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### **DOKUMENTASI PEMBUATAN FORM DATA MAHASISWA**

#### 1. Pembuatan database dan table

## 2. Membuat program untuk menghubungkan dengan database

```
package com.kruwell.program;

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

/**

* @author Acer

*/
public class config {
```

```
private static Connection MySQLConfig;
```

```
public statis Connection configDB()throws SQLException{
    try{
        String url = "jdbc:mysql://localhost:3306/tugas12";
        String User = "root";
        String pass = "";

        DriverManager.registerDriver(new com.mysql.jdbc.Driver());
        MySQLConfig = DriverManager.getConnection(url, user, pass);
    }catch(SQLException e){
        System.out.println("Koneksi ke Database gagal" + e.getMessage());
    }
    return MySQLConfig;
}
```

Tambahkan juga bagian mysql JDBC driver agar dapat terhubung dengan database.

```
Libraries

MySQL JDBC Driver - mysql-connector-java-5.1.23

Beans Binding - beansbinding-1.2.1.jar

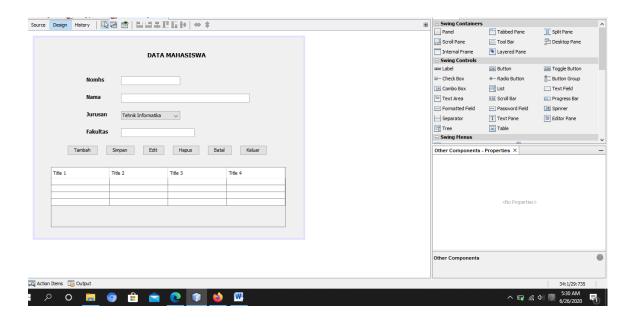
Absolute Layout - AbsoluteLayout.jar

JDK 1.8 (Default)

Test Libraries
```

#### 3. Pembuatan Form

Pembuatan judul . tombol pada form dan pembuatan table untuk menampilkan data yang telah diinput di form



## 4. Membuat Class mhsGUI.java

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package com.kruwell.program;

import java.awt.HeadlessException;
import java.sql.Connection;
import javax.swing.table.DefaultTableModel;
import javax.swing.JOptionPane;

/**
 *
```

```
* @author Acer
*/
public class Mahasiswa extends javax.swing.JFrame {
  private void kosongkan_form(){
   txtNomhs.setEditable(true);
   txtNomhs.setText(null);
   txtNama.setText(null);
   cbJurusan.setSelectedItem(this);
 }
  private void tampilkan_data(Object Nomhs){
   DefaultTableModel model = new DefaultTableModel();
   model.addColumn ("Nomhs.");
   model.addColumn ("Nama");
    model.addColumn ("Jurusan");
   try{
      int NOmhs = 1;
      String sql = "SELECT * FROM MAHASISWA";
      java.sql.Connection conn = (Connection)konfig.configDB();
      java.sql.Statement stm = conn.createStatement();
      java.sql.ResultSet res = stm.executeQuery(sql);
      while(res.next()){
        model.addRow(new
Object[]{Nomhs,res.getString(1),res.getString(2),res.getString(3)});
     }
      tabelMahasiswa.setModel (model);
   }catch (SQLException e){
```

```
System.out.println("Error: " + e.getMessage());
  }
}
/**
* Creates new form Mahasiswa
*/
public Mahasiswa() {
  initComponents();
  tampilkan_data();
  kosongkan_form();
}
/**
* 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.
*/
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {
  jLabel1 = new javax.swing.JLabel();
  jLabel2 = new javax.swing.JLabel();
  jLabel3 = new javax.swing.JLabel();
  jLabel4 = new javax.swing.JLabel();
  txtNomhs = new javax.swing.JTextField();
  txtNama = new javax.swing.JTextField();
  cbJurusan = new javax.swing.JComboBox<>();
  jScrollPane1 = new javax.swing.JScrollPane();
  tabelMahasiswa = new javax.swing.JTable();
  tbTambah = new javax.swing.JButton();
```

