

NAMA : ARVINA YUDITHIA SOMPIE

STAMBUK : 13020180093

KELAS : B2

TUGAS 11

PEMROGRAMAN BERORIENTASI OBJEK

PEMBUATAN DATA MAHASISWA

1. Buat database dan table

Database : mahasiswa

Table : tabel_mahasiswa



#	Nama	Jenis	Penyortiran	Atribut Kosong	Bawaan	Ekstra	Tindakan
1	nim	varchar(15)	latin1_swedish_ci	Tidak	Tidak ada		Ubah Hapus Kunci Utama Unik Indeks Spasial Teks penuh Distinct values
2	nama	varchar(30)	latin1_swedish_ci	Tidak	Tidak ada		Ubah Hapus Kunci Utama Unik Indeks Spasial Teks penuh Distinct values
3	fakultas	varchar(20)	latin1_swedish_ci	Tidak	Tidak ada		Ubah Hapus Kunci Utama Unik Indeks Spasial Teks penuh Distinct values
4	prodi	varchar(30)	latin1_swedish_ci	Tidak	Tidak ada		Ubah Hapus Kunci Utama Unik Indeks Spasial Teks penuh Distinct values

2. Program menghubungkan dengan database

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;

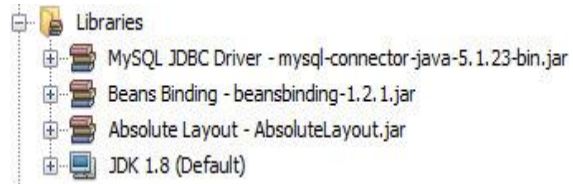
public class koneksiDb {
    private static Connection mysqlconfig;
    public static Connection configDB()throws
    SQLException{
        try {
            String
            url="jdbc:mysql://localhost:3306/mahasiswa";
            //url database
            String user="root"; //user database
            String pass=""; //password database
            DriverManager.registerDriver(new
            com.mysql.jdbc.Driver());

            mysqlconfig=DriverManager.getConnection(u
            rl, user, pass);
        } catch (Exception e) {
            System.err.println("koneksi gagal
            "+e.getMessage()); //perintah menampilkan
            error pada koneksi
        }
        return mysqlconfig;
    }
}
```

}

}

3. Menambahkan bagian Mysql JDBC driver untuk terhubung dengan database



4. form inputan

Title 1	Title 2	Title 3	Title 4

5. Listing form yang telah dibuat

Mhs.java

```
import java.sql.Connection;
import javax.swing.JTextField;
import javax.swing.table.DefaultTableModel;
/**
 *
 * @author Dell
 */
public class mhs extends javax.swing.JFrame {
```

```

private JTextField txtjurusan;
private Object smpn;

public mhs() {
    initComponents();
    load_table();
    kosong();
}

private void load_table(){
// membuat tampilan model tabel
DefaultTableModel model = new DefaultTableModel();
model.addColumn("No");
model.addColumn("Nim");
model.addColumn("Nama");
model.addColumn("Jurusan");
model.addColumn("Email");

//menampilkan data database kedalam tabel
try {
int no=1;
String sql = "select * from tabel_mahasiswa";
java.sql.Connection conn=(Connection)koneksiDB.configDB();
java.sql.Statement stm=conn.createStatement();
java.sql.ResultSet res=stm.executeQuery(sql);
while(res.next()){
model.addRow(new
Object[] {no++,res.getString(1),res.getString(2),res.getString(3),res.getString(4)
});
}
tab1.setModel(model);
} catch (Exception e) {
}
}

private void kosong(){
    txtnim.setEditable(true);
    txtnim.setText(null);
    txtnama.setText(null);
    cbjurusan.setSelectedItem(this);
    txtemail.setText(null);

```

```

}
/**
 * This method is called from within the constructor to initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is always
 * regenerated by the Form Editor.
 */
private void initComponents() {
jLabel1 = new javax.swing.JLabel();
jLabel2 = new javax.swing.JLabel();
jLabel3 = new javax.swing.JLabel();
jLabel4 = new javax.swing.JLabel();
jLabel5 = new javax.swing.JLabel();
txtnim = new javax.swing.JTextField();
txtnama = new javax.swing.JTextField();
txtjurusan = new javax.swing.JTextField();
jScrollPane1 = new javax.swing.JScrollPane();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE)
;
setBackground(new java.awt.Color(44, 82, 240));

