut (Kendall, 2003).

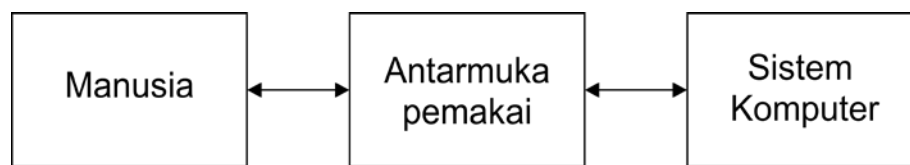
## 3.2 Interaksi Manusia dan Komputer

Interaksi Manusia dan Komputer (IMK) atau *Human-Computer Interaction* (HCI) adalah disiplin ilmu yang berhubungan dengan perancangan, evaluasi, dan implementasi sistem komputer interaktif untuk digunakan oleh manusia,

serta studi fenomena-fenomena besar yang berhubungan dengannya. (Definisi oleh *ACM SIGCHI*). Struktur IMK dapat dilihat pada Gambar 3.1.

Fokus interaksi manusia dan komputer antara lain yaitu:

1. Fokus adalah perancangan dan evaluasi antarmuka pemakai (*user interface*).
2. Antarmuka pemakai adalah bagian sistem komputer yang memungkinkan manusia berinteraksi dengan komputer.



Gambar 3.1 Struktur Interaksi Manusia dan Komputer

### 3.3 Prinsip UCD

*User Centered Design* (UCD) atau Perancangan berbasis pengguna adalah filosofi perancangan yang menempatkan pengguna sebagai pusat dari proses pengembangan sistem.

Aturan dalam *User Centered Design* (UCD) antara lain:

#### a. Perspektif

Pengguna selalu benar, jika terdapat masalah dalam penggunaan sistem maka masalahnya ada pada sistem dan bukan pengguna.

#### b. Instalasi

Pengguna mempunyai hak untuk dapat menginstall atau menguninstall perangkat lunak dan perangkat keras sistem secara mudah tanpa ada konsekuensi negatif.

c. Pemenuhan

Pengguna mempunyai hak untuk mendapatkan sistem dapat bekerja persis seperti yang dijanjikan.

d. Instruksi

Pengguna mempunyai hak untuk dapat menggunakan instruksi secara mudah (buku petunjuk bantuan secara *online* atau kontekstual pesan kesalahan), untuk memahami dan menggunakan sistem untuk mencapai tujuan yang diinginkan secara efisien dan terhindar dari masalah.

e. Control

Pengguna mempunyai hak untuk dapat mengontrol sistem dan mampu membuat sistem menanggapi dengan benar atas permintaan yang diberikan.

f. Umpan Balik

Pengguna mempunyai hak terhadap sistem untuk menyediakan informasi yang jelas, dapat dimengerti, dan akurat tentang tugas yang dilakukan dan kemajuan yang dicapai.

g. Keterkaitan

Pengguna mempunyai hak untuk mendapatkan informasi yang jelas tentang semua prasyarat yang dibutuhkan sistem untuk memperoleh hasil terbaik.

h. Scope

Pengguna mempunyai hak untuk mengetahui batasan kemampuan sistem.

i. Assistance

Pengguna mempunyai hak untuk dapat berkomunikasi dengan penyedia teknologi dan menerima pemikiran dan tanggapan yang membantu jika diperlukan.

j. Usability

Pengguna harus dapat menjadi penguasa perangkat lunak dan perangkat keras dan bukan sebaliknya. Produk harus dapat digunakan secara alami dan intuitif.

### 3.4 Sistem Pendukung Keputusan

#### 3.4.1 Pengertian Sistem Pendukung Keputusan

Keputusan-keputusan dibuat untuk memecahkan masalah. Dalam usaha memecahkan suatu masalah mungkin membuat banyak keputusan.

Keputusan merupakan rangkaian tindakan yang perlu diikuti dalam memecahkan masalah untuk menghindari atau mengurangi dampak negatif, atau untuk memanfaatkan kesempatan.

Menurut Herbert A. Simon<sup>1)</sup> keputusan berada pada suatu rangkaian kesatuan, dengan keputusan terprogram pada satu ujungnya dan keputusan tak terprogram pada ujung lainnya.

- a. Keputusan Terprogram, bersifat berulang dan rutin sedemikian sehingga suatu prosedur pasti telah dibuat untuk menanganinya sehingga keputusan tersebut tidak perlu diperlakukan *de novo* (sebagai sesuatu yang baru) tiap kali terjadi.
- b. Keputusan Tidak Terprogram, bersifat baru, tidak terstruktur, dan jarang konsekuen. Tidak ada metode yang pasti utk menangani masalah ini belum pernah ada sebelumnya, atau karena sifat dan struktur persisnya tak terlihat atau rumit, atau karena begitu pentingnya sehingga memerlukan perlakuan yang sangat khusus.

### 3.4.2 Tahapan Pengambil Keputusan

Tahapan Pengambilan Keputusan Menurut Simon. Ada 4 tahapan yang harus dilalui manager saat memecahkan suatu masalah, yaitu:

a. Kegiatan Intelijen

Mengamati lingkungan mencari kondisi-kondisi yang perlu diperbaiki.

b. Kegiatan Merancang

Menemukan, mengembangkan dan mengalihkan berbagai alternatif tindakan yang mungkin.

c. Kegiatan Memilih

Memilih suatu rangkaian tindakan tertentu dari beberapa yang tersedia.

d. Kegiatan Menelaah

Menilai pilihan-pilihan yang ada.

### 3.4.3 Konsep DSS

a. Dimulai akhir tahun 1960 dengan *timesharing* komputer yaitu untuk pertama kalinya seseorang dapat berinteraksi langsung dengan komputer tanpa harus melalui spesialis informasi.

b. Istilah DSS diciptakan pada tahun 1971 oleh G. Anthony Gorry dan Michael S. Scott Morton untuk mengarahkan aplikasi komputer pada pengambilan keputusan manajemen.

### 3.4.4 Tujuan DS

Perintis DSS yang lain, Peter G.W. Keen, bekerja sama dengan Scott Morton mendefinisikan 3 (tiga) tujuan yang harus dicapai DSS. Mereka percaya bahwa DSS harus:

1. Membantu manajer membuat keputusan untuk memecahkan masalah semi terstruktur



2. Mendukung penilaian manajer bukan mencoba menggantikannya
3. Meningkatkan efektifitas pengambilan keputusan manajer

### **3.4.5 Prinsip Dasar DSS**

#### **a. Struktur Masalah**

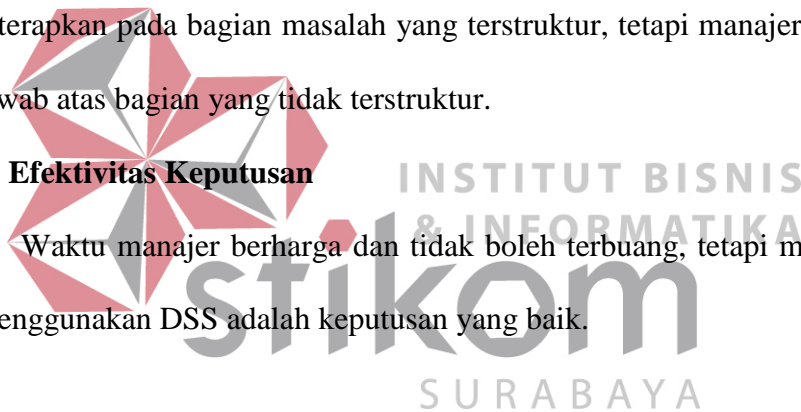
Sulit untuk menemukan masalah yang sepenuhnya terstruktur atau tidak terstruktur area kelabu Simon. Ini berarti DSS diarahkan pada area tempat sebagian besar masalah berada.

#### **b. Dukungan Keputusan**

DSS tidak dimaksudkan untuk menggantikan manajer. Komputer dapat diterapkan pada bagian masalah yang terstruktur, tetapi manajer bertanggung jawab atas bagian yang tidak terstruktur.

#### **c. Efektivitas Keputusan**

Waktu manajer berharga dan tidak boleh terbuang, tetapi manfaat utama menggunakan DSS adalah keputusan yang baik.





