QuizWiz

LAPORAN PROYEK AKHIR

COMP6364 – Object Oriented Programming

KELAS LA20

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Semester Ganjil 2023/2024

MALANG

LEMBAR PERSETUJUAN PROYEK AKHIR

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BAB I

LATAR BELAKANG

Dalam era digital yang terus berkembang, pendidikan dan pembelajaran tidak lagi terbatas pada lingkup tradisional. Penggunaan teknologi di dunia pendidikan menjadi kunci untuk meningkatkan efektivitas dan keterlibatan siswa. Oleh karena itu, kami mempersembahkan "QuizWiz," sebuah aplikasi inovatif yang dirancang untuk meningkatkan pengalaman pembelajaran melalui platform kuis yang interaktif.

Sistem pendidikan saat ini dihadapkan pada berbagai tantangan, termasuk rendahnya tingkat keterlibatan siswa, kurangnya variasi dalam metode pengajaran, dan kebutuhan untuk mengadaptasi pembelajaran ke dalam format digital. Pembelajaran yang kurang interaktif dan kurang menarik dapat mengurangi motivasi siswa dan mempengaruhi efektivitas pembelajaran. Aplikasi QuizWiz ditujukan untuk guru dan siswa di tingkat pendidikan sekolah menengah dan perguruan tinggi yang ingin meningkatkan pengalaman pembelajaran mereka melalui pendekatan yang inovatif dan interaktif.

QuizWiz adalah langkah maju dalam menghadapi perubahan paradigma dalam pendidikan. Melalui aplikasi ini, kami berharap dapat menciptakan lingkungan pembelajaran yang lebih menyenangkan, meningkatkan keterlibatan siswa, dan memberikan alat yang efisien bagi guru dalam mendukung proses pembelajaran. Dengan dukungan dari berbagai pihak, kami yakin QuizWiz dapat menjadi solusi yang efektif dan memberikan kontribusi positif dalam dunia pendidikan.

BAB II

LANDASAN TEORI

3.1 CONSTRUCTOR

3.1.1 Constructor adalah method khusus yang akan dieksekusi pada saat pembuatan objek. Biasanya method ini digunakan untuk inisialisasi atau mempersiapkan data untuk objek. Dalam konteks pembuatan aplikasi, constructor digunakan untuk mengatur nilai awal, menginisialisasi properti, atau melakukan tugas persiapan lainnya sehingga objek dapat beroperasi dengan benar sejak awal. Penggunaan constructor dapat membantu dalam memastikan bahwa objek memiliki keadaan awal yang valid dan sesuai dengan kebutuhan aplikasi. Constructor juga memberikan fleksibilitas dalam memberikan nilai awal atau konfigurasi khusus saat objek dibuat, sehingga memungkinkan adaptabilitas dalam penggunaan objek tersebut.

3.2 OVERLOADING OPERATOR

3.2.1 Overloading Operator adalah salah satu fitur pada java yang memungkinkan kita mendirikan dua atau lebih function dengan identitas yang sama selama memiliki keunikan pada function parameter. Dengan menggunakan overloading operator, kita dapat membuat variasi dari suatu fungsi dengan memanfaatkan jumlah, tipe, atau urutan parameter yang berbeda. Hal ini memberikan fleksibilitas dalam menggunakan operator yang sama untuk tipe data atau objek yang berbeda, memudahkan penggunaan dan meningkatkan ekspresivitas kode. Dengan memanfaatkan fitur ini, Java memungkinkan pengembang untuk membuat kode yang lebih fleksibel dan dapat digunakan dalam berbagai konteks, meningkatkan efisiensi pengembangan dan kemudahan pemeliharaan kode.

3.3 INHERITANCE

3.3.1 **Inheritance** atau *Pewarisan/Penurunan* adalah konsep pemrograman dimana sebuah *class* dapat 'menurunkan' **property** dan **method** yang dimilikinya kepada **class** lain. Dengan menggunakan inheritance, kita dapat membuat struktur kelas, di mana kelas yang satu dapat mengambil sifat atau perilaku dari kelas yang lain. Hal ini memungkinkan untuk penggunaan kembali kode dan mempermudah pengelolaan dan pengembangan program. Dalam konteks inheritance, terdapat kelas induk (parent class) yang memiliki properti dan metode, dan kelas anak (child class) yang mewarisi sifat-sifat tersebut. Kelas anak dapat menambahkan atau mengubah perilaku yang diwarisi dari kelas induk, sehingga memungkinkan untuk spesialisasi atau penyesuaian fungsionalitas sesuai kebutuhan. Penerapan konsep inheritance ini mendukung prinsip-prinsip pemrograman berorientasi objek, seperti encapsulation dan abstraction, yang meningkatkan modularitas dan fleksibilitas dalam pengembangan perangkat lunak.

BAB III

DEFINISI PROGRAM

Aplikasi QuizWiz ini menggunakan bahasa pemrograman Java dibantu dengan Database, yang input nya berupa klik pada mouse dan string/teks untuk mengisi data username dan password dari user. Username dan password yang di input akan di cross-check dengan database, untuk memastikan apakah username dan password yang di input sama dengan username dan password yang ada di dalam database. Setelah login, user dapat memilih paket soal berdasarkan jurusan, dimana setiap paket akan memiliki set soal yang berbeda. User dapat melakukan navigasi pada soal dengan mengklik tombol next atau previous yang terdapat di kiri bawah, atau mengklik nomor soal yang ingin dikerjakan. Setelah user selesai melakukan input jawaban, user dapat mengklik tombol finish ("fin") di bawah tombol previous untuk menyelesaikan kuis, yang mana setelah itu akan ditampilkan nilai/hasil dari pengerjaan kuis.

Aplikasi QuizWiz ini bertujuan untuk meningkatkan pengalaman belajar user melalui platform kuis yang interaktif, dimana user, dalam kasus ini guru dan siswa dapat memanfaatkan aplikasi ini untuk meningkatkan pengalaman dalam pembelajaran mereka dengan cara yang efektif dan inovatif. Aplikasi ini juga bertujuan untuk menerapkan sistem pembelajaran yang lebih interaktif, dimana siswa tidak merasa bosan saat melakukan kegiatan pembelajaran, sehingga user merasa lebih terlibat dalam pembelajaran, dan mendapatkan lebih banyak variasi dalam pembelajaran.

