Aplikasi Program Kartu Hasil Studi Mahasiswa

Matakuliah Pemrogaman Visual

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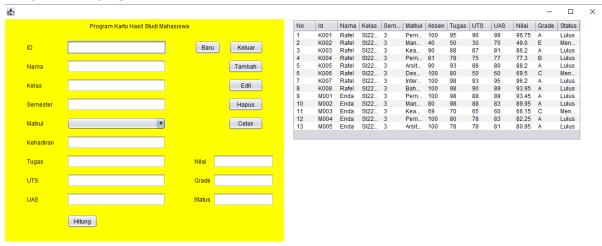Nim : 220101031

Kelas : SI 22 A1

Fakultas Ilmu Komputer

Universitas Duta Bangsa Surakarta
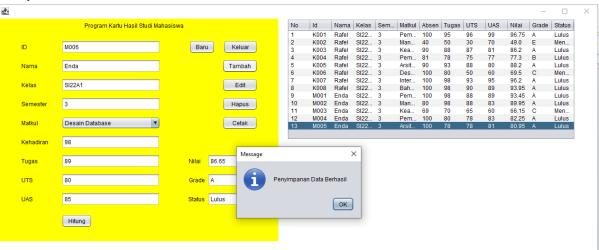
Tahun Pelajaran 2023/2024

Daftar Isi

Screenshot Hasil Program

1. Tampilan awal program

Program Kartu Hasil Studi Mahasiswa

ID | Baru | Keluar

Nama | Tambah

Kelas | Edit

Semester | Hapus

Matkul | Cetak

Kehadiran

Tugas | Nilai

UTS | Grade

UAS | Status

Hitung

No	Id	Nama	Kelas	Sem...	Matkul	Absen	Tugas	UTS	UAS	Nilai	Grade	Status
1	K001	Rafel	SI22...	3	Pem...	100	95	96	99	96.75	A	Lulus
2	K002	Rafel	SI22...	3	Man...	40	50	30	70	49.0	E	Men...
3	K003	Rafel	SI22...	3	Kea...	90	88	87	81	86.2	A	Lulus
4	K004	Rafel	SI22...	3	Pem...	81	78	75	77	77.3	B	Lulus
5	K005	Rafel	SI22...	3	Arsit...	90	93	88	80	88.2	A	Lulus
6	K006	Rafel	SI22...	3	Des...	100	80	50	60	69.5	C	Men...
7	K007	Rafel	SI22...	3	Inter...	100	98	93	95	96.2	A	Lulus
8	K008	Rafel	SI22...	3	Bah...	100	98	90	89	93.95	A	Lulus
9	M001	Enda	SI22...	3	Pem...	100	98	88	89	93.45	A	Lulus
10	M002	Enda	SI22...	3	Man...	80	98	88	83	89.95	A	Lulus
11	M003	Enda	SI22...	3	Kea...	69	70	65	60	66.15	C	Men...
12	M004	Enda	SI22...	3	Pem...	100	80	78	83	82.25	A	Lulus
13	M005	Enda	SI22...	3	Arsit...	100	78	78	81	80.95	A	Lulus