jLabel1.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
jLabel1.setText("DATA MAHASISWA"); getContentPane().add(jLabel1,
new org.netbeans.lib.awtextra.AbsoluteConstraints(48, 53, 41, 31));
jLabel2.setFont(new java.awt.Font("Tahoma 11 plain", 0, 12)); // NOI18N
jLabel2.setText("Nama");
getContentPane().add(jLabel2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(48, 53, 41, 31));
jLabel3.setFont(new java.awt.Font("Tahoma 11 plain", 0, 12)); // NOI18N
jLabel3.setText("NIM MAHASISWA"); getContentPane().add(jLabel3,
new org.netbeans.lib.awtextra.AbsoluteConstraints(48, 95, 41, 31));
jLabel4.setFont(new java.awt.Font("Tahoma 11 plain", 0, 12)); // NOI18N
jLabel4.setText("PRODI");
getContentPane().add(jLabel4, new
org.netbeans.lib.awtextra.AbsoluteConstraints(48, 137, 65, 31));
jLabel5.setFont(new java.awt.Font("Tahoma 11 plain", 0, 12)); // NOI18N
jLabel5.setText("JURUSAN");

```

```

getContentPane().add(jLabel5, new
org.netbeans.lib.awtextra.AbsoluteConstraints(48, 179, 50, 31));
getContentPane().add(txtnim, new
org.netbeans.lib.awtextra.AbsoluteConstraints(172, 53, 213, 31));
txtnama.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
txtnamaActionPerformed(evt);
}
});
getContentPane().add(txtnama, new
org.netbeans.lib.awtextra.AbsoluteConstraints(172, 95, 213, 31));
getContentPane().add(txtjurusan, new
org.netbeans.lib.awtextra.AbsoluteConstraints(172, 137, 213, 31));
simpan.setText("SIMPAN");
simpan.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
simpanActionPerformed(evt);
}
});
getContentPane().add(simpan, new
org.netbeans.lib.awtextra.AbsoluteConstraints(231, 216, -1, 33));
edit.setText("EDIT");
edit.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
reActionPerformed(evt);
}
});
getContentPane().add(edit, new org.netbeans.lib.awtextra.AbsoluteConstraints(308,
216, -1, 33));
tbl.setModel(new javax.swing.table.DefaultTableModel(
new Object [][] {
{null, null, null, null},
{null, null, null, null},
{null, null, null, null},
{null, null, null, null}
},
new String [] {
"Title 1", "Title 2", "Title 3", "Title 4"
}
));

```

```

tab1.addMouseListener(new java.awt.event.MouseAdapter() {
public void mouseClicked(java.awt.event.MouseEvent evt) {
tab1MouseClicked(evt);
}
});
jScrollPane1.setViewportView(tab1);
getContentPane().add(jScrollPane1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(48, 260, 337, 93));
hps.setText("HAPUS");
hps.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
edtActionPerformed(evt);
}
});
getContentPane().add(hps, new org.netbeans.lib.awtextra.AbsoluteConstraints(253,
359, -1, 33));
klr.setText("KELUAR");
klr.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
hpsActionPerformed(evt);
}
});
getContentPane().add(, new org.netbeans.lib.awtextra.AbsoluteConstraints(314,
359, -1, 33));
pro.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
pro.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "Teknik
Informatika", "Sistem Informasi" }));
pro.setName(""); // NOI18N
pro.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
proActionPerformed(evt);
}
});
getContentPane().add(pro, new org.netbeans.lib.awtextra.AbsoluteConstraints(172,
179, 213, 31));
pack();
} // </editor-fold>
private void txtnamaActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:
}

```

```

private void smpnActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:
try {
String sql = "INSERT INTO tabel_mahasiswa VALUES
('"+txtnim.getText()+"','"+txtnama.getText()+"','"+txtfak.getText()+"','"+pro.getSelectedI
t
em()+"')";
java.sql.Connection conn=(Connection)koneksiDb.configDB();
java.sql.PreparedStatement pst=conn.prepareStatement(sql);
pst.execute();
JOptionPane.showMessageDialog(null, "Penyimpanan Data Berhasil");
} catch (Exception e) {
JOptionPane.showMessageDialog(this, e.getMessage());
}
load_table();
kosong();
}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    txtnim = new javax.swing.JTextField();
    txtnama = new javax.swing.JTextField();
    jLabel3 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();
    cbjurusan = new javax.swing.JComboBox<>();
    jLabel5 = new javax.swing.JLabel();
    txtemail = new javax.swing.JTextField();
    btHapus = new javax.swing.JButton();
    btKeluar = new javax.swing.JButton();
    jScrollPane1 = new javax.swing.JScrollPane();
    tablemahasiswa = new javax.swing.JTable();
    btSimpan = new javax.swing.JButton();
    btEdit = new javax.swing.JButton();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