Databaseconnection.java

```java
/*
 * Click
nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-
default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Other/File.java
to edit this template
 */
package com.mycompany.mavenproject1;


import java.sql.*;

import java.util.HashMap;

import java.util.Map;


/**
 *
 * @author Afei
 */
public class databaseConnection {

    public Map<String, String> ImportUsernameAndPassword() throws
SQLException {


        Connection connection = null;
```

```java
        try {

            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");

        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        Map <String, String> returnMap = new HashMap<>();

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.usernameandpassword;");

        while(resultSet.next()){

            returnMap.put(resultSet.getString("username"),
resultSet.getString("passkey"));

        }

        return returnMap;


    }



    public String[][] ImportSoaldanJawabanMatkul1Bagian1() throws
SQLException {

        Connection connection;



        try {

            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");
```

```java
        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        String [][] returnArray = new String[6][16];

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.soaldanjawaban1_1;");

        int i = 0;

        while(resultSet.next()){

            returnArray[0][i] = resultSet.getString("soal");

            returnArray[1][i] = resultSet.getString("jawaban1");

            returnArray[2][i] = resultSet.getString("jawaban2");

            returnArray[3][i] = resultSet.getString("jawaban3");

            returnArray[4][i] = resultSet.getString("jawaban4");

            returnArray[5][i] =
resultSet.getString("kunciJawaban");

            i++;

        }

        return returnArray;

    }

    public String[][] ImportSoaldanJawabanMatkul1Bagian2() throws
SQLException {

        Connection connection;


        try {
```

```java
            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");

        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        String [][] returnArray = new String[6][16];

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.soaldanjawaban1_2;");

        int i = 0;

        while(resultSet.next()){

            returnArray[0][i] = resultSet.getString("soal");

            returnArray[1][i] = resultSet.getString("jawaban1");

            returnArray[2][i] = resultSet.getString("jawaban2");

            returnArray[3][i] = resultSet.getString("jawaban3");

            returnArray[4][i] = resultSet.getString("jawaban4");

            returnArray[5][i] =
resultSet.getString("kunciJawaban");

            i++;

        }

        return returnArray;

    }

    public String[][] ImportSoaldanJawabanMatkul1Bagian3() throws
SQLException {

        Connection connection;
```

```java
        try {

            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");

        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        String [][] returnArray = new String[6][16];

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.soaldanjawaban1_3;");

        int i = 0;

        while(resultSet.next()){

            returnArray[0][i] = resultSet.getString("soal");

            returnArray[1][i] = resultSet.getString("jawaban1");

            returnArray[2][i] = resultSet.getString("jawaban2");

            returnArray[3][i] = resultSet.getString("jawaban3");

            returnArray[4][i] = resultSet.getString("jawaban4");

            returnArray[5][i] =
resultSet.getString("kunciJawaban");

            i++;

        }

        return returnArray;

    }

    public String[][] ImportSoaldanJawabanMatkul1Bagian4() throws
SQLException {

        Connection connection;
```

```java
        try {

            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");

        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        String [][] returnArray = new String[6][16];

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.soaldanjawaban1_4;");

        int i = 0;

        while(resultSet.next()){

            returnArray[0][i] = resultSet.getString("soal");

            returnArray[1][i] = resultSet.getString("jawaban1");

            returnArray[2][i] = resultSet.getString("jawaban2");

            returnArray[3][i] = resultSet.getString("jawaban3");

            returnArray[4][i] = resultSet.getString("jawaban4");

            returnArray[5][i] =
resultSet.getString("kunciJawaban");

            i++;

        }

        return returnArray;

    }

    public String[][] ImportSoaldanJawabanMatkul2Bagian1() throws
SQLException {
```

```java
        Connection connection;


        try {

            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");

        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        String [][] returnArray = new String[6][16];

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.soaldanjawaban2_1;");

        int i = 0;

        while(resultSet.next()){

            returnArray[0][i] = resultSet.getString("soal");

            returnArray[1][i] = resultSet.getString("jawaban1");

            returnArray[2][i] = resultSet.getString("jawaban2");

            returnArray[3][i] = resultSet.getString("jawaban3");

            returnArray[4][i] = resultSet.getString("jawaban4");

            returnArray[5][i] =
resultSet.getString("kunciJawaban");

            i++;

        }

        return returnArray;

    }
```

```java
    public String[][] ImportSoaldanJawabanMatkul2Bagian2() throws
SQLException {

        Connection connection;


        try {

            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");

        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        String [][] returnArray = new String[6][16];

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.soaldanjawaban2_2;");

        int i = 0;

        while(resultSet.next()){

            returnArray[0][i] = resultSet.getString("soal");

            returnArray[1][i] = resultSet.getString("jawaban1");

            returnArray[2][i] = resultSet.getString("jawaban2");

            returnArray[3][i] = resultSet.getString("jawaban3");

            returnArray[4][i] = resultSet.getString("jawaban4");

            returnArray[5][i] =
resultSet.getString("kunciJawaban");

            i++;

        }

        return returnArray;
```

```java
    }

    public String[][] ImportSoaldanJawabanMatkul2Bagian3() throws
SQLException {

        Connection connection;


        try {

            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");

        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        String [][] returnArray = new String[6][16];

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.soaldanjawaban2_3;");

        int i = 0;

        while(resultSet.next()){

            returnArray[0][i] = resultSet.getString("soal");

            returnArray[1][i] = resultSet.getString("jawaban1");

            returnArray[2][i] = resultSet.getString("jawaban2");

            returnArray[3][i] = resultSet.getString("jawaban3");

            returnArray[4][i] = resultSet.getString("jawaban4");

            returnArray[5][i] =
resultSet.getString("kunciJawaban");

            i++;

        }
```

```java
        return returnArray;

    }

    public String[][] ImportSoaldanJawabanMatkul2Bagian4() throws
SQLException {

        Connection connection;


        try {

            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");

        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        String [][] returnArray = new String[6][16];

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.soaldanjawaban2_4;");

        int i = 0;

        while(resultSet.next()){

            returnArray[0][i] = resultSet.getString("soal");

            returnArray[1][i] = resultSet.getString("jawaban1");

            returnArray[2][i] = resultSet.getString("jawaban2");

            returnArray[3][i] = resultSet.getString("jawaban3");

            returnArray[4][i] = resultSet.getString("jawaban4");

            returnArray[5][i] =
resultSet.getString("kunciJawaban");

            i++;
```

```java
        }

        return returnArray;

    }

    public String[][] ImportSoaldanJawabanMatkul3Bagian1() throws
SQLException {

        Connection connection;


        try {

            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");

        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        String [][] returnArray = new String[6][16];

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.soaldanjawaban3_1;");

        int i = 0;

        while(resultSet.next()){

            returnArray[0][i] = resultSet.getString("soal");

            returnArray[1][i] = resultSet.getString("jawaban1");

            returnArray[2][i] = resultSet.getString("jawaban2");

            returnArray[3][i] = resultSet.getString("jawaban3");

            returnArray[4][i] = resultSet.getString("jawaban4");

            returnArray[5][i] =
resultSet.getString("kunciJawaban");
```

```java
            i++;

        }

        return returnArray;

    }

    public String[][] ImportSoaldanJawabanMatkul3Bagian2() throws
SQLException {

        Connection connection;


        try {

            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");

        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        String [][] returnArray = new String[6][16];

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.soaldanjawaban3_2;");

        int i = 0;

        while(resultSet.next()){

            returnArray[0][i] = resultSet.getString("soal");

            returnArray[1][i] = resultSet.getString("jawaban1");

            returnArray[2][i] = resultSet.getString("jawaban2");

            returnArray[3][i] = resultSet.getString("jawaban3");

            returnArray[4][i] = resultSet.getString("jawaban4");
```

```java
            returnArray[5][i] =
resultSet.getString("kunciJawaban");

            i++;

        }

        return returnArray;

    }

    public String[][] ImportSoaldanJawabanMatkul3Bagian3() throws
SQLException {

        Connection connection;


        try {

            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");

        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        String [][] returnArray = new String[6][16];

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.soaldanjawaban3_3;");

        int i = 0;

        while(resultSet.next()){

            returnArray[0][i] = resultSet.getString("soal");

            returnArray[1][i] = resultSet.getString("jawaban1");

            returnArray[2][i] = resultSet.getString("jawaban2");

            returnArray[3][i] = resultSet.getString("jawaban3");
```

```java
            returnArray[4][i] = resultSet.getString("jawaban4");

            returnArray[5][i] =
resultSet.getString("kunciJawaban");

            i++;

        }

        return returnArray;

    }

    public String[][] ImportSoaldanJawabanMatkul3Bagian4() throws
SQLException {

        Connection connection;


        try {

            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");

        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        String [][] returnArray = new String[6][16];

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.soaldanjawaban3_4;");

        int i = 0;

        while(resultSet.next()){

            returnArray[0][i] = resultSet.getString("soal");

            returnArray[1][i] = resultSet.getString("jawaban1");

            returnArray[2][i] = resultSet.getString("jawaban2");
```

```java
            returnArray[3][i] = resultSet.getString("jawaban3");

            returnArray[4][i] = resultSet.getString("jawaban4");

            returnArray[5][i] =
resultSet.getString("kunciJawaban");

            i++;

        }

        return returnArray;

    }

    public String[][] ImportSoaldanJawabanMatkul4Bagian1() throws
SQLException {

        Connection connection;


        try {

            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");

        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        String [][] returnArray = new String[6][16];

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.soaldanjawaban4_1;");

        int i = 0;

        while(resultSet.next()){

            returnArray[0][i] = resultSet.getString("soal");

            returnArray[1][i] = resultSet.getString("jawaban1");
```

```java
            returnArray[2][i] = resultSet.getString("jawaban2");

            returnArray[3][i] = resultSet.getString("jawaban3");

            returnArray[4][i] = resultSet.getString("jawaban4");

            returnArray[5][i] =
resultSet.getString("kunciJawaban");

            i++;

        }

        return returnArray;

    }

    public String[][] ImportSoaldanJawabanMatkul4Bagian2() throws
SQLException {

        Connection connection;


        try {

            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");

        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        String [][] returnArray = new String[6][16];

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.soaldanjawaban4_2;");

        int i = 0;

        while(resultSet.next()){

            returnArray[0][i] = resultSet.getString("soal");
```

```java
            returnArray[1][i] = resultSet.getString("jawaban1");

            returnArray[2][i] = resultSet.getString("jawaban2");

            returnArray[3][i] = resultSet.getString("jawaban3");

            returnArray[4][i] = resultSet.getString("jawaban4");

            returnArray[5][i] =
resultSet.getString("kunciJawaban");

            i++;

        }

        return returnArray;

    }

    public String[][] ImportSoaldanJawabanMatkul4Bagian3() throws
SQLException {

        Connection connection;


        try {

            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");

        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        String [][] returnArray = new String[6][16];

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.soaldanjawaban4_3;");

        int i = 0;

        while(resultSet.next()){
```

```java
            returnArray[0][i] = resultSet.getString("soal");

            returnArray[1][i] = resultSet.getString("jawaban1");

            returnArray[2][i] = resultSet.getString("jawaban2");

            returnArray[3][i] = resultSet.getString("jawaban3");

            returnArray[4][i] = resultSet.getString("jawaban4");

            returnArray[5][i] =
resultSet.getString("kunciJawaban");

            i++;

        }

        return returnArray;

    }

    public String[][] ImportSoaldanJawabanMatkul4Bagian4() throws
SQLException {

        Connection connection;


        try {

            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/finprooop
", "root", "edrico3105");

        } catch (SQLException e) {

            throw new RuntimeException(e);

        }

        String [][] returnArray = new String[6][16];

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery("SELECT *
FROM finprooop.soaldanjawaban4_4;");

        int i = 0;
```

```java
        while(resultSet.next()){

            returnArray[0][i] = resultSet.getString("soal");

            returnArray[1][i] = resultSet.getString("jawaban1");

            returnArray[2][i] = resultSet.getString("jawaban2");

            returnArray[3][i] = resultSet.getString("jawaban3");

            returnArray[4][i] = resultSet.getString("jawaban4");

            returnArray[5][i] =
resultSet.getString("kunciJawaban");

            i++;

        }

        return returnArray;

    }

}
```