## Lampiran 3. Listing Program Form Master Guru

```

Imports System.Data.SqlClient
Public Class Guru
    Dim dtGuru As New DataTable
    Dim rows As DataRow
    Sub Kosong()
        '-- PERINTAH KOSONGI TEXTBOX DLL
        TextBox1.Text = ""
        TextBox2.Text = ""
        TextBox3.Text = ""
        TextBox4.Text = ""
        TextBox5.Text = ""
        TextBox6.Text = ""
        ComboBox1.Text = ""
        ComboBox2.Text = ""
        ComboBox3.Text = ""

        Button1.Enabled = True
        Button2.Enabled = False
        Button3.Enabled = False

        TextBox1.Text = counterid("NIP", "3", "4", "Guru", "G", False)
        ComboBox3.SelectedText = "Nama"
    End Sub
    Sub Simpan(ByVal Update As Boolean)
        '-- PERINTAH SIMPAN & UPDATE
        loadGuru(False)
        If Update = True Then
            rows = dtGuru.Rows.Find(TextBox1.Text)
            rows.BeginEdit()
        Else : rows = dtGuru.NewRow
        End If

        rows(0) = TextBox1.Text
        rows(1) = TextBox2.Text
        rows(2) = TextBox3.Text
        rows(3) = TextBox4.Text
        If RadioButton1.Checked = True Then
            rows(4) = "L"
        Else : rows(4) = "P"
        End If
        rows(5) = TextBox5.Text
        rows(6) = DateTimePicker1.Value
        rows(7) = ComboBox1.Text
        rows(8) = ComboBox2.Text

        If Update = True Then
            rows.EndEdit()
        Else : dtGuru.Rows.Add(rows)
        End If

        Dim cb As New SqlCommandBuilder(adGuru)
        adGuru.Update(dtGuru)
        loadGuru(False)
    End Sub
    Sub Hapus()
        '-- PERINTAH HAPUS DATA
        loadGuru(False)

        rows = dtGuru.Rows.Find(TextBox1.Text)
        rows.Delete()
        Dim cb As New SqlCommandBuilder(adGuru)
        adGuru.Update(dtGuru)

        loadGuru(False)
    End Sub
    Sub loadGuru(ByVal filter As Boolean)
        '-- LOAD DATA UNTUK DITARUH DI DATAGRID
        dtGuru.Rows.Clear()

        If filter = True Then
            comm.CommandText = "select * from guru where " & ComboBox3.Text & "
            like '%" & TextBox6.Text & "%'"
        Else : comm.CommandText = "select * from guru"
    End Sub

```

```

End If

adGuru = New SqlDataAdapter(comm.CommandText, conn)
adGuru.Fill(dtGuru)
Dim pk() As DataColumn = New DataColumn() {dtGuru.Columns("NIP")}
dtGuru.PrimaryKey = pk
DataGridView1.DataSource = dtGuru
End Sub
Sub showColumn()
'-- MENAMPILKAN KOLOM PADA TABEL SISWA
For i As Integer = 0 To dtGuru.Columns.Count - 1
    ComboBox3.Items.Add(dtGuru.Columns(i).ToString)
Next
ComboBox3.Text = ComboBox3.Items(1)
End Sub
Private Sub Guru_Load(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
    loadGuru(False)
    showColumn()
    Kosong()
End Sub
Private Sub TextBox6_TextChanged(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles TextBox6.TextChanged
    Try
        '-- LOAD DATAGRID TERGANTUNG FILTER
        If TextBox6.Text = "" Then
            loadGuru(False)
        Else : loadGuru(True)
        End If
    Catch ex As Exception
    End Try
End Sub
Private Sub btn_ok_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
    Try
        Simpan(False)
        Kosong()
    Catch ex As Exception
    End Try
End Sub
Private Sub btn_edit_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button2.Click
    Try
        Simpan(True)
        Kosong()
    Catch ex As Exception
    End Try
End Sub
Private Sub DataGridView1_Click(ByVal sender As Object, ByVal e As
System.EventArgs) Handles DataGridView1.Click
    Try
        '-- MENAMPILKAN DATA KE DATAGRIDVIEW
        Dim row As DataRow = dtGuru.Rows(DataGridView1.CurrentRow.Index)
        TextBox1.Text = row(0)
        TextBox2.Text = row(1)
        TextBox3.Text = row(2)
        TextBox4.Text = row(3)

        If row(4) = "L" Then
            RadioButton1.Checked = True
        Else : RadioButton2.Checked = True
        End If

        TextBox5.Text = row(5)
        DateTimePicker1.Value = row(6)
        ComboBox1.Text = row(7)
        ComboBox2.Text = row(8)

        Button1.Enabled = False
        Button2.Enabled = True
        Button3.Enabled = True
    End Try
End Sub

```

```

        Catch ex As Exception

        End Try
    End Sub

    Private Sub btn_kembali_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button4.Click
        Kosong()
    End Sub

    Private Sub btn_hapus_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button3.Click
        Try
            Hapus()
            Kosong()
        Catch ex As Exception

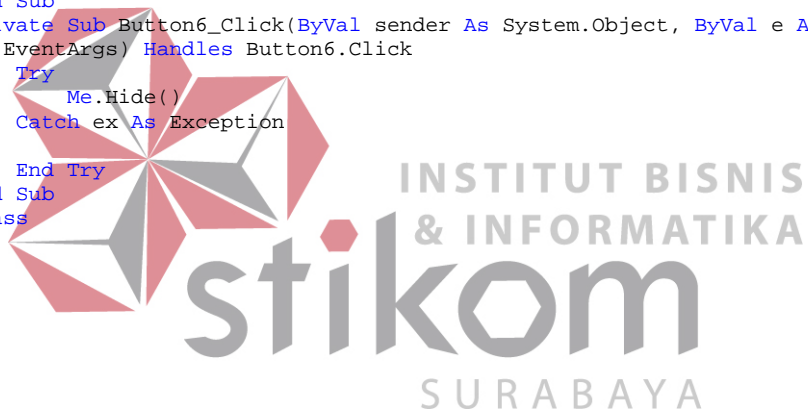
        End Try
    End Sub

    Private Sub Button5_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button5.Click
        Try
            loadGuru(False)
        Catch ex As Exception

        End Try
    End Sub
    Private Sub Button6_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button6.Click
        Try
            Me.Hide()
        Catch ex As Exception

        End Try
    End Sub
End Class

```



## Lampiran 4. Listing Program Form Master Kelas

```

Imports System.Data.SqlClient
Public Class Kelas
    Dim dtKelas, dtNip As New DataTable
    Dim rows As DataRow
    Sub Kosong()
        '-- PERINTAH KOSONGI TEXTBOX DLL
        TextBox1.Text = ""
        TextBox2.Text = ""
        NumericUpDown1.Value = "0"
        TextBox6.Text = ""
        ComboBox1.Text = ""
        ComboBox3.Text = ""

        Button1.Enabled = True
        Button2.Enabled = False
        Button3.Enabled = False

        TextBox1.Text = counterid("Kd_kelas", "3", "4", "Kelas", "K", False)
        ComboBox3.SelectedText = "Nama_Kelas"
    End Sub
    Sub Simpan(ByVal Update As Boolean)
        '-- PERINTAH SIMPAN & UPDATE
        loadKelas(False)
        If Update = True Then
            rows = dtKelas.Rows.Find(TextBox1.Text)
            rows.BeginEdit()
        Else : rows = dtKelas.NewRow
        End If
        rows(0) = TextBox1.Text
        rows(1) = ComboBox1.SelectedValue
        rows(2) = TextBox2.Text
        rows(3) = NumericUpDown1.Value

        If Update = True Then
            rows.EndEdit()
        Else : dtKelas.Rows.Add(rows)
        End If

        Dim cb As New SqlCommandBuilder(adKelas)
        adKelas.Update(dtKelas)
        loadKelas(False)
    End Sub
    Sub Hapus()
        '-- PERINTAH HAPUS DATA
        loadKelas(False)
        rows = dtKelas.Rows.Find(TextBox1.Text)
        rows.Delete()
        Dim cb As New SqlCommandBuilder(adKelas)
        adKelas.Update(dtKelas)

        loadKelas(False)
    End Sub
    Sub loadKelas(ByVal filter As Boolean)
        '-- LOAD DATA UNTUK DITARUH DI DATAGRID
        dtKelas.Rows.Clear()

        If filter = True Then
            comm.CommandText = "select * from kelas where " & ComboBox3.Text & "
like '%" & TextBox6.Text & "%'"
        Else : comm.CommandText = "select * from kelas"
        End If

        adKelas = New SqlDataAdapter(comm.CommandText, conn)
        adKelas.Fill(dtKelas)
        Dim pk() As DataColumn = New DataColumn() {dtKelas.Columns("kd_kelas")}
        dtKelas.PrimaryKey = pk
        DataGridView1.DataSource = dtKelas
    End Sub
    Sub selectQuery(ByVal s As String, ByVal f As String, ByVal w As String)
        '-- MENAMPILKAN KOLOM PADA TABEL KELAS
        dtNip.PrimaryKey = Nothing
        dtNip.Rows.Clear()

```

```

dtNip.Columns.Clear()
If w = "-" Then
    comm.CommandText = "select " & s & " from " & f
Else
    comm.CommandText = "select " & s & " from " & f & " where " & w
End If
adNip = New SqlDataAdapter(comm.CommandText, conn)
adNip.Fill(dtNip)
End Sub
Sub showColumn()
    '-- TAMPILKAN KOLOM FILTER
    For i As Integer = 0 To dtKelas.Columns.Count - 1
        ComboBox3.Items.Add(dtKelas.Columns(i).ToString)
    Next
    ComboBox3.Text = ComboBox3.Items(1)
End Sub
Private Sub Guru_Load(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
    loadKelas(False)
    showColumn()

    selectQuery("NIP,NAMA", "GURU", "-")
    ComboBox1.DataSource = dtNip
    ComboBox1.ValueMember = "NIP"
    ComboBox1.DisplayMember = "NAMA"

    Kosong()
End Sub
Private Sub TextBox6_TextChanged(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles TextBox6.TextChanged
    Try
        '-- LOAD DATAGRID TERGANTUNG FILTER
        If TextBox6.Text = "" Then
            loadKelas(False)
        Else : loadKelas(True)
        End If
    Catch ex As Exception
    End Try
End Sub
Private Sub btn_ok_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
    Try
        Simpan(False)
        Kosong()
    Catch ex As Exception

    End Try
End Sub

Private Sub btn_edit_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button2.Click
    Try
        Simpan(True)
        Kosong()
    Catch ex As Exception

    End Try
End Sub

Private Sub DataGridView1_Click(ByVal sender As Object, ByVal e As
System.EventArgs) Handles DataGridView1.Click
    Try
        '-- MENAMPILKAN DATA KE DATAGRIDVIEW
        Dim row As DataRow = dtKelas.Rows(DataGridView1.CurrentRow.Index)

        If dtNip.Rows.Count > 0 Then
            TextBox1.Text = row(0)
            TextBox2.Text = row(2)
            ComboBox1.Text = selectQueryUniv("nama", "guru", "nip =" & row(1)
& " ")
            NumericUpDown1.Value = row(3)

            Button1.Enabled = False
            Button2.Enabled = True