    jLabel1.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N

```

```

jLabel1.setText("DATA MAHASISWA");
jLabel1.setName(""); // NOI18N

jLabel2.setText("NIM");

txtnim.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        txtnimActionPerformed(evt);
    }
});

txtnama.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        txtnamaActionPerformed(evt);
    }
});

jLabel3.setText("NAMA MAHASISWA");

jLabel4.setText("JURUSAN");

cbjurusan.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {
"PILIH JURUSAN", "TEKNIK INFORMATIKA", "SISTEM INFORMASI", " " }));
cbjurusan.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        cbjurusanActionPerformed(evt);
    }
});

jLabel5.setText("EMAIL");

txtemail.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        txtemailActionPerformed(evt);
    }
});

btHapus.setText("HAPUS");
btHapus.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {

```



```

        btHapusActionPerformed(evt);
    }
});

```

```

btKeluar.setText("KELUAR");
btKeluar.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        btKeluarActionPerformed(evt);
    }
});

```

```

tablemahasiswa.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jScrollPane1.setViewportView(tablemahasiswa);

```

```

btSimpan.setText("SIMPAN");
btSimpan.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        btSimpanActionPerformed(evt);
    }
});

```

```

btEdit.setText("EDIT");
btEdit.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        btEditActionPerformed(evt);
    }
});

```

```

        javax.swing.GroupLayout layout = new
        javax.swing.GroupLayout(getContentPane());

```

```

getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
        .add(ContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .add(Component(jLabel1)
        .add(Gap(240, 240, 240))
        .add(Group(layout.createSequentialGroup()
        .add(Gap(40, 40, 40)

.add(Group(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .add(Component(jLabel2)
        .add(Component(jLabel3)
        .add(Component(jLabel4)
        .add(Component(jLabel5)
        .add(Component(btSimpan)
        .add(Component(btEdit))

.add(Group(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .add(Group(layout.createSequentialGroup()
        .add(Gap(32, 32, 32)

.add(Group(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .add(Component(cbJurusan,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .add(Component(txtNim,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .add(Component(txtNama,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .add(Component(txtEmail,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .add(Group(layout.createSequentialGroup()
        .add(Gap(174, 174, 174)

```

```

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(btHapus)
    .addComponent(btKeluar))))
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
32, Short.MAX_VALUE)
.addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
426, javax.swing.GroupLayout.PREFERRED_SIZE)
.addContainerGap()
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE
)
        .addComponent(jLabel2)
        .addComponent(txtnim, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(18, 18, 18)

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE
)
        .addComponent(txtnama,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel3))
        .addGap(18, 18, 18)

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE
)

```

```

        .addComponent(cbjurusan,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel4))
        .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE
)

        .addComponent(jLabel5)
        .addComponent(txtemail,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE
)

        .addComponent(btHapus)
        .addComponent(btSimpan))
        .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE
)

        .addComponent(btKeluar)
        .addComponent(btEdit))
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup())

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(29, 29, 29))))
);

```

```

jLabel1.getAccessibleContext().setAccessibleName("");

getAccessibleContext().setAccessibleName("Aplikasi Data Mahasiswa");

pack();
setLocationRelativeTo(null);
} // </editor-fold>

private void txtnimActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:

}

private void btKeluarActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    system.exit(0);
}

private void txtnamaActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

private void cbjurusanActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

private void txtemailActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

private void btSimpanActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

private void btEditActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

private void btHapusActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

```

```

}

public static void main(String args[]) {
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new mhs().setVisible(true);
        }
    });
}

// Variables declaration - do not modify
private javax.swing.JButton btEdit;
private javax.swing.JButton btHapus;
private javax.swing.JButton btKeluar;
private javax.swing.JButton btSimpan;
private javax.swing.JComboBox<String> cbjurusan;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel5;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JTable tablemahasiswa;
private javax.swing.JTextField txtemail;
private javax.swing.JTextField txtnama;
private javax.swing.JTextField txtnim;
// End of variables declaration
}

```

6. Hasil run program

DATA MAHASISWA

NAMA:

NIM:

FAKULTAS:

PRODI:

Title 1	Title 2	Title 3	Title 4