Loginuser.java

```java
/*
 * Click
nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-
default.txt to change this license

 * Click
nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to
edit this template

 */

package com.mycompany.mavenproject1;
```

```java
import java.sql.Connection;

import java.sql.SQLException;

import java.util.Map;

import java.util.HashMap;

import java.util.logging.Level;

import java.util.logging.Logger;

/**
 *
 * @author Afei
 */
public class LoginUser extends javax.swing.JFrame {


    /**
     * Creates new form LoginUser
     */
    public LoginUser() {

        initComponents();

    }


    /**
     * 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.
     */
```

```java
    @SuppressWarnings("unchecked")

    // <editor-fold defaultstate="collapsed" desc="Generated
Code">//GEN-BEGIN:initComponents

    private void initComponents() {


        MainPanel = new javax.swing.JPanel();

        PanelJudul = new javax.swing.JPanel();

        LabelJudul = new javax.swing.JLabel();

        PanelLogin = new javax.swing.JPanel();

        textUsername = new javax.swing.JLabel();

        UsernameTextField = new javax.swing.JTextField();

        PasswordLabel = new javax.swing.JLabel();

        PasswordTextField = new javax.swing.JPasswordField();

        VerifyButton = new javax.swing.JButton();

        jLabel1 = new javax.swing.JLabel();



setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE
);

        setTitle("User Login Page");

        setResizable(false);

        getContentPane().setLayout(new java.awt.GridLayout());


        MainPanel.setLayout(new java.awt.BorderLayout());
```

```
PanelJudul.setBorder(javax.swing.BorderFactory.createEmptyBorder(3
0, 0, 0, 0));

        PanelJudul.setLayout(new java.awt.GridLayout());


        LabelJudul.setFont(new java.awt.Font("sansserif", 1, 22));
// NOI18N


LabelJudul.setHorizontalAlignment(javax.swing.SwingConstants.CENTE
R);

        LabelJudul.setText("User Login Page");

        PanelJudul.add(LabelJudul);


        MainPanel.add(PanelJudul, java.awt.BorderLayout.NORTH);


        textUsername.setText("Username");


        UsernameTextField.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                UsernameTextFieldActionPerformed(evt);

            }

        });


        PasswordLabel.setText("Password");
```

```java
        PasswordTextField.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                PasswordTextFieldActionPerformed(evt);

            }

        });


        VerifyButton.setText("Verify");

        VerifyButton.setFocusable(false);

        VerifyButton.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                try {

                    VerifyButtonActionPerformed(evt);

                } catch (SQLException e) {

                    throw new RuntimeException(e);

                }

            }

        });

        VerifyButton.addKeyListener(new
java.awt.event.KeyAdapter() {

            public void keyPressed(java.awt.event.KeyEvent evt) {

                VerifyButtonKeyPressed(evt);

            }

        });
```

```java
        jLabel1.setForeground(new java.awt.Color(255, 0, 51));

        jLabel1.setText("Invalid Username or Password!");

        jLabel1.setFocusable(false);

        jLabel1.setOpaque(true);


        javax.swing.GroupLayout PanelLoginLayout = new
javax.swing.GroupLayout(PanelLogin);

        PanelLogin.setLayout(PanelLoginLayout);

        PanelLoginLayout.setHorizontalGroup(

PanelLoginLayout.createParallelGroup(javax.swing.GroupLayout.Align
ment.LEADING)

            .addGroup(PanelLoginLayout.createSequentialGroup()

.addGroup(PanelLoginLayout.createParallelGroup(javax.swing.GroupLa
yout.Alignment.LEADING)

.addGroup(PanelLoginLayout.createSequentialGroup()

                    .addGap(103, 103, 103)

.addGroup(PanelLoginLayout.createParallelGroup(javax.swing.GroupLa
yout.Alignment.LEADING)

                        .addComponent(textUsername,
javax.swing.GroupLayout.PREFERRED_SIZE, 63,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addGroup(PanelLoginLayout.createParallelGroup(javax.swing.GroupLa
yout.Alignment.TRAILING, false)
```

```java
                                    .addComponent(PasswordLabel,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.PREFERRED_SIZE, 67,
javax.swing.GroupLayout.PREFERRED_SIZE)

                                    .addComponent(UsernameTextField,
javax.swing.GroupLayout.Alignment.LEADING)

                                    .addComponent(PasswordTextField,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, 202, Short.MAX_VALUE))

                                .addComponent(jLabel1,
javax.swing.GroupLayout.PREFERRED_SIZE, 177,
javax.swing.GroupLayout.PREFERRED_SIZE)))


.addGroup(PanelLoginLayout.createSequentialGroup()

                            .addGap(137, 137, 137)

                            .addComponent(VerifyButton,
javax.swing.GroupLayout.PREFERRED_SIZE, 114,
javax.swing.GroupLayout.PREFERRED_SIZE)))

                .addContainerGap(107, Short.MAX_VALUE))

        );

        PanelLoginLayout.setVerticalGroup(

PanelLoginLayout.createParallelGroup(javax.swing.GroupLayout.Align
ment.LEADING)

            .addGroup(PanelLoginLayout.createSequentialGroup()

                .addGap(49, 49, 49)

                .addComponent(textUsername)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATE
D)
```

```java
                .addComponent(UsernameTextField,
javax.swing.GroupLayout.PREFERRED_SIZE, 28,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELA
TED)

                .addComponent(PasswordLabel)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELA
TED)

                .addComponent(PasswordTextField,
javax.swing.GroupLayout.PREFERRED_SIZE, 28,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELA
TED)

                .addComponent(jLabel1)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELA
TED)

                .addComponent(VerifyButton)

                .addContainerGap(104, Short.MAX_VALUE))
        );


        jLabel1.setVisible(false);


        MainPanel.add(PanelLogin, java.awt.BorderLayout.CENTER);


        getContentPane().add(MainPanel);
```

```java
        setSize(new java.awt.Dimension(426, 400));

        setLocationRelativeTo(null);

    }// </editor-fold>//GEN-END:initComponents


    private void
UsernameTextFieldActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_UsernameTextFieldActionPerformed

        // TODO add your handling code here:

    }//GEN-LAST:event_UsernameTextFieldActionPerformed


    private void
PasswordTextFieldActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_PasswordTextFieldActionPerformed

        // TODO add your handling code here:

    }//GEN-LAST:event_PasswordTextFieldActionPerformed


    private void
VerifyButtonActionPerformed(java.awt.event.ActionEvent evt) throws
SQLException {//GEN-FIRST:event_VerifyButtonActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==VerifyButton){

            String username = this.UsernameTextField.getText();


            String password = new
String(this.PasswordTextField.getPassword());
```

```java
            if(!username.trim().isEmpty() &&
!password.trim().isEmpty()){

                databaseConnection db = new databaseConnection();

                Map <String, String> checkMap = new
HashMap<String, String>();



                try {

                    //Import Data From Database

                    checkMap = db.ImportUsernameAndPassword();

                } catch (SQLException ex) {

                    checkMap.put("edr", "edr");

                }

                if(checkMap.containsKey(username) &&
checkMap.get(username).equals(password)){

                    this.setVisible(false);

                    MainFrame frameUtama = new MainFrame();

                    frameUtama.selectFrame.setVisible(true);

                }

                else{

                    jLabel1.setVisible(true);

                    UsernameTextField.setText("");

                    PasswordTextField.setText("");

                }

            }

        }
```

```java
    }//GEN-LAST:event_VerifyButtonActionPerformed


    private void VerifyButtonKeyPressed(java.awt.event.KeyEvent
evt) {//GEN-FIRST:event_VerifyButtonKeyPressed

        // TODO add your handling code here:

    }//GEN-LAST:event_VerifyButtonKeyPressed



    /**
     * @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/pla
f.html
         */
        try {

            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {

                if ("Nimbus".equals(info.getName())) {


javax.swing.UIManager.setLookAndFeel(info.getClassName());

                    break;
```

```java
            }

         }

      } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(LoginUser.class.getName()).log(
java.util.logging.Level.SEVERE, null, ex);

      } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(LoginUser.class.getName()).log(
java.util.logging.Level.SEVERE, null, ex);

      } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(LoginUser.class.getName()).log(
java.util.logging.Level.SEVERE, null, ex);

      } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(LoginUser.class.getName()).log(
java.util.logging.Level.SEVERE, null, ex);

      }

      //</editor-fold>


      /* Create and display the form */

      java.awt.EventQueue.invokeLater(new Runnable() {

         public void run() {

            new LoginUser().setVisible(true);

         }

      });

   }
```

```java
    // Variables declaration - do not modify//GEN-BEGIN:variables

    private javax.swing.JLabel LabelJudul;

    private javax.swing.JPanel MainPanel;

    private javax.swing.JPanel PanelJudul;

    private javax.swing.JPanel PanelLogin;

    private javax.swing.JLabel PasswordLabel;

    private javax.swing.JPasswordField PasswordTextField;

    private javax.swing.JTextField UsernameTextField;

    private javax.swing.JButton VerifyButton;

    private javax.swing.JLabel jLabel1;

    private javax.swing.JLabel textUsername;

    // End of variables declaration//GEN-END:variables
}
```

