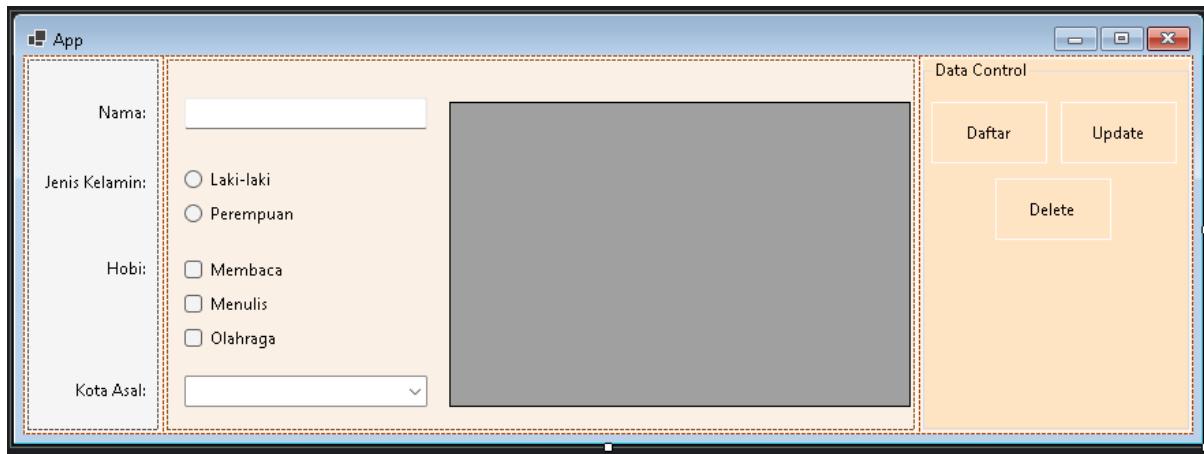


## Desain



Komponen yang dipakai:

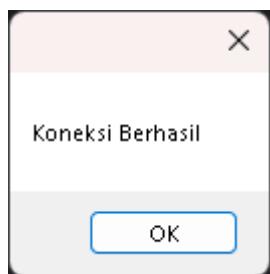
- 1 Form
- 1 TextBox (untuk nama)
- 3 Button (Daftar, Update, dan Delete)
- 3 CheckBox (Untuk hobi)
- 1 ComboBox (Untuk kota asal)
- 1 DataGridView (Untuk menampilkan data yang ada di database)
- 2 Radio Button (Untuk Jenis Kelamin)
- 1 GroupBox, 4 Label, 2 Panel, dan 1 Tabel Layout Panel

## Database

	Name	Data Type	Allow Nulls	Default
1	Id	int	<input checked="" type="checkbox"/>	
2	nama	nchar(30)	<input checked="" type="checkbox"/>	
3	jenis_kelamin	char(20)	<input checked="" type="checkbox"/>	
4	hobi	text	<input checked="" type="checkbox"/>	
5	kota_asal	text	<input checked="" type="checkbox"/>	
			<input checked="" type="checkbox"/>	

```
CREATE TABLE [dbo].[member] (
    [Id]           INT      IDENTITY (1, 1) NOT NULL,
    [nama]         NCHAR (30) NULL,
    [jenis_kelamin] CHAR (20) NULL,
    [hobi]          TEXT     NULL,
    [kota_asal]     TEXT     NULL,
    PRIMARY KEY CLUSTERED ([Id] ASC)
);
```

# Run



App

	Id	nama	jenis_kelamin
*			

Data Control

Daftar      Update  
Delete

This screenshot shows the application interface. On the left, there are input fields for Name (Nama), Gender (Jenis Kelamin), Hobbies (Hobi), and City of Origin (Kota Asal). The gender section has two radio buttons: "Laki-laki" and "Perempuan". The hobbies section has three checkboxes: "Membaca", "Menulis", and "Olahraga", with the first two checked. The city of origin dropdown shows "Depok". To the right is a table with a single row containing asterisks (\*). A "Data Control" panel on the far right contains buttons for "Daftar", "Update", and "Delete".

App

	Id	nama	jenis_kelamin
*			

Data Control

Daftar      Update  
Delete

This screenshot shows the application after data entry. The Name field now contains "Maulana Ibrahim", the Gender field has "Laki-laki" selected, and the Hobbies field has all three checkboxes checked ("Membaca", "Menulis", "Olahraga"). The City of Origin dropdown still shows "Depok". The table on the right remains empty with a single row containing asterisks (\*). The "Data Control" panel is identical to the previous screenshot.