```
tbEdit = new javax.swing.JButton();
   tbHapus = new javax.swing.JButton();
   tbBatal = new javax.swing.JButton();
   tbKeluar = new javax.swing.JButton();
   jLabel5 = new javax.swing.JLabel();
   ¡TextField1 = new javax.swing.JTextField();
    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
   setTitle("DATA MAHASISW");
    getContentPane().setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());
   jLabel1.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
   jLabel1.setText("DATA MAHASISWA");
    getContentPane().add(jLabel1, new org.netbeans.lib.awtextra.AbsoluteConstraints(261,
32, -1, -1));
   jLabel2.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
   jLabel2.setText("Nomhs");
   getContentPane().add(jLabel2, new org.netbeans.lib.awtextra.AbsoluteConstraints(120,
90, -1, -1));
   jLabel3.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
   jLabel3.setText("Nama");
   getContentPane().add(jLabel3, new org.netbeans.lib.awtextra.AbsoluteConstraints(120,
130, -1, -1));
   jLabel4.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
   jLabel4.setText("Jurusan");
   getContentPane().add(jLabel4, new org.netbeans.lib.awtextra.AbsoluteConstraints(120,
170, -1, -1));
```

tbSimpan = new javax.swing.JButton();

```
getContentPane().add(txtNomhs, new
org.netbeans.lib.awtextra.AbsoluteConstraints(200, 90, 137, -1));
    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(200,
130, 297, -1));
    cbJurusan.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "Tehnik
Informatika", "SiStem Informasi", " ", " " }));
    getContentPane().add(cbJurusan, new
org.netbeans.lib.awtextra.AbsoluteConstraints(200, 170, 137, -1));
    tabelMahasiswa.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"
      }
    ));
    tabelMahasiswa.addMouseListener(new java.awt.event.MouseAdapter() {
      public void mouseClicked(java.awt.event.MouseEvent evt) {
        tabelMahasiswaMouseClicked(evt);
      }
    });
```

```
jScrollPane1.setViewportView(tabelMahasiswa);
   getContentPane().add(jScrollPane1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(38, 299, 543, 139));
   tbTambah.setText("Tambah");
   tbTambah.addActionListener(new java.awt.event.ActionListener() {
      public void actionPerformed(java.awt.event.ActionEvent evt) {
        tbTambahActionPerformed(evt);
      }
   });
   getContentPane().add(tbTambah, new org.netbeans.lib.awtextra.AbsoluteConstraints(76,
249, -1, -1));
   tbSimpan.setText("Simpan");
   tbSimpan.addActionListener(new java.awt.event.ActionListener() {
      public void actionPerformed(java.awt.event.ActionEvent evt) {
        tbSimpanActionPerformed(evt);
      }
   });
   getContentPane().add(tbSimpan, new
org.netbeans.lib.awtextra.AbsoluteConstraints(165, 249, -1, -1));
   tbEdit.setText("Edit");
   tbEdit.addActionListener(new java.awt.event.ActionListener() {
      public void actionPerformed(java.awt.event.ActionEvent evt) {
        tbEditActionPerformed(evt);
      }
   });
   getContentPane().add(tbEdit, new org.netbeans.lib.awtextra.AbsoluteConstraints(250,
249, -1, -1));
```

```
tbHapus.setText("Hapus");
    tbHapus.addActionListener(new java.awt.event.ActionListener() {
      public void actionPerformed(java.awt.event.ActionEvent evt) {
        tbHapusActionPerformed(evt);
      }
    });
    getContentPane().add(tbHapus, new org.netbeans.lib.awtextra.AbsoluteConstraints(319,
249, -1, -1));
    tbBatal.setText("Batal");
    tbBatal.addActionListener(new java.awt.event.ActionListener() {
      public void actionPerformed(java.awt.event.ActionEvent evt) {
        tbBatalActionPerformed(evt);
      }
    });
    getContentPane().add(tbBatal, new org.netbeans.lib.awtextra.AbsoluteConstraints(400,
249, -1, -1));
    tbKeluar.setText("Keluar");
    tbKeluar.addActionListener(new java.awt.event.ActionListener() {
      public void actionPerformed(java.awt.event.ActionEvent evt) {
        tbKeluarActionPerformed(evt);
      }
    });
    getContentPane().add(tbKeluar, new org.netbeans.lib.awtextra.AbsoluteConstraints(475,
249, -1, -1));
    jLabel5.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
    jLabel5.setText("Fakultas");
    getContentPane().add(jLabel5, new org.netbeans.lib.awtextra.AbsoluteConstraints(120,
210, -1, -1));
```