Mavenproject1.java

```java
/*
 * Click
nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-
default.txt to change this license
 */



package com.mycompany.mavenproject1;
/**
 *
```

```
 * @author Afei

 */

public class Mavenproject1 {


    public static void main(String[] args) {

        new LoginUser().setVisible(true);

    }

}
```

ScoreDisplayframe.java

```
/*

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default.txt to change this license

 * Click
nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to
edit this template

 */

package com.mycompany.mavenproject1;



/**

 *

 * @author Afei

 */
```

```java
public class ScoreDisplayFrame extends javax.swing.JFrame {


    /**

     * Creates new form ScoreDisplayFrame

     */

    public ScoreDisplayFrame(int nilaiTotal) {

        initComponents(nilaiTotal);

    }



    /**

     * 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">//GEN-BEGIN:initComponents

    private void initComponents(int nilaiTotal) {


        titlePanel = new javax.swing.JPanel();

        ScoreTitleLabel = new javax.swing.JLabel();

        ScorePanel = new javax.swing.JPanel();

        ScoreLabel = new javax.swing.JLabel();
```

```java
setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE
);

        setResizable(false);




titlePanel.setBorder(javax.swing.BorderFactory.createEmptyBorder(2
0, 0, 0, 0));

        titlePanel.setLayout(new java.awt.GridLayout());



        ScoreTitleLabel.setFont(new java.awt.Font("Comic Sans MS",
1, 36)); // NOI18N


ScoreTitleLabel.setHorizontalAlignment(javax.swing.SwingConstants.
CENTER);

        ScoreTitleLabel.setText("Your Score is.......");

        ScoreTitleLabel.setPreferredSize(new
java.awt.Dimension(85, 100));

        titlePanel.add(ScoreTitleLabel);



        getContentPane().add(titlePanel,
java.awt.BorderLayout.NORTH);



        ScorePanel.setLayout(new java.awt.GridLayout());



        ScoreLabel.setFont(new java.awt.Font("Pristina", 0, 95));
// NOI18N
```

```java
ScoreLabel.setHorizontalAlignment(javax.swing.SwingConstants.CENTE
R);

        ScoreLabel.setText(new String(String.valueOf(nilaiTotal))
+ " %");

        ScorePanel.add(ScoreLabel);


        getContentPane().add(ScorePanel,
java.awt.BorderLayout.CENTER);


        setSize(new java.awt.Dimension(564, 394));

        setLocationRelativeTo(null);

    }// </editor-fold>//GEN-END:initComponents


    /**

     * @param args the command line arguments

     */


    // Variables declaration - do not modify//GEN-BEGIN:variables

    private javax.swing.JLabel ScoreLabel;

    private javax.swing.JPanel ScorePanel;

    private javax.swing.JLabel ScoreTitleLabel;

    private javax.swing.JPanel titlePanel;

    // End of variables declaration//GEN-END:variables

}
```