Data Pendaftaran

Nama: Maulana Ibrahim  
Jenis Kelamin: Laki-laki  
Hobi: Membaca Menulis Olahraga  
Kota: Depok

OK

This screenshot shows a confirmation dialog box titled "Data Pendaftaran". It displays the entered data: Name (Maulana Ibrahim), Gender (Laki-laki), Hobbies (Membaca, Menulis, Olahraga), and City (Depok). At the bottom is a blue-outlined "OK" button.

App

Nama:	<input type="text"/>
Jenis Kelamin:	<input type="radio"/> Laki-laki <input type="radio"/> Perempuan
Hobi:	<input type="checkbox"/> Membaca <input type="checkbox"/> Menulis <input type="checkbox"/> Olahraga
Kota Asal:	<input type="text"/>

Data Control

	Id	nama	jenis_kelamin
▶	9	Maulana Ibrahi...	Laki-laki
*			

App

Nama:	<input type="text" value="Maulana Ibrahim"/>
Jenis Kelamin:	<input checked="" type="radio"/> Laki-laki <input type="radio"/> Perempuan
Hobi:	<input checked="" type="checkbox"/> Membaca <input checked="" type="checkbox"/> Menulis <input checked="" type="checkbox"/> Olahraga
Kota Asal:	<input type="text" value="Depok"/>

Data Control

	Id	nama	jenis_kelamin
▶	9	Maulana Ibrahi...	Laki-laki
*			

App

Nama:	<input type="text" value="Baim Wong"/>
Jenis Kelamin:	<input checked="" type="radio"/> Laki-laki <input type="radio"/> Perempuan
Hobi:	<input type="checkbox"/> Membaca <input type="checkbox"/> Menulis <input type="checkbox"/> Olahraga
Kota Asal:	<input type="text" value="Depok"/>

Data Control

	Id	nama	jenis_kelamin
▶	9	Maulana Ibrahi...	Laki-laki
*			

App

Nama:	<input type="text"/>
Jenis Kelamin:	<input type="radio"/> Laki-laki <input type="radio"/> Perempuan
Hobi:	<input type="checkbox"/> Membaca <input type="checkbox"/> Menulis <input type="checkbox"/> Olahraga
Kota Asal:	<input type="text"/>

Data Control

	Id	nama	jenis_kelamin
▶	9	Baim Wong ...	Laki-laki
*			

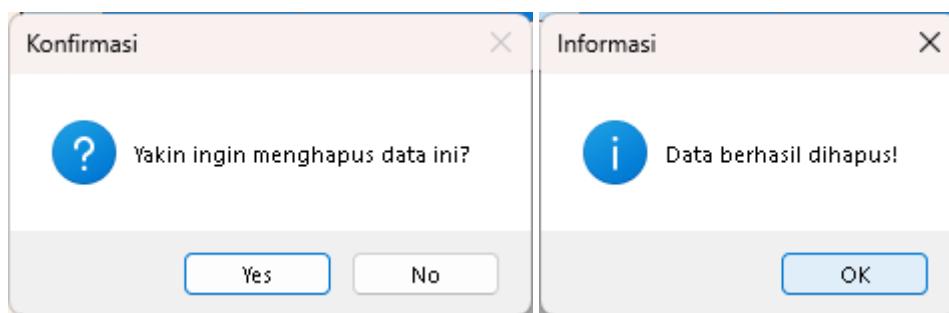
App

Nama:	Baim Wong
Jenis Kelamin:	<input checked="" type="radio"/> Laki-laki <input type="radio"/> Perempuan
Hobi:	<input type="checkbox"/> Membaca <input type="checkbox"/> Menulis <input type="checkbox"/> Olahraga
Kota Asal:	Depok

	Id	nama	jenis_kelamin
▶	9	Baim Wong ...	Laki-laki
*			

Data Control

Daftar      Update  
Delete



App

Nama:	
Jenis Kelamin:	<input type="radio"/> Laki-laki <input type="radio"/> Perempuan
Hobi:	<input type="checkbox"/> Membaca <input type="checkbox"/> Menulis <input type="checkbox"/> Olahraga
Kota Asal:	