```

```

        Button3.Enabled = True
    End If
Catch ex As Exception

End Try
End Sub

Private Sub btn_kembali_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button4.Click
    Kosong()
End Sub

Private Sub btn_hapus_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button3.Click
    Try
        Hapus()
        Kosong()
    Catch ex As Exception

    End Try
End Sub

Private Sub Button5_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button5.Click
    Try
        loadKelas(False)
    Catch ex As Exception

    End Try
End Sub

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

```



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## Lampiran 5. Listing Program Form Master Orangtua

```

Imports System.Data.SqlClient
Public Class Orang_Tua
    Dim dtOrtu, dtNip, dtAuto As New DataTable
    Dim rows As DataRow
    Private Sub Orang_Tua_Load(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
        loadortu(False)
        showColumn()
        selectQuery("NIP,NAMA", "GURU", "-")
        Kosong()
        autoComplete_nama()
        LinkLabel1.Enabled = False
    End Sub

    Private Sub Button6_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button6.Click
        Try
            TextBox13.Text = selectQueryUniv("a.nis", "Siswa a, pendaftaran b",
"a.kd_pendaftaran = b.kd_pendaftaran and b.nama = '" & TextBox7.Text & "'")
            loadortu(False)
            showColumn()
            selectQuery("NIP,NAMA", "GURU", "-")
            autoComplete_nama()
        Catch ex As Exception
        End Try
    End Sub
    Private Sub TextBox7_LostFocus(ByVal sender As Object, ByVal e As
System.EventArgs) Handles TextBox7.LostFocus
        Try
            TextBox13.Text = selectQueryUniv("a.nis", "Siswa a, pendaftaran b",
"a.kd_pendaftaran = b.kd_pendaftaran and b.nama = '" & TextBox7.Text & "'")
        Catch ex As Exception
        End Try
    End Sub
Sub Kosong()
    TextBox1.Text = ""
    TextBox2.Text = ""
    TextBox3.Text = ""
    TextBox4.Text = ""
    TextBox5.Text = ""
    TextBox6.Text = ""
    TextBox7.Text = ""
    TextBox8.Text = ""
    TextBox9.Text = ""
    TextBox10.Text = ""
    TextBox11.Text = ""
    TextBox13.Text = ""
    TextBox12.Text = ""
    ComboBox3.Text = ""

    Button1.Enabled = True
    Button2.Enabled = False
    Button3.Enabled = False

    TextBox1.Text = counterid("Kd_Ortu", "5", "4", "Orang_Tua", "0", True)
    ComboBox3.SelectedText = "NIS"
    LinkLabel1.Enabled = False
End Sub
Sub autoComplete_nama()
    dtAuto.Rows.Clear()
    comm.CommandText = "SELECT b.nama FROM siswa a, pendaftaran b where
a.kd_pendaftaran = b.kd_pendaftaran"
    adAuto = New SqlDataAdapter(comm.CommandText, conn)
    adAuto.Fill(dtAuto)

    If dtAuto.Rows.Count <> 0 Then
        For x As Integer = 0 To dtAuto.Rows.Count - 1
            TextBox7.AutoCompleteCustomSource.Add(dtAuto.Rows(x).Item(0))
        Next
    End If
End Sub

```

```

End Sub
Sub Simpan(ByVal Update As Boolean)
    loadortu(False)
    If Update = True Then
        rows = dtortu.Rows.Find(TextBox1.Text)
        rows.BeginEdit()
    Else : rows = dtortu.NewRow
    End If

    rows(0) = TextBox1.Text
    rows(1) = TextBox13.Text
    rows(2) = TextBox2.Text
    rows(3) = TextBox3.Text
    rows(4) = TextBox4.Text
    rows(5) = TextBox5.Text
    rows(6) = TextBox8.Text
    rows(7) = TextBox9.Text
    rows(8) = TextBox10.Text
    rows(9) = TextBox11.Text
    rows(10) = TextBox12.Text

    If Update = True Then
        rows.EndEdit()
    Else : dtortu.Rows.Add(rows)
    End If

    Dim cb As New SqlCommandBuilder(adortu)
    adortu.Update(dtortu)
    loadortu(False)
End Sub
Sub Hapus()
    loadortu(False)

    rows = dtortu.Rows.Find(TextBox1.Text)
    rows.Delete()
    Dim cb As New SqlCommandBuilder(adortu)
    adortu.Update(dtortu)
    loadortu(False)
End Sub
Sub loadortu(ByVal filter As Boolean)
    dtOrtu.Rows.Clear()

    If filter = True Then
        comm.CommandText = "select * from orang_tua where " & ComboBox3.Text &
" like '%" & TextBox6.Text & "%'"
    Else : comm.CommandText = "select * from orang_tua"
    End If

    adOrtu = New SqlDataAdapter(comm.CommandText, conn)
    adOrtu.Fill(dtOrtu)
    Dim pk() As DataColumn = New DataColumn() {dtOrtu.Columns("kd_ortu")}
    dtOrtu.PrimaryKey = pk
    DataGridView1.DataSource = dtOrtu
End Sub
Sub selectQuery(ByVal s As String, ByVal f As String, ByVal w As String)
    dtNip.PrimaryKey = Nothing
    dtNip.Rows.Clear()
    dtNip.Columns.Clear()
    If w = "-" Then
        comm.CommandText = "select " & s & " from " & f
    Else
        comm.CommandText = "select " & s & " from " & f & " where " & w
    End If
    adNip = New SqlDataAdapter(comm.CommandText, conn)
    adNip.Fill(dtNip)
End Sub
Sub showColumn()
    For i As Integer = 0 To dtortu.Columns.Count - 1
        ComboBox3.Items.Add(dtOrtu.Columns(i).ToString)
    Next
    ComboBox3.Text = ComboBox3.Items(1)
End Sub
Private Sub TextBox6_TextChanged(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles TextBox6.TextChanged
    Try

```

```

        If TextBox6.Text = "" Then
            loadortu(False)
        Else : loadortu(True)
        End If
    Catch ex As Exception

    End Try
End Sub

Private Sub btn_ok_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
    Try
        Simpan(False)
        Kosong()
    Catch ex As Exception

    End Try
End Sub

Private Sub btn_edit_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button2.Click
    Try
        Simpan(True)
        Kosong()
    Catch ex As Exception

    End Try
End Sub

Private Sub DataGridView1_Click(ByVal sender As Object, ByVal e As
System.EventArgs) Handles DataGridView1.Click
    Try
        Dim rows As DataRow = dtOrtu.Rows(DataGridView1.CurrentRow.Index)
        TextBox1.Text = rows(0)
        TextBox13.Text = rows(1)
        TextBox2.Text = rows(2)
        TextBox3.Text = rows(3)
        TextBox4.Text = rows(4)
        TextBox5.Text = rows(5)
        TextBox7.Text = selectQueryUniv("b.nama", "pendaftaran b, siswa a",
"a.kd_pendaftaran = b.kd_pendaftaran and a.nis = '" & TextBox13.Text & "'")
        TextBox8.Text = rows(6)
        TextBox9.Text = rows(7)
        TextBox10.Text = rows(8)
        TextBox11.Text = rows(9)
        TextBox12.Text = rows(10)

        Button1.Enabled = False
        Button2.Enabled = True
        Button3.Enabled = True

    Catch ex As Exception

    End Try
End Sub

Private Sub btn_kembali_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button4.Click
    Kosong()
End Sub

Private Sub btn_hapus_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button3.Click
    Try
        Hapus()
        Kosong()
    Catch ex As Exception

    End Try
End Sub

Private Sub Button5_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button5.Click
    Try
        loadortu(False)
    Catch ex As Exception

```

```
        End Try
    End Sub

    Private Sub LinkLabel1_LinkClicked(ByVal sender As System.Object, ByVal e As
System.Windows.Forms.LinkLabelLinkClickedEventArgs) Handles LinkLabel1.LinkClicked
        Me.Hide()
        Verifikasi_Daftar_Online.Show()
    End Sub

    Private Sub Button7_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button7.Click
        Me.Hide()
    End Sub
End Class
```