```
getContentPane().add(jTextField1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(200, 210, 170, -1));
   pack();
 }// </editor-fold>
  private void txtNamaActionPerformed(java.awt.event.ActionEvent evt) {
   // TODO add your handling code here:
 }
  private void tbTambahActionPerformed(java.awt.event.ActionEvent evt) {
   // TODO add your handling code here:
   Kosongkan_form();
 }
  private void tbKeluarActionPerformed(java.awt.event.ActionEvent evt) {
   // TODO add your handling code here:
   System.exit(0);
 }
  private void tbSimpanActionPerformed(java.awt.event.ActionEvent evt) {
   // TODO add your handling code here:
   try{
      String sql = "INSERT INTO MAHASISWA VALUES
(""+txtNomhs.getText()+"','"+txtNama.getText()+"','"+cbJurusan.getSelectedItem()+"')";
      java.sql.Connection conn = (Connection)Konfig.configDB();
      java.sql.PreparedStatement pstm = conn.PrepareStatement(sql);
      pstm.execute();
      JOptionpane.showMessageDialog(null, "Proses Simpan Data Berhasil..");
      tampilkan_data();
      kosongkan_form();
   }catch(HeadlessException | SQLException e){
```

```
JOptionpane.showMessageDialog(this, e.getMessage());
   }
 }
 private void tabelMahasiswaMouseClicked(java.awt.event.MouseEvent evt) {
   // TODO add your handling code here:
   int baris = tabelMahasiswa.rowAtpoint(evt.getpoin());
   String Nomhs = tabelMahasiswa.getValuecAT(baris, 1).toString();
   txtNomhs.setText(NOmhs);
    String Nama = tabelMahasiswa.getValuecAT(baris, 2).toString();
   txtNama.setText(Nama);
    String Jurusan = tabelMahasiswa.getValuecAT(baris, 3).toString();
    cbJurusan.stSelectedItem(jurusan);
 }
 private void tbEditActionPerformed(java.awt.event.ActionEvent evt) {
   // TODO add your handling code here:
   try{
     String sql = "UPDATE Mahasiswa SET
Nomhs='"+txtNomhs.getText()+"',Nama='"+txtNama.getText()+"',Jurusan='"+cbJurusan.getSel
ectedItem()+"' WHERE Nomhs = ""+txtNomhs.getText()+"";
     java.sql.Connection conn = (Connection)Konfig.configDB();
     java.sql.PreparedStatement pstm = conn.prepareStatement(sql);
     pstm.execute();
     JOptionPane.showMessageDialog(null, "Edit Data Berhasil...");
   }catch(HeadlessException | SQLException e){
     JOptionPane.showMessageDialog(this, e.getMessage());
   }
```

```
tampilkan_data();
   kosongkan_form();
 }
  private void tbHapusActionPerformed(java.awt.event.ActionEvent evt) {
   // TODO add your handling code here:
   try{
       String sql ="DELETE FROM MAHASISWA WHERE Nomhs=""+txtNomhs.getText()+"";
       java.sql.Connection conn = (Connection)Konfig.configDB();
      java.sql.PreparedStatement pstm = conn.prepareStatement(sql);
       pstm.execute();
       JOptionPane.showMessageDialog(null, "Hapus Data Berhasil...");
   }catch(HeadlessException | SQLException e){
       JOptionPane.showMessageDialog(this, e.getMessage());
   tampilkan_data();
   kosongkan_form();
 }
  private void tbBatalActionPerformed(java.awt.event.ActionEvent evt) {
   // TODO add your handling code here:
   kosongkan_form();
 }
  /**
  * @param args the command line arguments
  */
  public static void main(String args[]) {
   /* Set the Nimbus look and feel */
   //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
   /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
    * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
```

```
*/
    try {
      for (javax.swing.UIManager.LookAndFeelInfo info:
javax.swing.UIManager.getInstalledLookAndFeels()) {
        if ("Nimbus".equals(info.getName())) {
           javax.swing.UIManager.setLookAndFeel(info.getClassName());
           break;
        }
      }
    } catch (ClassNotFoundException ex) {
java.util.logging.Logger.getLogger(Mahasiswa.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
    } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(Mahasiswa.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
    } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(Mahasiswa.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
java.util.logging.Logger.getLogger(Mahasiswa.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
    }
    //</editor-fold>
    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
      public void run() {
        new Mahasiswa().setVisible(true);
```

```
}
    });
  }
  // Variables declaration - do not modify
  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.JTextField jTextField1;
  private javax.swing.JTable tabelMahasiswa;
  private javax.swing.JButton tbBatal;
  private javax.swing.JButton tbEdit;
  private javax.swing.JButton tbHapus;
  private javax.swing.JButton tbKeluar;
  private javax.swing.JButton tbSimpan;
  private javax.swing.JButton tbTambah;
  private javax.swing.JTextField txtNama;
  private javax.swing.JTextField txtNomhs;
  // End of variables declaration
}
```

# 5. Run program