	Id	nama	jenis_kelamin
*			

Data Control

Daftar      Update  
Delete

# Kode Program

```
1  Imports Microsoft.Data.SqlClient
2
3  Public Class App
4      Private connStr = "Data Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Rizlrad Fz\source\repos\ProjekPertamaVB\Latihan 1\DatabaseAplikasi.mdf;Integrated Security=True"
5      Private id As Integer = -1
6
7      Private Sub App_Load(sender As Object, e As EventArgs) Handles MyBase.Load
8          'Isi kota ke combobox
9          ComboBox1.Items.Add("Jakarta")
10         ComboBox1.Items.Add("Bandung")
11         ComboBox1.Items.Add("Surabaya")
12         ComboBox1.Items.Add("Yogyakarta")
13         ComboBox1.Items.Add("Semarang")
14         ComboBox1.Items.Add("Depok")
15
16         Using conn As New SqlConnection(connStr)
17             Try
18                 conn.Open()
19                 MessageBox.Show("Koneksi Berhasil ")
20                 conn.Close()
21             Catch ex As Exception
22                 MessageBox.Show("Error: " & ex.Message)
23             End Try
24         End Using
25         TampilData()
26
27         DataGridView1.ReadOnly = True
28     End Sub
29
30     Private Sub ResetInputForm()
31         TextBox1.Clear()
32         RadioButton1.Checked = False
33         RadioButton2.Checked = False
34         CheckBox1.Checked = False
35         CheckBox2.Checked = False
36         CheckBox3.Checked = False
37         ComboBox1.SelectedIndex = -1
38         id = -1
39     End Sub
40
41     Private Sub TampilData()
42         Using conn As New SqlConnection(connStr)
43             conn.Open()
44             Using sDA As New SqlDataAdapter("SELECT * FROM member", conn)
45                 Dim dt As New DataTable()
46                 sDA.Fill(dt)
47                 DataGridView1.DataSource = dt
48             End Using
49         End Using
50     End Sub
```

```
52     Private Sub UpdateData(id As Integer, nama As String, jenisKelamin As String, hobi As String, kota As String)
53         Try
54             Using conn As New SqlConnection(connStr)
55                 conn.Open()
56                 Dim query As String = "UPDATE member SET nama = @nama, jenis_kelamin = @jenis_kelamin,
57                                         hobi = @hobi, kota_asal = @kota_asal WHERE id = @id"
58                 Using cmd As New SqlCommand(query, conn)
59                     cmd.Parameters.AddWithValue("@id", id)
60                     cmd.Parameters.AddWithValue("@nama", nama)
61                     cmd.Parameters.AddWithValue("@jenis_kelamin", jenisKelamin)
62                     cmd.Parameters.AddWithValue("@hobi", hobi)
63                     cmd.Parameters.AddWithValue("@kota_asal", kota)
64                     cmd.ExecuteNonQuery()
65                 End Using
66             End Using
67             ResetInputForm()
68             TampilData()
69         Catch ex As Exception
70             MessageBox.Show("Error: " & ex.Message)
71     End Try
72 End Sub
```

```
74     Private Sub DeleteData(id As Integer)
75         Try
76             Using conn As New SqlConnection(connStr)
77                 conn.Open()
78                 Dim query As String = "DELETE FROM member WHERE id=@id"
79                 Using cmd As New SqlCommand(query, conn)
80                     cmd.Parameters.AddWithValue("@id", id)
81                     Dim rowsAffected As Integer = cmd.ExecuteNonQuery()
82                     If rowsAffected > 0 Then
83                         MessageBox.Show("Data berhasil dihapus!", "Informasi", MessageBoxButtons.OK, MessageBoxIcon.Information)
84                         'Kosongkan input setelah hapus
85                         ResetInputForm()
86                         TampilData()
87                     Else
88                         MessageBox.Show("Data tidak ditemukan!", "Kesalahan", MessageBoxButtons.OK, MessageBoxIcon.Error)
89                     End If
90                 End Using
91             End Using
92         Catch ex As Exception
93             MessageBox.Show("Error: " & ex.Message)
94     End Try
95 End Sub
```

```
97     Private Sub InsertData(nama As String, jenisKelamin As String, hobi As String, kota As String)
98         Try
99             Using conn As New SqlConnection(connStr)
100                conn.Open()
101                Dim query As String = "INSERT INTO member (nama, jenis_kelamin, hobi, kota_asal) VALUES
102                                (@nama, @jenis_kelamin, @hobi, @kota_asal)"
103                Using cmd As New SqlCommand(query, conn)
104                    cmd.Parameters.AddWithValue("@nama", nama)
105                    cmd.Parameters.AddWithValue("@jenis_kelamin", jenisKelamin)
106                    cmd.Parameters.AddWithValue("@hobi", hobi)
107                    cmd.Parameters.AddWithValue("@kota_asal", kota)
108                    cmd.ExecuteNonQuery()
109                End Using
110            End Using
111
112            ResetInputForm()
113
114            TampilData()
115        Catch ex As Exception
116            MessageBox.Show("Error: " & ex.Message)
117        End Try
118    End Sub
```

```

120  Private Sub DataGridView1_CellClick(sender As Object, e As DataGridViewCellEventArgs) Handles DataGridView1.CellClick
121      If e.RowIndex >= 0 And DataGridView1.Rows.Count > 1 Then
122          Try
123              id = Convert.ToInt32(Trim(DataGridView1.Rows(e.RowIndex).Cells("id").Value.ToString()))
124
125              TextBox1.Text = Trim(DataGridView1.Rows(e.RowIndex).Cells("nama").Value.ToString())
126              Dim jenis As String
127              jenis = Trim(DataGridView1.Rows(e.RowIndex).Cells("jenis_kelamin").Value.ToString())
128              If jenis = "Laki-laki" Then
129                  RadioButton1.Checked = True
130              End If
131              If jenis = "Perempuan" Then
132                  RadioButton2.Checked = True
133              End If
134
135              Dim hobi As String = ""
136              hobi = Trim(DataGridView1.Rows(e.RowIndex).Cells("hobi").Value.ToString())
137              If hobi.Contains("Membaca") Then
138                  CheckBox1.Checked = True
139              End If
140              If hobi.Contains("Menulis") Then
141                  CheckBox2.Checked = True
142              End If
143              If hobi.Contains("Olahraga") Then
144                  CheckBox3.Checked = True
145              End If
146
147              ComboBox1.Text = Trim(DataGridView1.Rows(e.RowIndex).Cells("kota_asal").Value.ToString())
148          Catch ex As Exception
149              MessageBox.Show("Silahkan pilih data yang tersedia!" & vbCrLf & ex.Message, "Error", MessageBoxButtons.OK, MessageBoxIcon.Error)
150          End Try
151      End If
152  End Sub