## Lampiran 6. Listing Program Form Master Siswa

```

Imports System.Data.SqlClient
Public Class Siswa
    Dim dtSiswa As New DataTable
    Dim rows As DataRow
    Dim kdAcuan As String
    Sub Kosong()
        '-- PERINTAH KOSONGI TEXTBOX DLL
        TextBox1.Text = ""
        TextBox2.Text = ""
        TextBox3.Text = ""
        TextBox4.Text = ""
        TextBox5.Text = ""
        TextBox6.Text = ""
        ComboBox1.Text = ""
        ComboBox2.Text = ""
        ComboBox3.Text = ""
        TextBox7.Text = ""
        TextBox8.Text = ""
        TextBox9.Text = ""
        TextBox10.Text = ""
        DateTimePicker1.Value = Now.Date
        DateTimePicker2.Value = Now.Date

        Button1.Enabled = True
        Button2.Enabled = False
        Button3.Enabled = False

        TextBox1.Text = counterid("NIS", "5", "4", "Siswa", "S", True)
        ComboBox3.SelectedText = "Nama"
    End Sub
    Sub Simpan(ByVal Update As Boolean)
        '-- PERINTAH SIMPAN & UPDATE
        loadSiswa(False)
        Dim jk, kd As String
        If RadioButton1.Checked = True Then
            jk = "L"
        Else : jk = "P"
        End If
        kd = counterid("kd_pendaftaran", "5", "4", "pendaftaran", "P", True)
        If Update = True Then
            updateQuery("pendaftaran", "kd_pendaftaran=" & kdAcuan & "' & _
                ",nama=" & TextBox2.Text & "' & ",alamat=" & TextBox3.Text & "' & _
                ",kota=" & TextBox4.Text & "' & _
                ",jk=" & jk & "' & ",tmp_lahir=" & TextBox5.Text & "' & _
                ",tgl_lahir=" & DateTimePicker1.Value & "' & _
                ",agama=" & ComboBox1.Text & "' & ",warganegara=" & ComboBox2.Text
            & "' & ",telp=" & TextBox7.Text & "' & _
                ",asal_smp=" & TextBox8.Text & "' & ",no_sttb=" & TextBox9.Text &
            "' & ",tgl_sttb=" & DateTimePicker2.Value & "' & _
                ",nem=" & filterKoma(TextBox10.Text), "kd_pendaftaran = ' & kdAcuan &
            "'")

            updateQuery("siswa", "kd_pendaftaran=" & kdAcuan & "' & ",Status=" &
            & ComboBox4.Text & "' & ",tgl_masuk=" & Now.Date & "' & _
                ",kd_kelas=" & "-'" & ",kd_pendaftaran = ' & kdAcuan & "'")
        Else
            insertQuery("pendaftaran", "' & kd & "' & _
                ",'" & TextBox2.Text & "' & ",'" & TextBox3.Text & "' & ",'" &
            TextBox4.Text & "' & _
                ",'" & jk & "' & ",'" & TextBox5.Text & "' & ",'" &
            DateTimePicker1.Value & "' & _
                ",'" & ComboBox1.Text & "' & ",'" & ComboBox2.Text & "' & ",'" &
            TextBox7.Text & "' & _
                ",'" & TextBox8.Text & "' & ",'" & TextBox9.Text & "' & _
                ",'" & DateTimePicker2.Value & "' & ",'" & TextBox10.Text & "' &
            ", 'Tidak' & ", 'Ya'")

            insertQuery("siswa", "' & counterid("NIS", "5", "4", "siswa", "S",
            True) & "' & _
                ",'" & kd & "' & ",'" & ComboBox4.Text & "' & ",'" & Now.Date & "' & _
                ",'" & "-'" & "'")
        End If
    End Sub

```

```

    End If
    loadSiswa(False)
End Sub
Sub Hapus()
    '-- PERINTAH HAPUS DATA
    loadSiswa(False)

    deleteQuery("siswa", "kd_pendaftaran = '" & kdAcuan & "'")
    deleteQuery("pendaftaran", "kd_pendaftaran = '" & kdAcuan & "'")

    loadSiswa(False)
End Sub
Sub loadSiswa(ByVal filter As Boolean)
    '-- LOAD DATA UNTUK DITARUH DI DATAGRID

    dtSiswa.Rows.Clear()
    If filter = True Then
        comm.CommandText = "select a.nis, b.nama, b.alamat, b.kota, b.jk,
b.tmp_lahir, b.tgl_lahir, b.agama, b.warganegara, b.telp, b.asal_smp, b.no_sttb,
b.tgl_sttb, b.nem, a.status, a.kd_pendaftaran from siswa a, pendaftaran b where
a.kd_pendaftaran = b.kd_pendaftaran and " & ComboBox3.Text & " like '%" &
TextBox6.Text & "%'"
    Else : comm.CommandText = "select a.nis, b.nama, b.alamat, b.kota, b.jk,
b.tmp_lahir, b.tgl_lahir, b.agama, b.warganegara, b.telp, b.asal_smp, b.no_sttb,
b.tgl_sttb, b.nem, a.status, a.kd_pendaftaran from siswa a, pendaftaran b where
a.kd_pendaftaran = b.kd_pendaftaran"
    End If

    adSiswa = New SqlDataAdapter(comm.CommandText, conn)
    adSiswa.Fill(dtSiswa)
    Dim pk() As DataColumn = New DataColumn() {dtSiswa.Columns("NIS")}
    dtSiswa.PrimaryKey = pk
    DataGridView1.DataSource = dtSiswa
End Sub
Sub showColumn()
    '-- MENAMPILKAN KOLOM PADA TABEL SISWA
    For i As Integer = 0 To dtSiswa.Columns.Count - 1
        ComboBox3.Items.Add(dtSiswa.Columns(i).ToString())
    Next
    ComboBox3.Text = ComboBox3.Items(1)
End Sub
Private Sub Guru_Load(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
    loadSiswa(False)
    showColumn()
    Kosong()
End Sub
Private Sub TextBox6_TextChanged(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles TextBox6.TextChanged
    Try
        '-- LOAD DATAGRID TERGANTUNG FILTER

        If TextBox6.Text = "" Then
            loadSiswa(False)
        Else : loadSiswa(True)
        End If
    Catch ex As Exception

    End Try
End Sub

Private Sub btn_ok_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
    Simpan(False)
    Kosong()
End Sub

Private Sub btn_edit_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button2.Click
    Simpan(True)
    Kosong()
End Sub

Private Sub DataGridView1_Click(ByVal sender As Object, ByVal e As
System.EventArgs) Handles DataGridView1.Click
    Try

```

```

'-- MENAMPILKAN DATA KE DATAGRIDVIEW

Dim row As DataRow = dtSiswa.Rows(DataGridView1.CurrentRow.Index)
TextBox1.Text = row(0)
TextBox2.Text = row(1)
TextBox3.Text = row(2)
TextBox4.Text = row(3)
If row(4) = "L" Then
    RadioButton1.Checked = True
Else : RadioButton2.Checked = True
End If

TextBox5.Text = row(5)
DateTimePicker1.Value = row(6)
ComboBox1.Text = row(7)
ComboBox2.Text = row(8)
TextBox7.Text = row(9)
TextBox8.Text = row(10)
TextBox9.Text = row(11)
DateTimePicker1.Value = row(12)
TextBox10.Text = row(13)
ComboBox4.Text = row(14)
kdAcuan = row(15)

Button1.Enabled = False
Button2.Enabled = True
Button3.Enabled = True
Catch ex As Exception

End Try
End Sub

Private Sub btn_kembali_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button4.Click
    Kosong()
End Sub

Private Sub btn_hapus_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button3.Click
    Try
        Hapus()
        Kosong()
    Catch ex As Exception

    End Try
End Sub

Private Sub Button5_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button5.Click
    Try
        loadSiswa(False)
    Catch ex As Exception

    End Try
End Sub

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

```

## Lampiran 7. Listing Program Form Transaksi Alokasi Kelas

```

Imports System.Data.SqlClient
Public Class Alokasi_Kelas
    '-- DEKLARASI VARIABEL
    Dim dtAlokasi, dtAlokasi1, dtload, dt1, dt2, dtsiswa, dttmp As New DataTable
    Dim adload, ad1, ad2, adsiswa, adtmp As New SqlDataAdapter
    Dim st, kd_kelas, kd_kelas_lama, stLoad As String
    Sub loadGrid1()
        '-- LOAD DATAGRID 1
        kd_kelas_lama = ComboBox0.SelectedValue.ToString
        dt1.Rows.Clear()
        comm.CommandText = "select a.nis, b.nama from siswa a, pendaftaran b where
a.kd_pendaftaran = b.kd_pendaftaran and status = 'Aktif' and kd_kelas <> ' " &
kd_kelas & " "
        ad1 = New SqlDataAdapter(comm.CommandText, conn)
        ad1.Fill(dt1)
        DataGridView1.DataSource = dt1
        Dim pk1() As DataColumn = New DataColumn() {dt1.Columns("a.nis")}
        dt1.PrimaryKey = pk1

    End Sub
    Sub loadGrid2()
        '-- LOAD DATAGRID 2
        dt2.Rows.Clear()
        comm.CommandText = "select a.nis, b.nama from siswa a, pendaftaran b where
a.kd_pendaftaran = b.kd_pendaftaran and status = 'Aktif' and kd_kelas = ' " &
kd_kelas & " "
        ad2 = New SqlDataAdapter(comm.CommandText, conn)
        ad2.Fill(dt2)
        DataGridView2.DataSource = dt2
        Dim pk2() As DataColumn = New DataColumn() {dt2.Columns("a.nis")}
        dt2.PrimaryKey = pk2
    End Sub
    Sub loadAlokasi(ByVal S As String, ByVal F As String, ByVal W As String)
        '-- LOAD DATABASE UNTUK DISIMPAN
        dtAlokasi.PrimaryKey = Nothing
        dtAlokasi.Rows.Clear()
        dtAlokasi.Columns.Clear()
        If W = "-" Then
            comm.CommandText = "select " & S & " from " & F
        Else
            comm.CommandText = "select " & S & " from " & F & " where " & W
        End If
        adAlokasi = New SqlDataAdapter(comm.CommandText, conn)
        adAlokasi.Fill(dtAlokasi)
    End Sub
    Sub loadAlokasi1(ByVal S As String, ByVal F As String, ByVal W As String)
        '-- LOAD DATABASE UNTUK DISIMPAN
        dtAlokasi1.PrimaryKey = Nothing
        dtAlokasi1.Rows.Clear()
        dtAlokasi1.Columns.Clear()
        If W = "-" Then
            comm.CommandText = "select " & S & " from " & F
        Else
            comm.CommandText = "select " & S & " from " & F & " where " & W
        End If
        adAlokasi1 = New SqlDataAdapter(comm.CommandText, conn)
        adAlokasi1.Fill(dtAlokasi1)
    End Sub
    Sub loadCombo1()
        loadAlokasi("kd_kelas,nama_kelas", "kelas", "-")

        ComboBox0.DataSource = dtAlokasi
        ComboBox0.ValueMember = "kd_kelas"
        ComboBox0.DisplayMember = "nama_Kelas"

        ComboBox0.Text = dtAlokasi.Rows(0).Item(1)
    End Sub
    Sub loadCombo2()
        If Microsoft.VisualBasic.Left(ComboBox0.Text, 2) = "--" Then
            loadAlokasi1("kd_kelas,nama_kelas", "kelas",
"substring(nama_kelas,1,2) = '10'" )
        End If
    End Sub
End Class