SelectMatKuldanBabFrame.java

```java
/*
 * Click
nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-
default.txt to change this license
 * Click
nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to
edit this template
 */
package com.mycompany.mavenproject1;


import javax.swing.*;

import java.sql.SQLException;


/**
 *
 * @author Afei
 */
public class SelectMatkulDanBabFrame extends javax.swing.JFrame {

    int matkulId = 0;

    int bagianId = 0;

    boolean flag = false;

    /**
     * Creates new form SelectMatkulDanBabFrame
     */
    public SelectMatkulDanBabFrame() {
```

```java
        initComponents();

    }



    /**

     * 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">//GEN-BEGIN:initComponents

    private void initComponents() {

        this.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

        titlePanel = new javax.swing.JPanel();

        TitleLabel = new javax.swing.JLabel();

        MainContentPanel = new javax.swing.JPanel();

        PanelMatkul1 = new javax.swing.JPanel();

        Matkul1TitlePanel = new javax.swing.JPanel();

        Matkul1TitleLabel = new javax.swing.JLabel();

        ButtonsMatkul1Panel = new javax.swing.JPanel();

        Matkul1Bagian1Button = new javax.swing.JButton();

        Matkul1Bagian2Button = new javax.swing.JButton();

        Matkul1Bagian3Button = new javax.swing.JButton();

        Matkul1Bagian4Button = new javax.swing.JButton();
```

```java
PanelMatkul2 = new javax.swing.JPanel();

Matkul2TitlePanel = new javax.swing.JPanel();

Matkul2TitleLabel = new javax.swing.JLabel();

ButtonsMatkul2Panel = new javax.swing.JPanel();

Matkul2Bagian1Button = new javax.swing.JButton();

Matkul2Bagian2Button = new javax.swing.JButton();

Matkul2Bagian3Button = new javax.swing.JButton();

Matkul2Bagian4Button = new javax.swing.JButton();

PanelMatkul3 = new javax.swing.JPanel();

Matkul3TitlePanel = new javax.swing.JPanel();

Matkul3TitleLabel = new javax.swing.JLabel();

ButtonsMatkul3Panel = new javax.swing.JPanel();

Matkul3Bagian1Button = new javax.swing.JButton();

Matkul3Bagian2Button = new javax.swing.JButton();

Matkul3Bagian3Button = new javax.swing.JButton();

Matkul3Bagian4Button = new javax.swing.JButton();

PanelMatkul4 = new javax.swing.JPanel();

Matkul4TitlePanel = new javax.swing.JPanel();

Matkul4TitleLabel = new javax.swing.JLabel();

ButtonsMatkul4Panel = new javax.swing.JPanel();

Matkul4Bagian1Button = new javax.swing.JButton();

Matkul4Bagian2Button = new javax.swing.JButton();

Matkul4Bagian3Button = new javax.swing.JButton();

Matkul4Bagian4Button = new javax.swing.JButton();
```

```java
setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE
);

        setResizable(false);


        titlePanel.setMinimumSize(new java.awt.Dimension(198,
150));

        titlePanel.setPreferredSize(new java.awt.Dimension(0,
100));

        titlePanel.setLayout(new java.awt.GridLayout(1, 0));


        TitleLabel.setFont(new java.awt.Font("Segoe UI", 1, 30));
// NOI18N


TitleLabel.setHorizontalAlignment(javax.swing.SwingConstants.CENTE
R);

        TitleLabel.setText("Pilihan Matkul dan Bab yang
Tersedia");

        titlePanel.add(TitleLabel);


        getContentPane().add(titlePanel,
java.awt.BorderLayout.NORTH);


        MainContentPanel.setLayout(new
javax.swing.BoxLayout(MainContentPanel,
javax.swing.BoxLayout.Y_AXIS));


        PanelMatkul1.setBackground(new java.awt.Color(102, 255,
255));
```

```java
        PanelMatkul1.setPreferredSize(new java.awt.Dimension(624,
86));

        PanelMatkul1.setLayout(new java.awt.BorderLayout());


        Matkul1TitlePanel.setLayout(new java.awt.BorderLayout());


        Matkul1TitleLabel.setText("Nama Matkul 1");
        Matkul1TitlePanel.add(Matkul1TitleLabel,
java.awt.BorderLayout.CENTER);


        PanelMatkul1.add(Matkul1TitlePanel,
java.awt.BorderLayout.NORTH);


        ButtonsMatkul1Panel.setLayout(new
java.awt.FlowLayout(java.awt.FlowLayout.LEFT));


        Matkul1Bagian1Button.setText("Bagian1");

Matkul1Bagian1Button.setHorizontalAlignment(javax.swing.SwingConst
ants.LEFT);
        Matkul1Bagian1Button.addActionListener(new
java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent
evt) {
                try {
                    Matkul1Bagian1ButtonActionPerformed(evt);
                } catch (SQLException e) {
                    throw new RuntimeException(e);
```

```java
                }

            }

        });

        ButtonsMatkul1Panel.add(Matkul1Bagian1Button);


        Matkul1Bagian2Button.setText("Bagian2");

        Matkul1Bagian2Button.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                try {

                    Matkul1Bagian2ButtonActionPerformed(evt);

                } catch (SQLException e) {

                    throw new RuntimeException(e);

                }

            }

        });

        ButtonsMatkul1Panel.add(Matkul1Bagian2Button);


        Matkul1Bagian3Button.setText("Bagian3");

        Matkul1Bagian3Button.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                try {

                    Matkul1Bagian3ButtonActionPerformed(evt);
```

```java
            } catch (SQLException e) {

                throw new RuntimeException(e);

            }

        }

    });

    ButtonsMatkul1Panel.add(Matkul1Bagian3Button);


    Matkul1Bagian4Button.setText("Bagian4");

    Matkul1Bagian4Button.addActionListener(new
java.awt.event.ActionListener() {

        public void actionPerformed(java.awt.event.ActionEvent
evt) {

            try {

                Matkul1Bagian4ButtonActionPerformed(evt);

            } catch (SQLException e) {

                throw new RuntimeException(e);

            }

        }

    });

    ButtonsMatkul1Panel.add(Matkul1Bagian4Button);


    PanelMatkul1.add(ButtonsMatkul1Panel,
java.awt.BorderLayout.CENTER);


    MainContentPanel.add(PanelMatkul1);
```

```java
        PanelMatkul2.setBackground(new java.awt.Color(255, 51,
51));

        PanelMatkul2.setPreferredSize(new java.awt.Dimension(624,
86));

        PanelMatkul2.setLayout(new java.awt.BorderLayout());


        Matkul2TitlePanel.setLayout(new java.awt.GridLayout(1,
0));


        Matkul2TitleLabel.setText("Nama Matkul 2");

        Matkul2TitlePanel.add(Matkul2TitleLabel);


        PanelMatkul2.add(Matkul2TitlePanel,
java.awt.BorderLayout.NORTH);


        ButtonsMatkul2Panel.setLayout(new
java.awt.FlowLayout(java.awt.FlowLayout.LEFT));


        Matkul2Bagian1Button.setText("Bagian1");

        Matkul2Bagian1Button.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                try {

                    Matkul2Bagian1ButtonActionPerformed(evt);

                } catch (SQLException e) {

                    throw new RuntimeException(e);
```

```java
            }

        }

    });

    ButtonsMatkul2Panel.add(Matkul2Bagian1Button);


    Matkul2Bagian2Button.setText("Bagian2");

    Matkul2Bagian2Button.addActionListener(new
java.awt.event.ActionListener() {

        public void actionPerformed(java.awt.event.ActionEvent
evt) {

            try {

                Matkul2Bagian2ButtonActionPerformed(evt);

            } catch (SQLException e) {

                throw new RuntimeException(e);

            }

        }

    });

    ButtonsMatkul2Panel.add(Matkul2Bagian2Button);