```

```

154  Private Sub ButtonDaftar_Click(sender As Object, e As EventArgs) Handles ButtonDaftar.Click
155      'Ambil data dari textbox nama'
156      Dim nama = TextBox1.Text
157
158      'Ambil data dari radiobutton
159      Dim jenisKelamin = ""
160      If RadioButton1.Checked Then
161          jenisKelamin = "Laki-laki"
162      ElseIf RadioButton2.Checked Then
163          jenisKelamin = "Perempuan"
164      Else
165          jenisKelamin = "Tidak diisi"
166      End If
167
168      'Ambil data dari checkbox
169      Dim hobi = ""
170      If CheckBox1.Checked Then hobi &= CheckBox1.Text
171      If CheckBox2.Checked Then hobi &= CheckBox2.Text
172      If CheckBox3.Checked Then hobi &= CheckBox3.Text
173
174      'Ambil kota dari combobox
175      Dim kota = ComboBox1.Text
176
177      InsertData(nama:=nama, jenisKelamin:=jenisKelamin, hobi:=hobi, kota:=kota)
178
179      'tampilkan hasilnya
180      MessageBox.Show("Nama: " & nama & vbCrLf &
181                      "Jenis Kelamin: " & jenisKelamin & vbCrLf &
182                      "Hobi: " & hobi & vbCrLf &
183                      "Kota: " & kota, "Data Pendaftaran")
184  End Sub

```

```

186  Private Sub ButtonUpdate_Click(sender As Object, e As EventArgs) Handles ButtonUpdate.Click
187      If id = -1 Then
188          MessageBox.Show("Pilih data yang akan diupdate dari tabel terlebih dahulu.")
189          Exit Sub
190      End If
191
192      UpdateData(id:=id,
193                  nama:=TextBox1.Text,
194                  jenisKelamin:=If(RadioButton1.Checked, "Laki-laki", If(RadioButton2.Checked, "Perempuan", "")),
195                  hobi:=If(CheckBox1.Checked, CheckBox1.Text, "") & If(CheckBox2.Checked, CheckBox2.Text, "") & If(CheckBox3.Checked, CheckBox3.Text, ""),
196                  kota:=ComboBox1.Text)
197  End Sub

```

```
199      Private Sub ButtonDelete_Click(sender As Object, e As EventArgs) Handles ButtonDelete.Click
200          If id = -1 Then
201              MessageBox.Show("Pilih data yang akan dihapus dari tabel terlebih dahulu.")
202              Exit Sub
203          End If
204
205          'Konfirmasi sebelum hapus
206          Dim result As DialogResult = MessageBox.Show("Yakin ingin menghapus data ini?", "Konfirmasi", MessageBoxButtons.YesNo, MessageBoxIcon.Question)
207
208          If result = DialogResult.Yes Then
209              DeleteData(id)
210              ResetInputForm()
211          End If
212      End Sub
213  End Class
```