```



```

        ElseIf Microsoft.VisualBasic.Left(ComboBox0.Text, 2) = "10" Then
            loadAlokasil("kd_kelas,nama_kelas", "kelas",
"substring(nama_kelas,1,2) = '11'")
        ElseIf Microsoft.VisualBasic.Left(ComboBox0.Text, 2) = "11" Then
            loadAlokasil("kd_kelas,nama_kelas", "kelas",
"substring(nama_kelas,1,2) = '12'")
        Else
            loadAlokasil("kd_kelas,nama_kelas", "kelas",
"substring(nama_kelas,1,2) = '--'")
        End If

        ComboBox1.DataSource = dtAlokasil
        ComboBox1.ValueMember = "kd_kelas"
        ComboBox1.DisplayMember = "Nama_Kelas"

        'ComboBox1.Text = dtAlokasil.Rows(0).Item(1)
    End Sub

    Private Sub Alokasi_Kelas_Load(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
        ComboBox0.Items.Add("BARU")
        loadCombol()
        loadGrid1()
        ad2.Fill(dttmp)

    End Sub

    Private Sub ButtonX1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
        Try
            '-- PERINTAH TOMBOL ADD
            Dim row1 As DataRow = dt1.Rows(DataGridView1.CurrentRow.Index)

            Dim row2 As DataRow = dt2.NewRow
            row2(0) = row1(0)
            row2(1) = row1(1)
            dt2.Rows.Add(row2)

            dt1.Rows.Remove(row1)
        Catch ex As Exception
            If Microsoft.VisualBasic.Right(ex.Message, 16) = "already present."
Then
                MsgBox("Nama Sudah Ada Di Kelas!", MsgBoxStyle.Critical,
"Peringatan")
            Else
                MsgBox(ex.Message)
            End If
        End Try
    End Sub

    Private Sub ButtonX2_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button2.Click
        '-- PERINTAH TOMBOL REMOVE
        Try
            Dim row2 As DataRow = dt2.Rows(DataGridView2.CurrentRow.Index)
            dt2.Rows.Remove(row2)
            'stRemove = True
        Catch ex As Exception
            If ex.Message = "Object reference not set to an instance of an
object." Then
                MsgBox("Data Kosong!", MsgBoxStyle.Information, "Perhatian")
            Else
                MsgBox(ex.Message)
            End If
        End Try
    End Sub

    Private Sub TextBox1_MouseClick(ByVal sender As Object, ByVal e As
System.Windows.Forms.MouseEventArgs) Handles TextBox1.MouseClick
        '-- PERINTAH KOSONGI TEXTBOX SAAT TEXTBOX DI KLIK
        TextBox1.Text = ""
    End Sub

    Private Sub TextBox1_TextChanged(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles TextBox1.TextChanged
        Try

```

```

        '-- FILTER DATAGRID 1 SESUAI DENGAN TULISAN DI TEXTBOX
        dt1.Rows.Clear()
        comm.CommandText = "select a.nis, b.nama from siswa a, pendaftaran b
where a.kd_pendaftaran = b.kd_pendaftaran and status = 'Aktif' and kd_kelas <> ' "
& kd_kelas & " ' and b.nama like '%" & TextBox1.Text & "%'"
        ad1 = New SqlDataAdapter(comm.CommandText, conn)
        ad1.Fill(dt1)
        DataGridView1.DataSource = dt1
    Catch ex As Exception
        MsgBox(ex.Message)
    End Try
End Sub

Private Sub ButtonX3_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button3.Click
    Try
        '-- PERINTAH SIMPAN KE DATABASE
        If MessageBox.Show("Apakah Anda Ingin Mengedit Data?", "Edit",
MessageBoxButtons.YesNo) = Windows.Forms.DialogResult.Yes Then
            '-- MENYIMPAN DATA DI GRID 2
            For i As Integer = 0 To dt2.Rows.Count - 1
' MENYIMPAN KELAS MASING - MASING SISWA YANG ADA DI GRID 2.
                buka()
                comm.Connection = conn
                comm.CommandText = "update siswa set kd_kelas = ' " &
ComboBox1.SelectedValue & " ' where nis = ' " & dt2.Rows(i).Item(0) & " ' "
                comm.ExecuteNonQuery()
                conn.Close()
            Next
            For i As Integer = 0 To dttmp.Rows.Count - 1
' MENGUPDATE DATA YANG TIDAK ADA DI GRID 2 TAPI KELASNYA HARUS SAMA DENGAN
COMBOBOX 1.
                st = False
                For j As Integer = 0 To dt2.Rows.Count - 1
                    If dttmp.Rows(i).Item(0) = dt2.Rows(j).Item(0) Then
                        st = True
                    End If
                Next
                If st = False Then
                    buka()
                    comm.Connection = conn
                    comm.CommandText = "update siswa set kd_kelas = ' " where
nis = ' " & dttmp.Rows(i).Item(0) & " ' and kd_kelas = ' " & ComboBox1.SelectedValue
& " ' "
                    comm.ExecuteNonQuery()
                End If
            Next
            MsgBox("Data telah Terupdate!", MsgBoxStyle.Information,
"Perhatian")
            loadGrid1()
            loadGrid2()
            ad2.Fill(dttmp)
        End If
    Catch ex As Exception
        MsgBox(ex.Message)
    End Try
End Sub

Private Sub Button4_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button4.Click
    Try
        '-- PROSES TOMBOL BATAL
        dt2.Rows.Clear()
        loadGrid1()
        loadGrid2()
        TextBox1.Text = " "

    Catch ex As Exception

    End Try
End Sub

Private Sub ComboBox0_SelectedIndexChanged(ByVal sender As Object, ByVal e As
System.EventArgs) Handles ComboBox0.SelectedIndexChanged
    loadGrid1()
    loadCombo2()
    kd_kelas = ComboBox1.SelectedValue.ToString

```

```
        loadGrid2()  
    End Sub  
  
    Private Sub Button6_Click(ByVal sender As System.Object, ByVal e As  
System.EventArgs) Handles Button6.Click  
        Me.Hide()  
    End Sub  
    Private Sub ComboBox1_LostFocus(ByVal sender As Object, ByVal e As  
System.EventArgs) Handles ComboBox1.LostFocus  
        Try  
            kd_kelas = ComboBox1.SelectedValue.ToString  
            loadGrid2()  
        Catch ex As Exception  
  
        End Try  
    End Sub  
End Class
```



## Lampiran 8. Listing Program Form Transaksi Daftar Siswa Mutasi

```

Imports System.Data.SqlClient
Public Class Daftar_Siswa_Mutasi
    Dim dtMutasi As New DataTable
    Dim row1, row2 As DataRow
    Dim a, b, c, d As String
    Sub rubahMode()
        ' -- MENGGANTI MODE NEW dan EDIT
        If RadioButton1.Checked = True Then
            kosong()
            modeNew(True)
        Else : kosong()
            modeNew(False)
        End If
    End Sub
    Sub kosong()
        ' -- PROSES MENGGOSONGI TEXTBOX DLL
        TextBox1.Text = ""
        TextBox2.Text = ""
        TextBox3.Text = ""
        TextBox4.Text = ""
        TextBox2.Text = ""
        TextBox3.Text = ""
        TextBox4.Text = ""
        RadioButton3.Checked = True
        Lb_NIS.Text = "-"
        TextBox6.Text = ""
        ComboBox2.Text = "Indonesia"
        TextBox8.Text = ""
        TextBox9.Text = ""
        TextBox10.Text = ""
        TextBox11.Text = ""
        TextBox14.Text = ""
        TextBox15.Text = ""
        DateTimePicker1.Value = Now.Date
        DateTimePicker2.Value = Now.Date
        ComboBox1.Text = ""
        CheckBox1.Checked = False
        CheckBox2.Checked = False
        CheckBox3.Checked = False
        CheckBox4.Checked = False
        modeNew(True)

        Lb_Pagu.Text = 10 - CInt(selectQueryUniv("count(*)", "siswa",
"substring(NIS,2,2) = '" & Microsoft.VisualBasic.Mid(Now.Year, 3, 2) & "'"))
    End Sub
    Sub modeNew(ByVal value As Boolean)
        ' -- DEKLARASI MODE NEW
        If value = True Then
            Button1.Enabled = False
            TextBox1.Enabled = False
            TextBox1.Text = counterid("kd_pendaftaran", "5", "4", "pendaftaran",
"P", True)
        Else : Button1.Enabled = True
            TextBox1.Enabled = True
            TextBox1.Text = ""
        End If
    End Sub
    Public Sub verifikasi()
        ' -- CEK CHECKBOX
        If CheckBox1.Checked = True Then
            a = "Ya"
        Else : a = "Tidak"
        End If
        If CheckBox2.Checked = True Then
            b = "Ya"
        Else : b = "Tidak"
        End If
        If CheckBox3.Checked = True Then
            c = "Ya"
        Else : c = "Tidak"
        End If
    End Sub