2. Tampilan menambahkan data

Program Kartu Hasil Studi Mahasiswa

ID | M006 | Baru | Keluar

Nama | Enda | Tambah

Kelas | SI22A1 | Edit

Semester | 3 | Hapus

Matkul | Desain Database | Cetak

Kehadiran | 98

Tugas | 89 | Nilai | 86.65

UTS | 80 | Grade | A

UAS | 85 | Status | Lulus

Hitung

Message

Penyimpanan Data Berhasil

OK

3. Tampilan mengedit data

Program Kartu Hasil Studi Mahasiswa

ID | M006 | Baru | Keluar

Nama | Enda | Tambah

Kelas | SI22A1 | Edit

Semester | 3 | Hapus

Matkul | Desain Database | Cetak

Kehadiran | 80

Tugas | 89 | Nilai | 84.85

UTS | 80 | Grade | A

UAS | 85 | Status | Lulus

Hitung

Message

Data Berhasil diubah

OK

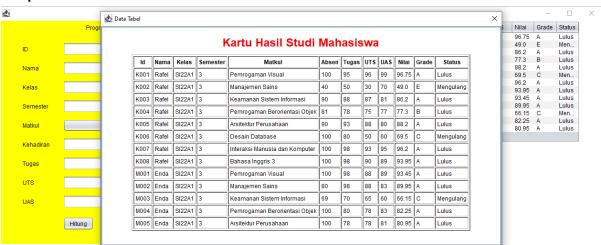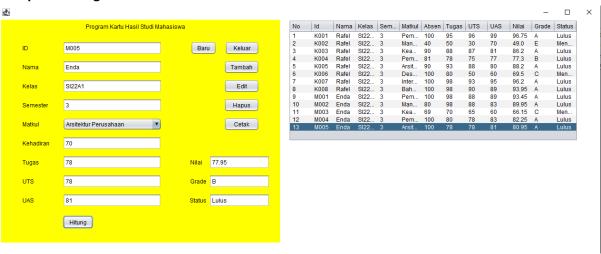| 14 | M006 | Enda | SI22... | 3 | Des... | 98 | 89 | 80 | 85 | 86.65 | A | Lulus |

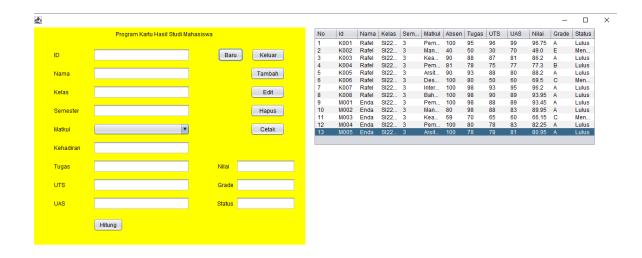## 4. Tampilan menghapus data

5. Tampilan mencetak data

6. Tampilan hitung

7. Tampilan tombol baru

Data Component dan Pallete

Swings Controls	Properties	Change Variable Name
Label 1	Program Kartu Hasil Studi Mahasiswa	
Label 2 - 13	ID, Nama, Kelas, Semester, Matkul, Kehadiran, Tugas, UTS, UAS, Nilai, Grade, Status	
Text Field 1 - 11	Kosong	txtid, txtnama, txtkelas, txtsemester, txthadir, txttugas, txtuts, txtuas, hnilai, hgrade, hstatus
Combo Box	Pemrogaman Visual, Manajemen Sains, Keamanan Sistem Informasi, Pemrogaman Berorientasi Objek, Arsitektur Perusahaan, Desain Database, Interaksi Manusia dan Komputer, Bahasa Inggris 3	cbmatkul
Button 1 - 7	Hitung, Baru, Keluar, Tambah, Edit, Hapus, Cetak	bhitung, bbaru, bkeluar, btambah, bedit, bhapus, bcetak
Table 1	Default	jTable1

Salinan Coding

a. **Baru**

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

b. Keluar

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

c. Tambah

```
private void btambahActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    try (var pst = con.prepareStatement("insert into khs (id, nama, kelas, semester,
matkul, hadir, tugas, uts, uas, nilai, grade, status) values (?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?)")) {
    // Set values using parameter placeholders
    pst.setString(1, txtid.getText());
    pst.setString(2, txtnama.getText());
    pst.setString(3, txtkelas.getText());
    pst.setString(4, txtsemester.getText());
    pst.setString(5, cbmatkul.getSelectedItem().toString());
    pst.setInt(6, Integer.parseInt(txthadir.getText())); // Convert harga to int
    pst.setInt(7, Integer.parseInt(txttugas.getText())); // Convert jumlah to int
    pst.setInt(8, Integer.parseInt(txtuts.getText()));   // Convert htotal to int
    pst.setInt(9, Integer.parseInt(txtuas.getText()));   // Convert htotal to int
    pst.setString(10, hnilai.getText());
    pst.setString(11, hgrade.getText());
    pst.setString(12, hstatus.getText());

    pst.executeUpdate();
    JOptionPane.showMessageDialog(null, "Penyimpanan Data Berhasil");
    } catch (SQLException ex) { // Handle SQLException instead of general Exception
    JOptionPane.showMessageDialog(null, "Error adding data: " + ex.getMessage());
    Logger.getLogger(Khs.class.getName()).log(Level.SEVERE, null, ex);
    }

    tabel();
    koneksi();
}
```