    Matkul2Bagian3Button.setText("Bagian3");

    Matkul2Bagian3Button.addActionListener(new
java.awt.event.ActionListener() {

        public void actionPerformed(java.awt.event.ActionEvent
evt) {

            try {

                Matkul2Bagian3ButtonActionPerformed(evt);
```

```java
                } catch (SQLException e) {

                    throw new RuntimeException(e);

                }

            }

        });

        ButtonsMatkul2Panel.add(Matkul2Bagian3Button);


        Matkul2Bagian4Button.setText("Bagian4");

        Matkul2Bagian4Button.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                try {

                    Matkul2Bagian4ButtonActionPerformed(evt);

                } catch (SQLException e) {

                    throw new RuntimeException(e);

                }

            }

        });

        ButtonsMatkul2Panel.add(Matkul2Bagian4Button);


        PanelMatkul2.add(ButtonsMatkul2Panel,
java.awt.BorderLayout.CENTER);


        MainContentPanel.add(PanelMatkul2);
```

```java
        PanelMatkul3.setBackground(new java.awt.Color(0, 255,
102));

        PanelMatkul3.setPreferredSize(new java.awt.Dimension(624,
86));

        PanelMatkul3.setLayout(new java.awt.BorderLayout());


        Matkul3TitlePanel.setLayout(new java.awt.GridLayout(1,
0));


        Matkul3TitleLabel.setText("Nama Matkul 3");

        Matkul3TitlePanel.add(Matkul3TitleLabel);


        PanelMatkul3.add(Matkul3TitlePanel,
java.awt.BorderLayout.NORTH);


        ButtonsMatkul3Panel.setLayout(new
java.awt.FlowLayout(java.awt.FlowLayout.LEFT));


        Matkul3Bagian1Button.setText("Bagian1");

        Matkul3Bagian1Button.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                try {

                    Matkul3Bagian1ButtonActionPerformed(evt);

                } catch (SQLException e) {

                    throw new RuntimeException(e);
```

```java
                }

            }

        });

        ButtonsMatkul3Panel.add(Matkul3Bagian1Button);


        Matkul3Bagian2Button.setText("Bagian2");

        Matkul3Bagian2Button.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                try {

                    Matkul3Bagian2ButtonActionPerformed(evt);

                } catch (SQLException e) {

                    throw new RuntimeException(e);

                }

            }

        });

        ButtonsMatkul3Panel.add(Matkul3Bagian2Button);


        Matkul3Bagian3Button.setText("Bagian3");

        Matkul3Bagian3Button.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                try {

                    Matkul3Bagian3ButtonActionPerformed(evt);
```

```java
                } catch (SQLException e) {

                    throw new RuntimeException(e);

                }

            }

        });

        ButtonsMatkul3Panel.add(Matkul3Bagian3Button);


        Matkul3Bagian4Button.setText("Bagian4");

        Matkul3Bagian4Button.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                try {

                    Matkul3Bagian4ButtonActionPerformed(evt);

                } catch (SQLException e) {

                    throw new RuntimeException(e);

                }

            }

        });

        ButtonsMatkul3Panel.add(Matkul3Bagian4Button);


        PanelMatkul3.add(ButtonsMatkul3Panel,
java.awt.BorderLayout.CENTER);


        MainContentPanel.add(PanelMatkul3);
```

```java
        PanelMatkul4.setBackground(new java.awt.Color(102, 102,
255));

        PanelMatkul4.setPreferredSize(new java.awt.Dimension(624,
86));

        PanelMatkul4.setLayout(new java.awt.BorderLayout());


        Matkul4TitlePanel.setLayout(new java.awt.GridLayout(1,
0));


        Matkul4TitleLabel.setText("Nama Matkul 4");

        Matkul4TitlePanel.add(Matkul4TitleLabel);


        PanelMatkul4.add(Matkul4TitlePanel,
java.awt.BorderLayout.NORTH);


        ButtonsMatkul4Panel.setLayout(new
java.awt.FlowLayout(java.awt.FlowLayout.LEFT));


        Matkul4Bagian1Button.setText("Bagian1");

        Matkul4Bagian1Button.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                try {

                    Matkul4Bagian1ButtonActionPerformed(evt);

                } catch (SQLException e) {

                    throw new RuntimeException(e);
```

```java
                }

            }

        });

        ButtonsMatkul4Panel.add(Matkul4Bagian1Button);


        Matkul4Bagian2Button.setText("Bagian2");

        Matkul4Bagian2Button.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                try {

                    Matkul4Bagian2ButtonActionPerformed(evt);

                } catch (SQLException e) {

                    throw new RuntimeException(e);

                }

            }

        });

        ButtonsMatkul4Panel.add(Matkul4Bagian2Button);


        Matkul4Bagian3Button.setText("Bagian3");

        Matkul4Bagian3Button.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                try {

                    Matkul4Bagian3ButtonActionPerformed(evt);
```

```java
            } catch (SQLException e) {

                throw new RuntimeException(e);

            }

        }

    });

    ButtonsMatkul4Panel.add(Matkul4Bagian3Button);


    Matkul4Bagian4Button.setText("Bagian4");

    Matkul4Bagian4Button.addActionListener(new
java.awt.event.ActionListener() {

        public void actionPerformed(java.awt.event.ActionEvent
evt) {

            try {

                Matkul4Bagian4ButtonActionPerformed(evt);

            } catch (SQLException e) {

                throw new RuntimeException(e);

            }

        }

    });

    ButtonsMatkul4Panel.add(Matkul4Bagian4Button);


    PanelMatkul4.add(ButtonsMatkul4Panel,
java.awt.BorderLayout.CENTER);


    MainContentPanel.add(PanelMatkul4);
```

```java
        getContentPane().add(MainContentPanel,
java.awt.BorderLayout.CENTER);


        setSize(new java.awt.Dimension(638, 450));

        setLocationRelativeTo(null);

    }// </editor-fold>//GEN-END:initComponents


    private void
Matkul2Bagian3ButtonActionPerformed(java.awt.event.ActionEvent
evt) throws SQLException{//GEN-
FIRST:event_Matkul2Bagian3ButtonActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Matkul2Bagian3Button){

            matkulId = 2;

            bagianId = 3;

            AnyButtonPressed(evt);

        }

    }//GEN-LAST:event_Matkul2Bagian3ButtonActionPerformed


    private void
Matkul1Bagian1ButtonActionPerformed(java.awt.event.ActionEvent
evt) throws SQLException{//GEN-
FIRST:event_Matkul1Bagian1ButtonActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Matkul1Bagian1Button){

            matkulId = 1;

            bagianId = 1;
```

```java
            AnyButtonPressed(evt);

        }

    }//GEN-LAST:event_Matkul1Bagian1ButtonActionPerformed


    private void
Matkul1Bagian2ButtonActionPerformed(java.awt.event.ActionEvent
evt) throws SQLException{//GEN-
FIRST:event_Matkul1Bagian2ButtonActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Matkul1Bagian2Button){

            matkulId = 1;

            bagianId = 2;

            AnyButtonPressed(evt);

        }

    }//GEN-LAST:event_Matkul1Bagian2ButtonActionPerformed


    private void
Matkul1Bagian3ButtonActionPerformed(java.awt.event.ActionEvent
evt) throws SQLException{//GEN-