```

```

    If CheckBox4.Checked = True Then
        d = "Ya"
    Else : d = "Tidak"
    End If
End Sub
Sub Simpan(ByVal Update As Boolean)
    '-- INSERT UPDATE PENDAFTARAN
    verifikasi()
    Dim jk As String
    If RadioButton1.Checked = True Then
        jk = "L"
    Else : jk = "P"
    End If
    If Update = True Then
        updateQuery("pendaftaran", "kd_pendaftaran='" & TextBox1.Text & "'" &
            ",nama='" & TextBox2.Text & "'" & ",alamat='" & TextBox3.Text & "'" &
            ",kota='" & TextBox4.Text & "'" & _
            ",jk='" & jk & "'" & ",tmp_lahir='" & TextBox6.Text & "'" &
            ",tgl_lahir='" & DateTimePicker1.Value & "'" & _
            ",agama='" & ComboBox1.Text & "'" & ",warganegara='" & ComboBox2.Text
            & "'" & ",telp='" & TextBox8.Text & "'" & _
            ",asal_smp='" & TextBox9.Text & "'" & ",no_sttb='" & TextBox10.Text &
            "'" & ",tgl_sttb='" & DateTimePicker2.Value & "'" & _
            ",nem=" & filterKoma(TextBox11.Text) & "'" & ",status_mutasi='" & "YA"
            & "'" & ",status_seleksi='" & "Ya" & "'", "kd_pendaftaran='" & TextBox1.Text &
            "'" &
            updateQuery("verifikasi_pendaftaran", "kd_verifikasi='" &
            counterid("kd_verifikasi", "5", "4", "verifikasi_pendaftaran", "V", True) & "'" &
            _
            ",kd_pendaftaran='" & TextBox1.Text & "'" & ",tanggal=" & Now.Date &
            "'" & ",periode=" & Now.Year & "/" & CInt(Now.Year) + 1 & "'" & _
            ",status_pembayaran=" & a & "'" & ",status_ijazah=" & b & "'" &
            ",status_raport=" & c & "'" & _
            ",status_foto=" & d & "'", "kd_pendaftaran='" & TextBox1.Text & "'" &
            updateQuery("mutasi", "kd_pendaftaran='" & TextBox1.Text & "'" &
            ",asal_sma=" & TextBox14.Text & "'" & ",alasan_pindah=" & TextBox15.Text & "'",
            "kd_pendaftaran=" & TextBox1.Text & "'")
        Else : insertQuery("pendaftaran", "'" & TextBox1.Text & "'" & _
            TextBox2.Text & "'" & _
            TextBox3.Text & "'" & _
            TextBox4.Text & "'" & _
            ",jk=" & jk & "'" & _
            TextBox6.Text & "'" & _
            ",tgl_lahir=" & DateTimePicker1.Value & "'" & _
            ",agama=" & ComboBox1.Text & "'" & _
            ",warganegara=" & ComboBox2.Text & "'" & _
            ",telp=" & TextBox8.Text & "'" & _
            ",asal_smp=" & TextBox9.Text & "'" & _
            ",no_sttb=" & TextBox10.Text & "'" & _
            ",tgl_sttb=" & DateTimePicker2.Value & "'" & _
            ",nem=" & TextBox11.Text & "'" & _
            ",status_mutasi=" & "Ya" & "'" & _
            ",status_seleksi=" & "Ya" & "'")
        insertQuery("verifikasi_pendaftaran", "'" & counterid("kd_verifikasi",
            "5", "4", "verifikasi_pendaftaran", "V", True) & "'" & _
            TextBox1.Text & "'" & _
            ",tanggal=" & Now.Date & "'" & _
            ",periode=" & Now.Year & "'" & _
            ",status_pembayaran=" & a & "'" & _
            ",status_ijazah=" & b & "'" & _
            ",status_raport=" & c & "'" & _
            ",status_foto=" & d & "'")
        insertQuery("mutasi", "'" & counterid("kd_mutasi", "5", "4", "mutasi",
            "M", True) & "'" & _
            TextBox1.Text & "'" & _
            TextBox14.Text & "'" & _
            TextBox15.Text & "'")
        Dim NIS As String = counterid("NIS", "5", "4", "siswa", "S", True)
        insertQuery("siswa", "'" & NIS & "'" & _
            TextBox1.Text & "'" & _
            ",Aktif=" & "Aktif" & "'" & _
            ",tanggal=" & Now.Date & "'")
        MsgBox("NIS Anda : " & NIS)
    End If
End Sub
Sub loadMutasi(ByVal S As String, ByVal F As String, ByVal W As String)
    '-- LOAD DATABASE KE DATATABLE
    dtMutasi.PrimaryKey = Nothing
    dtMutasi.Rows.Clear()
    dtMutasi.Columns.Clear()
    If W = "-" Then
        comm.CommandText = "select " & S & " from " & F
    Else

```

```

        comm.CommandText = "select " & S & " from " & F & " where " & W
    End If
    adMutasi = New SqlDataAdapter(comm.CommandText, conn)
    adMutasi.Fill(dtMutasi)
End Sub
Private Sub RadioButton1_CheckedChanged(ByVal sender As System.Object, ByVal e
As System.EventArgs) Handles RadioButton1.CheckedChanged
    rubahMode()
End Sub
Private Sub RadioButton2_CheckedChanged(ByVal sender As System.Object, ByVal e
As System.EventArgs) Handles RadioButton2.CheckedChanged
    rubahMode()
End Sub

Private Sub btn_ok_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles btn_ok.Click
    Try
        '-- CEK PAGU --
        If CInt(Lb_Pagu.Text) > 0 Then
            If selectQueryUniv("count(*)", "pendaftaran", "no_sttb = '" &
TextBox10.Text & "'") = 0 Then
                If RadioButton1.Checked = True Then
                    Simpan(False)
                Else : Simpan(True)
                End If
                kosong()
                RadioButton1.Checked = True
                MsgBox("Data Telah Disimpan !", MsgBoxStyle.Information,
"Peringatan")
            Else
                MsgBox("No STTB Yang Sama Sudah Pernah Mendaftar!",
MsgBoxStyle.Critical, "Perintah")
            End If
        Else
            MsgBox("Pagu Penuh !", MsgBoxStyle.Critical, "Perintah")
            kosong()
            RadioButton1.Checked = True
        End If
    Catch ex As Exception
        MsgBox("data belum lengkap")
    End Try
End Sub

Private Sub Daftar_Siswa_Mutasi_Load(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
    modeNew(True)
    Lb_Pagu.Text = 10 - CInt(selectQueryUniv("count(*)", "siswa",
"substring(NIS,2,2) = '" & Microsoft.VisualBasic.Mid(Now.Year, 3, 2) & "'"))
End Sub

Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
    Try
        '-- CEK KODE PENDAFTARAN UNTUK EDIT --
        loadMutasi("a.*,b.*,c.*,d.*", "pendaftaran a, verifikasi_pendaftaran
b,mutasi c,siswa d", "a.kd_pendaftaran=b.kd_pendaftaran and
b.kd_pendaftaran=c.kd_pendaftaran and c.kd_pendaftaran = d.kd_pendaftaran and
a.kd_pendaftaran = '" & TextBox1.Text & "'")
        If dtMutasi.Rows.Count > 0 Then
            TextBox2.Text = dtMutasi.Rows(0).Item(1)
            TextBox3.Text = dtMutasi.Rows(0).Item(2)
            TextBox4.Text = dtMutasi.Rows(0).Item(3)
            If dtMutasi.Rows(0).Item(4) = "L" Then
                RadioButton3.Checked = True
            Else : RadioButton4.Checked = True
            End If
            TextBox6.Text = dtMutasi.Rows(0).Item(5)
            DateTimePicker1.Value = dtMutasi.Rows(0).Item(6)
            ComboBox1.Text = dtMutasi.Rows(0).Item(7)
            ComboBox2.Text = dtMutasi.Rows(0).Item(8)
            TextBox8.Text = dtMutasi.Rows(0).Item(9)
            TextBox9.Text = dtMutasi.Rows(0).Item(10)
            TextBox10.Text = dtMutasi.Rows(0).Item(11)
            DateTimePicker2.Value = dtMutasi.Rows(0).Item(12)
            TextBox11.Text = dtMutasi.Rows(0).Item(13)