d. Edit

```
private void beditActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    try {
    String sql = "UPDATE khs SET "
        + "nama=?, id=?, kelas=?, semester=?, matkul=?, hadir=?, tugas=?, uts=?, uas=?,
nilai=?, grade=?, status=? WHERE id=?";
    try {
```

```
        Class.forName("com.mysql.cj.jdbc.Driver");
    } catch (ClassNotFoundException ex) {
        Logger.getLogger(Khs.class.getName()).log(Level.SEVERE, null, ex);
    }

    con = DriverManager.getConnection("jdbc:mysql://localhost/uas_pemrog", "root",
"12345678");
    java.sql.PreparedStatement pst = con.prepareStatement(sql);

    // Set parameter values using prepared statement
    pst.setString(1, txtnama.getText());
    pst.setString(2, txtid.getText());
    pst.setString(3, txtkelas.getText());
    pst.setString(4, txtsemester.getText());
    pst.setString(5, cbmatkul.getSelectedItem().toString());
    pst.setString(6, txthadir.getText());
    pst.setString(7, txttugas.getText());
    pst.setString(8, txtuts.getText());
    pst.setString(9, txtuas.getText());
    pst.setString(10, hnilai.getText());
    pst.setString(11, hgrade.getText());
    pst.setString(12, hstatus.getText());
    pst.setString(13, txtid.getText());

    pst.executeUpdate();
    JOptionPane.showMessageDialog(null, "Data Berhasil diubah");

} catch (SQLException e) {
    JOptionPane.showMessageDialog(null, "Merubah Data Gagal: " + e.getMessage());
}

tabel();
koneksi();
    }
```

e. Hapus

```
    private void bhapusActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        try {
        int dialogButton = JOptionPane.YES_NO_OPTION;
        int dialogResult = JOptionPane.showConfirmDialog(this, "Anda yakin ingin
menghapus data?", "Hapus Data", dialogButton);
        if (dialogResult == 0) {
           // Jika pengguna menekan tombol "Yes"
           String idToDelete = txtid.getText();
```

```java
        String sql = "DELETE FROM khs WHERE id =?";

        try (var pst = con.prepareStatement(sql)) {
          pst.setString(1, idToDelete);
          pst.executeUpdate();
          JOptionPane.showMessageDialog(null, "Data berhasil dihapus");
          tabel();
          kosong();
        }
      }
    } catch (Exception ex) {
      JOptionPane.showMessageDialog(null, "Error deleting student: " +
ex.getMessage());
      Logger.getLogger(Khs.class.getName()).log(Level.SEVERE, null, ex);
    }
    }
```