FIRST:event_Matkul1Bagian3ButtonActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Matkul1Bagian3Button){

            matkulId = 1;

            bagianId = 3;

            AnyButtonPressed(evt);

        }

    }//GEN-LAST:event_Matkul1Bagian3ButtonActionPerformed
```

```java
    private void
Matkul1Bagian4ButtonActionPerformed(java.awt.event.ActionEvent
evt) throws SQLException{//GEN-
FIRST:event_Matkul1Bagian4ButtonActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Matkul1Bagian4Button){

            matkulId = 1;

            bagianId = 4;

            AnyButtonPressed(evt);

        }

    }//GEN-LAST:event_Matkul1Bagian4ButtonActionPerformed


    private void
Matkul2Bagian1ButtonActionPerformed(java.awt.event.ActionEvent
evt)throws SQLException{//GEN-
FIRST:event_Matkul2Bagian1ButtonActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Matkul2Bagian1Button){

            matkulId = 2;

            bagianId = 1;

            AnyButtonPressed(evt);

        }

    }//GEN-LAST:event_Matkul2Bagian1ButtonActionPerformed


    private void
Matkul2Bagian2ButtonActionPerformed(java.awt.event.ActionEvent
```

```java
evt) throws SQLException{//GEN-
FIRST:event_Matkul2Bagian2ButtonActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Matkul2Bagian2Button){

            matkulId = 2;

            bagianId = 2;

            AnyButtonPressed(evt);

        }

    }//GEN-LAST:event_Matkul2Bagian2ButtonActionPerformed


    private void
Matkul2Bagian4ButtonActionPerformed(java.awt.event.ActionEvent
evt) throws SQLException{//GEN-
FIRST:event_Matkul2Bagian4ButtonActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Matkul2Bagian4Button){

            matkulId = 2;

            bagianId = 4;

            AnyButtonPressed(evt);

        }

    }//GEN-LAST:event_Matkul2Bagian4ButtonActionPerformed


    private void
Matkul3Bagian1ButtonActionPerformed(java.awt.event.ActionEvent
evt) throws SQLException {//GEN-
FIRST:event_Matkul3Bagian1ButtonActionPerformed

        // TODO add your handling code here:
```

```java
        if(evt.getSource()==Matkul3Bagian1Button){

            matkulId = 3;

            bagianId = 1;

            AnyButtonPressed(evt);

        }

    }//GEN-LAST:event_Matkul3Bagian1ButtonActionPerformed


    private void
Matkul3Bagian2ButtonActionPerformed(java.awt.event.ActionEvent
evt) throws SQLException {//GEN-
FIRST:event_Matkul3Bagian2ButtonActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Matkul3Bagian2Button){

            matkulId = 3;

            bagianId = 2;

            AnyButtonPressed(evt);

        }

    }//GEN-LAST:event_Matkul3Bagian2ButtonActionPerformed


    private void
Matkul3Bagian3ButtonActionPerformed(java.awt.event.ActionEvent
evt) throws SQLException {//GEN-
FIRST:event_Matkul3Bagian3ButtonActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Matkul3Bagian3Button){

            matkulId = 3;

            bagianId = 3;
```

```java
            AnyButtonPressed(evt);

        }

    }//GEN-LAST:event_Matkul3Bagian3ButtonActionPerformed


    private void
Matkul3Bagian4ButtonActionPerformed(java.awt.event.ActionEvent
evt) throws SQLException {//GEN-
FIRST:event_Matkul3Bagian4ButtonActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Matkul3Bagian4Button){

            matkulId = 3;

            bagianId = 4;

            AnyButtonPressed(evt);

        }

    }//GEN-LAST:event_Matkul3Bagian4ButtonActionPerformed


    private void
Matkul4Bagian1ButtonActionPerformed(java.awt.event.ActionEvent
evt) throws SQLException {//GEN-
FIRST:event_Matkul4Bagian1ButtonActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Matkul4Bagian1Button){

            matkulId = 4;

            bagianId = 1;

            AnyButtonPressed(evt);

        }

    }//GEN-LAST:event_Matkul4Bagian1ButtonActionPerformed
```

```java
    private void
Matkul4Bagian2ButtonActionPerformed(java.awt.event.ActionEvent
evt) throws SQLException {//GEN-
FIRST:event_Matkul4Bagian2ButtonActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Matkul4Bagian2Button){

            matkulId = 4;

            bagianId = 2;

            AnyButtonPressed(evt);

        }

    }//GEN-LAST:event_Matkul4Bagian2ButtonActionPerformed


    private void
Matkul4Bagian3ButtonActionPerformed(java.awt.event.ActionEvent
evt) throws SQLException {//GEN-
FIRST:event_Matkul4Bagian3ButtonActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Matkul4Bagian3Button){

            matkulId = 4;

            bagianId = 3;

            AnyButtonPressed(evt);

        }

    }//GEN-LAST:event_Matkul4Bagian3ButtonActionPerformed


    private void
Matkul4Bagian4ButtonActionPerformed(java.awt.event.ActionEvent
```

```java
evt) throws SQLException {//GEN-
FIRST:event_Matkul4Bagian4ButtonActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Matkul4Bagian4Button){

            matkulId = 4;

            bagianId = 4;

            AnyButtonPressed(evt);

        }

    }//GEN-LAST:event_Matkul4Bagian4ButtonActionPerformed


    private void AnyButtonPressed(java.awt.event.ActionEvent evt)
throws SQLException {

        this.setVisible(false);

        flag = true;

        new MainFrame(this.matkulId,
this.bagianId).setVisible(true);

//        System.out.println(matkulId + " " + bagianId);

    }

    /**

     * @param args the command line arguments

     */


    // Variables declaration - do not modify//GEN-BEGIN:variables

    private javax.swing.JPanel ButtonsMatkul1Panel;

    private javax.swing.JPanel ButtonsMatkul2Panel;

    private javax.swing.JPanel ButtonsMatkul3Panel;
```

```java
    private javax.swing.JPanel ButtonsMatkul4Panel;

    private javax.swing.JPanel MainContentPanel;

    private javax.swing.JButton Matkul1Bagian1Button;

    private javax.swing.JButton Matkul1Bagian2Button;

    private javax.swing.JButton Matkul1Bagian3Button;

    private javax.swing.JButton Matkul1Bagian4Button;

    private javax.swing.JLabel Matkul1TitleLabel;

    private javax.swing.JPanel Matkul1TitlePanel;

    private javax.swing.JButton Matkul2Bagian1Button;

    private javax.swing.JButton Matkul2Bagian2Button;

    private javax.swing.JButton Matkul2Bagian3Button;

    private javax.swing.JButton Matkul2Bagian4Button;

    private javax.swing.JLabel Matkul2TitleLabel;

    private javax.swing.JPanel Matkul2TitlePanel;

    private javax.swing.JButton Matkul3Bagian1Button;

    private javax.swing.JButton Matkul3Bagian2Button;

    private javax.swing.JButton Matkul3Bagian3Button;

    private javax.swing.JButton Matkul3Bagian4Button;

    private javax.swing.JLabel Matkul3TitleLabel;

    private javax.swing.JPanel Matkul3TitlePanel;

    private javax.swing.JButton Matkul4Bagian1Button;

    private javax.swing.JButton Matkul4Bagian2Button;

    private javax.swing.JButton Matkul4Bagian3Button;

    private javax.swing.JButton Matkul4Bagian4Button;

    private javax.swing.JLabel Matkul4TitleLabel;
```

```java
    private javax.swing.JPanel Matkul4TitlePanel;

    private javax.swing.JPanel PanelMatkul1;

    private javax.swing.JPanel PanelMatkul2;

    private javax.swing.JPanel PanelMatkul3;

    private javax.swing.JPanel PanelMatkul4;

    private javax.swing.JLabel TitleLabel;

    private javax.swing.JPanel titlePanel;

    // End of variables declaration//GEN-END:variables

}
```