```

```

    If dtMutasi.Rows(0).Item(20) = "Ya" Then
        CheckBox1.Checked = True
    Else : CheckBox1.Checked = False
    End If
    If dtMutasi.Rows(0).Item(21) = "Ya" Then
        CheckBox2.Checked = True
    Else : CheckBox2.Checked = False
    End If
    If dtMutasi.Rows(0).Item(22) = "Ya" Then
        CheckBox3.Checked = True
    Else : CheckBox3.Checked = False
    End If
    If dtMutasi.Rows(0).Item(23) = "Ya" Then
        CheckBox4.Checked = True
    Else : CheckBox4.Checked = False
    End If

    TextBox14.Text = dtMutasi.Rows(0).Item(26)
    TextBox15.Text = dtMutasi.Rows(0).Item(27)

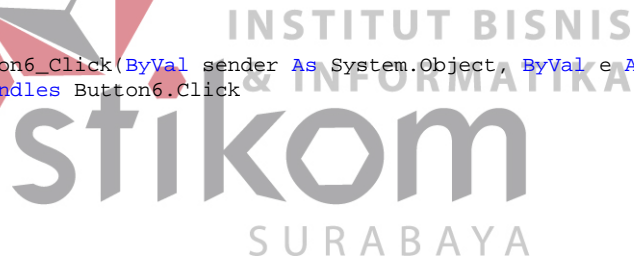
    Lb_NIS.Text = dtMutasi.Rows(0).Item(28)
Else
    MsgBox("Kode Pendaftaran Tidak Ada !", MsgBoxStyle.Critical,
"Peringatan")
End If
Catch ex As Exception

End Try
End Sub

Private Sub btn_kembali_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles btn_kembali.Click
    Kosong()
    RadioButton1.Checked = True
End Sub

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

```



## Lampiran 9. Listing Program Form Transaksi Daftar Ulang Siswa

```

Imports System.Data.SqlClient
Public Class Daftar_Ulang_Siswa
    Dim dtDaftarulang As New DataTable
    Dim rows As DataRow
    Dim up As Boolean
    Private Sub Labell_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs)
        'help.ShowDialog()
    End Sub
    Sub kosong()
        '-- KOSONGI TEXTBOX DLL
        TextBox1.Text = ""
        TextBox2.Text = ""
        TextBox3.Text = ""
        TextBox4.Text = ""
        TextBox5.Text = ""

        CheckBox1.Checked = False
        CheckBox2.Checked = False
        CheckBox3.Checked = False
        CheckBox4.Checked = False
    End Sub
    Sub loadDaftarUlang(ByVal S As String, ByVal F As String, ByVal W As String)
        '-- LOAD DATABASE KE DATATABEL
        dtDaftarulang.PrimaryKey = Nothing
        dtDaftarulang.Rows.Clear()
        dtDaftarulang.Columns.Clear()
        If W = "-" Then
            comm.CommandText = "select " & S & " from " & F
        Else
            comm.CommandText = "select " & S & " from " & F & " where " & W
        End If
        adDaftarulang = New SqlDataAdapter(comm.CommandText, conn)
        adDaftarulang.Fill(dtDaftarulang)
    End Sub
    Sub Simpan(ByVal Update As Boolean)
        '-- PROSES SIMPAN
        loadDaftarUlang("?", "daftar_ulang", "-")

        rows = dtDaftarulang.NewRow

        rows(0) = counterid("kd_daftarulang", "5", "4", "daftar_ulang", "D", True)
        rows(1) = TextBox1.Text
        rows(2) = Now.Year & "/" & CInt(Now.Year) + 1
        rows(3) = Now.Date
        If CheckBox1.Checked = True Then
            rows(4) = "Ya"
        Else : rows(4) = "Tidak"
        End If
        If CheckBox2.Checked = True Then
            rows(5) = "Ya"
        Else : rows(5) = "Tidak"
        End If
        If CheckBox3.Checked = True Then
            rows(6) = "Ya"
        Else : rows(6) = "Tidak"
        End If
        If CheckBox4.Checked = True Then
            rows(7) = "Ya"
        Else : rows(7) = "Tidak"
        End If
        rows(8) = TextBox5.Text

        dtDaftarulang.Rows.Add(rows)

        '-- CEK VALIDASI (HARUS DICENTANG SEMUA) --
        If rows(4) = "Ya" And rows(5) = "Ya" And rows(6) = "Ya" And rows(7) = "Ya"
Then
            Dim cb As New SqlCommandBuilder(adDaftarulang)
            adDaftarulang.Update(dtDaftarulang)
        Else

```



```

        MsgBox("Persyaratan Harus Lengkap !", MsgBoxStyle.Critical,
"Peringatan")
    End If

    loadDaftarUlang("?", "daftar_ulang", "-")
End Sub
Private Sub btn_ok_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles btn_ok.Click
    Try
        If up = True Then
            Simpan(True)
        Else
            Simpan(False)
        End If
        kosong()
    Catch ex As Exception

    End Try
End Sub

Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
    Try
        '-- CEK NIS ADA ATAU TIDAK
        loadDaftarUlang("count(kd_daftarulang)", "daftar_ulang", "nis = '" &
TextBox1.Text & "'")
        If dtDaftarulang.Rows(0).Item(0) > 0 Then
            up = True
            MsgBox("Anda Sudah Daftar Ulang!", MsgBoxStyle.Critical,
"Attention")
        Else
            up = False
            loadDaftarUlang("c.nama, b.nama_kelas, c.jk", "siswa a, kelas b,
pendaftaran c", "a.kd_kelas = b.kd_kelas and a.kd_pendaftaran = c.kd_pendaftaran
and nis = '" & TextBox1.Text & "'")
            If dtDaftarulang.Rows.Count > 0 Then
                'TampilData()
                TextBox2.Text = dtDaftarulang.Rows(0).Item(0)
                TextBox3.Text = dtDaftarulang.Rows(0).Item(1)
                TextBox4.Text = dtDaftarulang.Rows(0).Item(2)
                'Lb_NIS.Text = counterid("NIS", "5", "4", "Siswa", "S", True)
            Else
                MsgBox("Data Tidak Ditemukan!", MsgBoxStyle.Critical,
"Attention")
                kosong()
            End If
        End If
    Catch ex As Exception

    End Try
End Sub

Private Sub LinkLabel1_LinkClicked(ByVal sender As System.Object, ByVal e As
System.Windows.Forms.LinkLabelLinkClickedEventArgs) Handles LinkLabel1.LinkClicked
    Siswa.Show()
End Sub

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

```

## Lampiran 10. Listing Program Form Transaksi Verifikasi Daftar Online

```

Imports System.Data.SqlClient
Public Class Verifikasi_Daftar_Online
    Dim dtVerifikasi As New DataTable
    Dim rows As DataRow
    Dim up As Boolean
    Sub kosong()
        '-- RESET TEXTBOX DLL
        TextBox1.Text = ""
        TextBox2.Text = ""
        TextBox3.Text = ""
        TextBox5.Text = ""
        TextBox6.Text = ""
        TextBox7.Text = ""
        TextBox8.Text = ""
        TextBox9.Text = ""
        TextBox10.Text = ""
        TextBox11.Text = ""
        DateTimePicker1.Value = Now.Date
        Lb_NIS.Text = "-"

        CheckBox1.Checked = False
        CheckBox2.Checked = False
        CheckBox3.Checked = False
        CheckBox4.Checked = False
    End Sub
    Sub loadVerifikasi(ByVal S As String, ByVal F As String, ByVal W As String)
        '-- LOAD DATABASE KE DATATABEL
        dtVerifikasi.PrimaryKey = Nothing
        dtVerifikasi.Rows.Clear()
        dtVerifikasi.Columns.Clear()
        If W = "-" Then
            comm.CommandText = "select " & S & " from " & F
        Else
            comm.CommandText = "select " & S & " from " & F & " where " & W
        End If
        adVerifikasi = New SqlDataAdapter(comm.CommandText, conn)
        adVerifikasi.Fill(dtVerifikasi)
    End Sub
    Sub TampilData()
        '-- TAMPILKAN DATA KE TEXTBOX
        If up = True Then
            TextBox2.Text = selectQueryUniv("kd_verifikasi",
"verifikasi_pendaftaran", "kd_pendaftaran=" & TextBox1.Text & "")
        Else
            TextBox2.Text = counterid("kd_verifikasi", "5", "4",
"verifikasi_pendaftaran", "V", True)
        End If

        TextBox3.Text = dtVerifikasi.Rows(0).Item(11)
        TextBox5.Text = dtVerifikasi.Rows(0).Item(1)
        TextBox6.Text = dtVerifikasi.Rows(0).Item(2)
        TextBox7.Text = dtVerifikasi.Rows(0).Item(3)
        TextBox8.Text = dtVerifikasi.Rows(0).Item(4)
        TextBox9.Text = dtVerifikasi.Rows(0).Item(5)
        DateTimePicker1.Value = dtVerifikasi.Rows(0).Item(6)

        TextBox10.Text = dtVerifikasi.Rows(0).Item(10)
        TextBox11.Text = dtVerifikasi.Rows(0).Item(13)
    End Sub
    Sub Simpan(ByVal Update As Boolean)
        '-- PROSES SIMPAN DAN UPDATE
        loadVerifikasi("*", "verifikasi_pendaftaran", "-")

        If Update = True Then
            Dim pk() As DataColumn = New DataColumn()
            {dtVerifikasi.Columns("kd_Verifikasi")}
            dtVerifikasi.PrimaryKey = pk
            rows = dtVerifikasi.Rows.Find(TextBox2.Text)
            rows.BeginEdit()
        Else : rows = dtVerifikasi.NewRow
        End If
    End Sub