f. Hitung

```java
private void bhitungActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    String id = txtid.getText();
    String nama = txtnama.getText();
    String kelas = txtkelas.getText();
    String semester = txtsemester.getText();
    String matkul = cbmatkul.getSelectedItem().toString();


    int absen = Integer.parseInt(txthadir.getText());
    int tugas = Integer.parseInt(txttugas.getText());
    int uts = Integer.parseInt(txtuts.getText());
    int uas = Integer.parseInt(txtuas.getText());
    double hsl = (0.1*absen) + (0.4*tugas) + (0.25*uts) + (0.25*uas);
    hnilai.setText(String.valueOf(hsl));


    //Output dari Program berupa Nilai Akhir, Grade dan Keterangan
    if (hsl >= 80) {
      hgrade.setText("A");
      hstatus.setText("Lulus");
    }
    else if (hsl >= 70) {
      hgrade.setText("B");
      hstatus.setText("Lulus");
    }
    else if (hsl >= 60) {
```

```java
        hgrade.setText("C");
        hstatus.setText("Mengulang");
      }
      else if (hsl >= 50) {
        hgrade.setText("D");
        hstatus.setText("Mengulang");
      }
      else if (hsl >= 1) {
        hgrade.setText("E");
        hstatus.setText("Mengulang");
      }
      else  {
        hgrade.setText("E");
        hstatus.setText("Mengulang");
      }
    }

    private void btambahActionPerformed(java.awt.event.ActionEvent evt) {
      // TODO add your handling code here:
      try (var pst = con.prepareStatement("insert into khs (id, nama, kelas, semester,
matkul, hadir, tugas, uts, uas, nilai, grade, status) values (?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?)")) {
  // Set values using parameter placeholders
  pst.setString(1, txtid.getText());
  pst.setString(2, txtnama.getText());
  pst.setString(3, txtkelas.getText());
  pst.setString(4, txtsemester.getText());
  pst.setString(5, cbmatkul.getSelectedItem().toString());
  pst.setInt(6, Integer.parseInt(txthadir.getText())); // Convert harga to int
  pst.setInt(7, Integer.parseInt(txttugas.getText())); // Convert jumlah to int
  pst.setInt(8, Integer.parseInt(txtuts.getText()));   // Convert htotal to int
  pst.setInt(9, Integer.parseInt(txtuas.getText()));   // Convert htotal to int
  pst.setString(10, hnilai.getText());
  pst.setString(11, hgrade.getText());
  pst.setString(12, hstatus.getText());

  pst.executeUpdate();
  JOptionPane.showMessageDialog(null, "Penyimpanan Data Berhasil");
} catch (SQLException ex) { // Handle SQLException instead of general Exception
  JOptionPane.showMessageDialog(null, "Error adding data: " + ex.getMessage());
  Logger.getLogger(Khs.class.getName()).log(Level.SEVERE, null, ex);
}

tabel();
koneksi();
    }
```

g. Cetak

```java
private void bcetakActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    try {
    String query = "SELECT * FROM Khs";
    try (ResultSet resultSet = stat.executeQuery(query)) {
        // Mengumpulkan data dari hasil query
        StringBuilder output = new StringBuilder();
        output.append("<html><body style='text-align:center;'><h1 style='color:red; font-size:24pt;'>Kartu Hasil Studi Mahasiswa</h1><table border='1' style='margin:auto;'>");

output.append("<tr><th>Id</th><th>Nama</th><th>Kelas</th><th>Semester</th><th>Matkul</th><th>Absen</th><th>Tugas</th><th>UTS</th><th>UAS</th><th>Nilai</th><th>Grade</th><th>Status</th></tr>");

        int no = 1;
        while (resultSet.next()) {
            String id = resultSet.getString("id");
            String nama = resultSet.getString("nama");
            String kelas = resultSet.getString("kelas");
            String semester = resultSet.getString("semester");
            String matkul = resultSet.getString("matkul");
            String hadir = resultSet.getString("hadir");
            String tugas = resultSet.getString("tugas");
            String uts = resultSet.getString("uts");
            String uas = resultSet.getString("uas");
            String nilai = resultSet.getString("nilai");
            String grade = resultSet.getString("grade");
            String status = resultSet.getString("status");

            // Menambahkan data ke StringBuilder dengan format HTML
            output.append("<tr>")
                .append("<td>").append(id).append("</td>")
                .append("<td>").append(nama).append("</td>")
                .append("<td>").append(kelas).append("</td>")
                .append("<td>").append(semester).append("</td>")
                .append("<td>").append(matkul).append("</td>")
                .append("<td>").append(hadir).append("</td>")
                .append("<td>").append(tugas).append("</td>")
                .append("<td>").append(uts).append("</td>")
                .append("<td>").append(uas).append("</td>")
                .append("<td>").append(nilai).append("</td>")
                .append("<td>").append(grade).append("</td>")
                .append("<td>").append(status).append("</td>")
```

```
                .append("</tr>");
        }
        output.append("</table></body></html>");

        // Membuat jendela baru untuk menampilkan data
        JDialog dialog = new JDialog();
        dialog.setTitle("Data Tabel");
        dialog.setSize(600, 500);

        // Membuat JEditorPane untuk menampilkan data HTML
        JEditorPane editorPane = new JEditorPane();
        editorPane.setContentType("text/html");
        editorPane.setText(output.toString());
        editorPane.setEditable(false);

        JScrollPane scrollPane = new JScrollPane(editorPane);
        dialog.add(scrollPane);

        // Menampilkan jendela
        dialog.setVisible(true);
        tabel();
    }
} catch (SQLException ex) {
    JOptionPane.showMessageDialog(null, "Error fetching and displaying data: " +
ex.getMessage());
    ex.printStackTrace();
}

}
```