```

```

rows(0) = TextBox2.Text
rows(1) = TextBox1.Text
rows(2) = Now.Date
rows(3) = Now.Year & "/" & CInt(Now.Year) + 1
If CheckBox1.Checked = True Then
    rows(4) = "Ya"
Else : rows(4) = "Tidak"
End If
If CheckBox2.Checked = True Then
    rows(5) = "Ya"
Else : rows(5) = "Tidak"
End If
If CheckBox3.Checked = True Then
    rows(6) = "Ya"
Else : rows(6) = "Tidak"
End If
If CheckBox4.Checked = True Then
    rows(7) = "Ya"
Else : rows(7) = "Tidak"
End If

If Update = True Then
    rows.EndEdit()
Else : dtVerifikasi.Rows.Add(rows)
End If

Dim cb As New SqlCommandBuilder(adVerifikasi)
adVerifikasi.Update(dtVerifikasi)

loadVerifikasi("?", "verifikasi_pendaftaran", "-")
End Sub
Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
    Try
        '-- CEK KODE PENDAFTARAN ADA ATAU TIDAK
        loadVerifikasi("count(kd_pendaftaran)", "verifikasi_pendaftaran",
"kd_pendaftaran = '" & TextBox1.Text & "'")
        If dtVerifikasi.Rows(0).Item(0) > 0 Then
            up = True
            If MessageBox.Show("Data Sudah Ada, Apakah Anda Ingin Mengedit
Data?", "Tanya ?", MessageBoxButtons.YesNo) = Windows.Forms.DialogResult.Yes Then
                loadVerifikasi("?", "pendaftaran", "kd_pendaftaran = '" &
TextBox1.Text & "'")
                TampilData()

                buka()
                comm.CommandText = "SELECT nis FROM siswa WHERE kd_pendaftaran
= '" & TextBox1.Text & "'"
                comm.Connection = conn
                Lb_NIS.Text = comm.ExecuteScalar
                tutup()

                loadVerifikasi("?", "verifikasi_pendaftaran", "kd_pendaftaran
= '" & TextBox1.Text & "'")
                If dtVerifikasi.Rows(0).Item(4) = "Ya" Then
                    CheckBox1.Checked = True
                Else : CheckBox1.Checked = False
                End If
                If dtVerifikasi.Rows(0).Item(5) = "Ya" Then
                    CheckBox2.Checked = True
                Else : CheckBox2.Checked = False
                End If
                If dtVerifikasi.Rows(0).Item(6) = "Ya" Then
                    CheckBox3.Checked = True
                Else : CheckBox3.Checked = False
                End If
                If dtVerifikasi.Rows(0).Item(7) = "Ya" Then
                    CheckBox4.Checked = True
                Else : CheckBox4.Checked = False
                End If
            End If
        Else
            up = False
            loadVerifikasi("?", "pendaftaran", "kd_pendaftaran = '" &
TextBox1.Text & "'")

```

```

        If dtVerifikasi.Rows.Count > 0 Then
            TampilData()
            Lb_NIS.Text = counterid("NIS", "5", "4", "Siswa", "S", True)
        Else
            MsgBox("Kode Tidak Ditemukan!", MsgBoxStyle.Critical,
"Attention")
            kosong()
        End If
    End If
Catch ex As Exception
End Try
End Sub

Private Sub btn_ok_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles btn_ok.Click
    Try
        '-- PROSES SIMPAN DAN UPDATE
        If up = True Then
            Simpan(True)
            MsgBox("Data Telah Disimpan!", MsgBoxStyle.Information,
"Attention")
        Else
            Simpan(False)
            buka()
            comm.CommandText = "INSERT INTO siswa VALUES('" & Lb_NIS.Text &
"', '" & TextBox1.Text & "', 'Aktif', " & Now.Date & "', '-')"
            comm.Connection = conn
            comm.ExecuteNonQuery()
            tutup()
            MsgBox("Data Telah Diupdate!", MsgBoxStyle.Information,
"Attention")
        End If
        kosong()
    Catch ex As Exception
    End Try
End Sub

Private Sub btn_kembali_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles btn_kembali.Click
    kosong()
End Sub

Private Sub LinkLabel1_LinkClicked(ByVal sender As System.Object, ByVal e As
System.Windows.Forms.LinkLabelLinkClickedEventArgs) Handles LinkLabel1.LinkClicked
    Me.Hide()
    Orang_Tua.Show()
    Orang_Tua.LinkLabel1.Enabled = True
End Sub
Private Sub Button6_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button6.Click
    Me.Hide()
End Sub
End Class

```

## Lampiran 11. Listing Program Menu

```

Imports System.Drawing.Graphics
Imports VB = Microsoft.VisualBasic
Public Class Form1
    Dim MA, XI, KOM As String
    Public Sub masterall()
        Login.MdiParent = Me
        Guru.MdiParent = Me
        Siswa.MdiParent = Me
        Kelas.MdiParent = Me
        Orang_Tua.MdiParent = Me
        Alokasi_Kelas.MdiParent = Me
        Daftar_Siswa_Mutasi.MdiParent = Me
        Daftar_Ulang_Siswa.MdiParent = Me
        Verifikasi_Daftar_Online.MdiParent = Me
        Lap_Alokasi_Kelas_Form.MdiParent = Me
        Lap_List_Pendaftar_Form.MdiParent = Me
        Lap_Siswa_Diterima.MdiParent = Me
        Lap_Siswa.MdiParent = Me
        Lap_Daftar_Ulang.MdiParent = Me
        keluar.MdiParent = Me
        Lap_Mutasi.MdiParent = Me
        Lap_Verifikasi.MdiParent = Me
    End Sub
    Private Sub KelasToolStripMenuItem1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
        Kelas.ShowDialog()
    End Sub
    Private Sub Form1_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load
        Label1.Text = Now.ToString("dd - MMMM - yyyy")
        Label3.Text = "Selamat Datang di Aplikasi Sistem Informasi
Alokasi Kelas dan Registrasi Siswa"
    End Sub
    Private Sub LoginToolStripMenuItem1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles LoginToolStripMenuItem1.Click
        masterall()
        Login.Show()
        LoginToolStripMenuItem1.Enabled = False
    End Sub

    Private Sub LogOutToolStripMenuItem1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles LogOutToolStripMenuItem1.Click
        LoginToolStripMenuItem1.Enabled = True
        LogOutToolStripMenuItem1.Enabled = False
        MasterToolStripMenuItem1.Enabled = False
        TransaksiToolStripMenuItem1.Enabled = False
        ToolStripMenuItem1.Enabled = False
    End Sub

    Private Sub KeluarToolStripMenuItem1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles KeluarToolStripMenuItem1.Click
        masterall()
        keluar.Show()
    End Sub

    Private Sub CalonSiswaToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles SiswaToolStripMenuItem.Click
        masterall()
        Siswa.Show()
    End Sub

    Private Sub KelasToolStripMenuItem2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles OrtuToolStripMenuItem.Click
        masterall()
        Orang_Tua.Show()
    End Sub

    Private Sub AsalToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles GuruToolStripMenuItem.Click
        masterall()
        Guru.Show()
    End Sub

```

```

Private Sub KelasToolStripMenuItem3_Click(ByVal sender As System.Object, ByVal
e As System.EventArgs) Handles KelasToolStripMenuItem.Click
    masterall()
    Kelas.Show()
End Sub

Private Sub RegistrasiSiswaToolStripMenuItem_Click(ByVal sender As
System.Object, ByVal e As System.EventArgs) Handles
DaftarSiswaMutasiToolStripMenuItem.Click
    masterall()
    Daftar_Siswa_Mutasi.Show()
End Sub

Private Sub SiswaBaruToolStripMenuItem1_Click(ByVal sender As System.Object,
ByVal e As System.EventArgs)
    masterall()
End Sub

Private Sub AlokasiKelasToolStripMenuItem_Click(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles AlokasiKelasToolStripMenuItem.Click
    masterall()
    Alokasi_Kelas.Show()
End Sub

Private Sub ToolStripMenuItem3_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles ToolStripMenuItem3.Click
    masterall()
    Lap_Alokasi_Kelas_Form.Show()
End Sub

Private Sub ToolStripMenuItem4_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles ToolStripMenuItem4.Click
    masterall()
    Lap_List_Pendaftar_Form.Show()
End Sub

Private Sub DaftarSiswaToolStripMenuItem_Click(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles DaftarSiswaToolStripMenuItem.Click
    masterall()
    Daftar_Ulang_Siswa.Show()
End Sub

Private Sub PenjadwalanKelasToolStripMenuItem_Click(ByVal sender As
System.Object, ByVal e As System.EventArgs) Handles
PenjadwalanKelasToolStripMenuItem.Click
    masterall()
    Verifikasi_Daftar_Online.Show()
End Sub

Private Sub ToolStripMenuItem2_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles ToolStripMenuItem2.Click
    masterall()
    Lap_Daftar_Ulang.Show()
End Sub

Private Sub LaporanSiswaToolStripMenuItem_Click(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles LaporanSiswaToolStripMenuItem.Click
    masterall()
    Lap_Siswa.Show()
End Sub

Private Sub Timer1_Tick(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Timer1.Tick
    Label2.Text = Format(Now, "hh:mm:ss")

    Timer1.Interval = 100
    Label3.Visible = True
    On Error Resume Next
    MA = VB.Left(Label3.Text, 1)
    XI = VB.Len(Label3.Text)
    KOM = VB.Right(Label3.Text, XI - 1)
    Label3.Text = KOM + MA
End Sub

```

```
Private Sub ToolStripMenuItem5_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles ToolStripMenuItem5.Click
    masterall()
    Lap_Siswa_Diterima.Show()
End Sub

Private Sub LaporanMutasiToolStripMenuItem_Click(ByVal sender As
System.Object, ByVal e As System.EventArgs) Handles
LaporanMutasiToolStripMenuItem.Click
    masterall()
    Lap_Mutasi.Show()
End Sub

Private Sub LaporanVerifikasiToolStripMenuItem_Click(ByVal sender As
System.Object, ByVal e As System.EventArgs) Handles
LaporanVerifikasiToolStripMenuItem.Click
    masterall()
    Lap_Verifikasi.Show()
End Sub
End Class
```