h. Menampilkan tabel sql dan membuat koneksi di PHP MyAdmin

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.Statement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;
import javax.swing.JDialog;
import javax.swing.JEditorPane;
import javax.swing.JScrollPane;
import javax.swing.JTextArea;
import javax.swing.table.DefaultTableModel;
```

```java
public class Khs extends javax.swing.JFrame {
    private Connection con;
    private Statement stat;
    private ResultSet res;
    /**
     * Creates new form Khs
     */
    public Khs() {
        initComponents();
        koneksi();
        tabel();
        kosong();
    }

private void koneksi(){
try {
Class.forName("com.mysql.cj.jdbc.Driver");
con=DriverManager.getConnection("jdbc:mysql://localhost/uas_pemrog", "root",
"12345678");
stat = con.createStatement();
} catch (ClassNotFoundException | SQLException e) {
JOptionPane.showMessageDialog(null, e);
}
}

    private void kosong() {
     txtid.setText(null);
     txtnama.setText(null);
     txtkelas.setText(null);
     txtsemester.setText(null);
     cbmatkul.setSelectedItem(null);
     txthadir.setText(null);
     txttugas.setText(null);
     txtuts.setText(null);
     txtuas.setText(null);
     hnilai.setText(null);
     hgrade.setText(null);
     hstatus.setText(null);
}

    private void tabel(){
DefaultTableModel tb= new DefaultTableModel();

 int no=1;
tb.addColumn("No");
```

```java
tb.addColumn("Id");
tb.addColumn("Nama");
tb.addColumn("Kelas");
tb.addColumn("Semester");
tb.addColumn("Matkul");
tb.addColumn("Absen");
tb.addColumn("Tugas");
tb.addColumn("UTS");
tb.addColumn("UAS");
tb.addColumn("Nilai");
tb.addColumn("Grade");
tb.addColumn("Status");
jTable1.setModel(tb);
try{
   res=stat.executeQuery("select * from Khs");
   while (res.next())
{
// Mengambil data dari database berdasarkan nama kolom pada tabel
// Lalu di tampilkan ke dalam JTable
tb.addRow(new Object[]
{no++,res.getString(1),res.getString(2),res.getString(3),res.getString(4),res.getString(5),re
s.getString(6),res.getString(7),res.getString(8),res.getString(9),res.getString(10),res.getSt
ring(11),res.getString(12)});


}


}catch (Exception e){
}
}
```

i. **Click Mouse**

```java
private void jTable1MouseClicked(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:
    int baris = jTable1.rowAtPoint(evt.getPoint());
     String id = jTable1.getValueAt(baris,1).toString();
     txtid.setText(id);
     String nama = jTable1.getValueAt(baris,2).toString();
     txtnama.setText(nama);
     String kelas = jTable1.getValueAt(baris,3).toString();
     txtkelas.setText(kelas);
     String semester = jTable1.getValueAt(baris,4).toString();
     txtsemester.setText(semester);
     String matkul = jTable1.getValueAt(baris,5).toString();
     cbmatkul.setSelectedItem(matkul);
```

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```
String hadir = jTable1.getValueAt(baris,6).toString();
txthadir.setText(hadir);
String tugas = jTable1.getValueAt(baris,7).toString();
txttugas.setText(tugas);
String uts = jTable1.getValueAt(baris,8).toString();
txtuts.setText(uts);
String uas = jTable1.getValueAt(baris,9).toString();
txtuas.setText(uas);
String nilai = jTable1.getValueAt(baris,10).toString();
hnilai.setText(nilai);
String grade = jTable1.getValueAt(baris,11).toString();
hgrade.setText(grade);
String status = jTable1.getValueAt(baris,12).toString();
hstatus.setText(status);
}
```