MainFrame.java

```java
/*
 * Click
nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-
default.txt to change this license
 * Click
nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to
edit this template
 */
package com.mycompany.mavenproject1;


import java.awt.*;

import java.sql.SQLException;


/**
```

```java
 *
 * @author Afei
 */
public class MainFrame extends javax.swing.JFrame {

    int numberPosition = 0;

    databaseConnection dbConnector = new databaseConnection();

    String [][] ArraySoaldanJawaban;

    String [] ArrayOfAnswers = new String[16];

    Boolean [] ArrayOfAnswerStatus = new Boolean[16];

    SelectMatkulDanBabFrame selectFrame = new
SelectMatkulDanBabFrame();

    public MainFrame(){


    }

    public MainFrame(int matkulId, int bagianId) throws
SQLException {

        this.setLocationRelativeTo(null);

        this.setResizable(false);

        if(matkulId == 1){

            if(bagianId == 1) this.ArraySoaldanJawaban =
this.dbConnector.ImportSoaldanJawabanMatkul1Bagian1();

            else if(bagianId == 2) this.ArraySoaldanJawaban =
this.dbConnector.ImportSoaldanJawabanMatkul1Bagian2();

            else if(bagianId == 3) this.ArraySoaldanJawaban =
this.dbConnector.ImportSoaldanJawabanMatkul1Bagian3();

            else if(bagianId == 4) this.ArraySoaldanJawaban =
this.dbConnector.ImportSoaldanJawabanMatkul1Bagian4();
```

```
        }

        else if(matkulId == 2){

            if(bagianId == 1) this.ArraySoaldanJawaban =
this.dbConnector.ImportSoaldanJawabanMatkul2Bagian1();

            else if(bagianId == 2) this.ArraySoaldanJawaban =
this.dbConnector.ImportSoaldanJawabanMatkul2Bagian2();

            else if(bagianId == 3) this.ArraySoaldanJawaban =
this.dbConnector.ImportSoaldanJawabanMatkul2Bagian3();

            else if(bagianId == 4) this.ArraySoaldanJawaban =
this.dbConnector.ImportSoaldanJawabanMatkul2Bagian4();

        }

        else if(matkulId == 3){

            if(bagianId == 1) this.ArraySoaldanJawaban =
this.dbConnector.ImportSoaldanJawabanMatkul3Bagian1();

            else if(bagianId == 2) this.ArraySoaldanJawaban =
this.dbConnector.ImportSoaldanJawabanMatkul3Bagian2();

            else if(bagianId == 3) this.ArraySoaldanJawaban =
this.dbConnector.ImportSoaldanJawabanMatkul3Bagian3();

            else if(bagianId == 4) this.ArraySoaldanJawaban =
this.dbConnector.ImportSoaldanJawabanMatkul3Bagian4();

        }

        else if(matkulId == 4){

            if(bagianId == 1) this.ArraySoaldanJawaban =
this.dbConnector.ImportSoaldanJawabanMatkul4Bagian1();

            else if(bagianId == 2) this.ArraySoaldanJawaban =
this.dbConnector.ImportSoaldanJawabanMatkul4Bagian2();

            else if(bagianId == 3) this.ArraySoaldanJawaban =
this.dbConnector.ImportSoaldanJawabanMatkul4Bagian3();
```

```java
        else if(bagianId == 4) this.ArraySoaldanJawaban =
this.dbConnector.ImportSoaldanJawabanMatkul4Bagian4();

        }


        for(int i=0; i<16; i++){

            ArrayOfAnswerStatus[i] = false;

            ArrayOfAnswers[i] = "";

        }

        initComponents();


    }


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

        java.awt.GridBagConstraints gridBagConstraints;


        jDialog1 = new javax.swing.JDialog();

        PanelJudul = new javax.swing.JPanel();

        LabelJudulUtama = new javax.swing.JLabel();

        PanelUtamaDaftarSoal = new javax.swing.JPanel();

        PanelJudulDaftarSoal = new javax.swing.JPanel();

        LabelJudulDaftarSoal = new javax.swing.JLabel();

        PanelDaftarSoal = new javax.swing.JPanel();

        Soal1 = new javax.swing.JButton();
```

```java
        Soal2 = new javax.swing.JButton();

        Soal3 = new javax.swing.JButton();

        Soal4 = new javax.swing.JButton();

        Soal5 = new javax.swing.JButton();

        Soal6 = new javax.swing.JButton();

        Soal7 = new javax.swing.JButton();

        Soal8 = new javax.swing.JButton();

        Soal9 = new javax.swing.JButton();

        Soal10 = new javax.swing.JButton();

        Soal11 = new javax.swing.JButton();

        Soal12 = new javax.swing.JButton();

        Soal13 = new javax.swing.JButton();

        Soal14 = new javax.swing.JButton();

        Soal15 = new javax.swing.JButton();

        Soal16 = new javax.swing.JButton();

        PanelPreviousNextFinish = new javax.swing.JPanel();

        PanelNext = new javax.swing.JPanel();

        JudulNextButton = new javax.swing.JLabel();

        NextButton = new javax.swing.JButton();

        PanelPrevious = new javax.swing.JPanel();

        JudulPreviousButton = new javax.swing.JLabel();

        PreviousButton = new javax.swing.JButton();

        PanelFinish = new javax.swing.JPanel();

        JudulFinishButton = new javax.swing.JLabel();

        FinishButton = new javax.swing.JButton();
```

```java
PanelUtamaSoaldanPilihan = new javax.swing.JPanel();

PanelSoal = new javax.swing.JPanel();

LabelSoal = new javax.swing.JLabel();

PanelUtamaPilihan = new javax.swing.JPanel();

PanelUtamaPilihan1 = new javax.swing.JPanel();

PanelButtonPilihan1 = new javax.swing.JPanel();

ButtonPilihan1 = new javax.swing.JButton();

PanelJawabanPilihan1 = new javax.swing.JPanel();

LabelPilihan1 = new javax.swing.JLabel();

PanelUtamaPilihan2 = new javax.swing.JPanel();

PanelButtonPilihan2 = new javax.swing.JPanel();

ButtonPilihan2 = new javax.swing.JButton();

PanelJawabanPilihan2 = new javax.swing.JPanel();

LabelPilihan2 = new javax.swing.JLabel();

PanelUtamaPilihan3 = new javax.swing.JPanel();

PanelButtonPilihan3 = new javax.swing.JPanel();

ButtonPilihan3 = new javax.swing.JButton();

PanelJawabanPilihan3 = new javax.swing.JPanel();

LabelJawabanPilihan3 = new javax.swing.JLabel();

PanelUtamaPilihan4 = new javax.swing.JPanel();

PanelButtonPilihan4 = new javax.swing.JPanel();

ButtonPilihan4 = new javax.swing.JButton();

PanelJawabanPilihan4 = new javax.swing.JPanel();

LabelJawabanPilihan4 = new javax.swing.JLabel();
```

```java
        javax.swing.GroupLayout jDialog1Layout = new
javax.swing.GroupLayout(jDialog1.getContentPane());

        jDialog1.getContentPane().setLayout(jDialog1Layout);

        jDialog1Layout.setHorizontalGroup(

jDialog1Layout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.LEADING)

            .addGap(0, 400, Short.MAX_VALUE)

        );

        jDialog1Layout.setVerticalGroup(

jDialog1Layout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.LEADING)

            .addGap(0, 300, Short.MAX_VALUE)

        );

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE
);

        setTitle("QuizWizz");

        setMinimumSize(new java.awt.Dimension(900, 750));

        PanelJudul.setMinimumSize(new java.awt.Dimension(300,
300));

        PanelJudul.setPreferredSize(new java.awt.Dimension(746,
75));

        PanelJudul.setLayout(new java.awt.GridLayout(1, 0));
```

```java
        LabelJudulUtama.setFont(new java.awt.Font("Yu Gothic UI
Semibold", 1, 20)); // NOI18N

LabelJudulUtama.setHorizontalAlignment(javax.swing.SwingConstants.
CENTER);

        LabelJudulUtama.setText("Aplikasi Kuis Seadanya Karena
Kerjanya SKS (Sistem Kebut Semalam)");

        LabelJudulUtama.setMaximumSize(new java.awt.Dimension(200,
100));

        LabelJudulUtama.setMinimumSize(new java.awt.Dimension(100,
100));

        PanelJudul.add(LabelJudulUtama);

        getContentPane().add(PanelJudul,
java.awt.BorderLayout.NORTH);

PanelUtamaDaftarSoal.setDebugGraphicsOptions(javax.swing.DebugGrap
hics.BUFFERED_OPTION);

        PanelUtamaDaftarSoal.setFocusCycleRoot(true);

        PanelUtamaDaftarSoal.setMaximumSize(new
java.awt.Dimension(125, 100));

        PanelUtamaDaftarSoal.setMinimumSize(new
java.awt.Dimension(125, 33));

        PanelUtamaDaftarSoal.setPreferredSize(new
java.awt.Dimension(125, 58));

        PanelUtamaDaftarSoal.setLayout(new
java.awt.BorderLayout());
```

```java
PanelJudulDaftarSoal.setBorder(javax.swing.BorderFactory.createEmp
tyBorder(0, 0, 15, 0));

        PanelJudulDaftarSoal.setMaximumSize(new
java.awt.Dimension(32767, 100));

        PanelJudulDaftarSoal.setPreferredSize(new
java.awt.Dimension(100, 100));

        PanelJudulDaftarSoal.setLayout(new java.awt.GridLayout(1,
0));



        LabelJudulDaftarSoal.setFont(new java.awt.Font("Segoe UI",
1, 14)); // NOI18N


LabelJudulDaftarSoal.setHorizontalAlignment(javax.swing.SwingConst
ants.CENTER);

        LabelJudulDaftarSoal.setText("Question List");


LabelJudulDaftarSoal.setVerticalAlignment(javax.swing.SwingConstan
ts.BOTTOM);


LabelJudulDaftarSoal.setHorizontalTextPosition(javax.swing.SwingCo
nstants.CENTER);

        LabelJudulDaftarSoal.setOpaque(true);

        PanelJudulDaftarSoal.add(LabelJudulDaftarSoal);


        PanelUtamaDaftarSoal.add(PanelJudulDaftarSoal,
java.awt.BorderLayout.NORTH);


        Soal1.setText("1");
```

```java
        Soal1.setFocusable(false);

        Soal1.setPreferredSize(new java.awt.Dimension(50, 23));

        Soal1.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                Soal1ActionPerformed(evt);

            }

        });

        PanelDaftarSoal.add(Soal1);


        Soal2.setText("2");

        Soal2.setFocusable(false);

        Soal2.setPreferredSize(new java.awt.Dimension(50, 23));

        Soal2.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                Soal2ActionPerformed(evt);

            }

        });

        PanelDaftarSoal.add(Soal2);


        Soal3.setText("3");

        Soal3.setFocusable(false);

        Soal3.setPreferredSize(new java.awt.Dimension(50, 23));
```

```java
        Soal3.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                Soal3ActionPerformed(evt);

            }

        });

        PanelDaftarSoal.add(Soal3);


        Soal4.setText("4");

        Soal4.setFocusable(false);

        Soal4.setPreferredSize(new java.awt.Dimension(50, 23));

        Soal4.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                Soal4ActionPerformed(evt);

            }

        });

        PanelDaftarSoal.add(Soal4);


        Soal5.setText("5");

        Soal5.setFocusable(false);

        Soal5.setPreferredSize(new java.awt.Dimension(50, 23));

        Soal5.addActionListener(new
java.awt.event.ActionListener() {
```

```java
        public void actionPerformed(java.awt.event.ActionEvent
evt) {

                Soal5ActionPerformed(evt);

            }

        });

        PanelDaftarSoal.add(Soal5);


        Soal6.setText("6");

        Soal6.setFocusable(false);

        Soal6.setPreferredSize(new java.awt.Dimension(50, 23));

        Soal6.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                Soal6ActionPerformed(evt);

            }

        });

        PanelDaftarSoal.add(Soal6);


        Soal7.setText("7");

        Soal7.setFocusable(false);

        Soal7.setPreferredSize(new java.awt.Dimension(50, 23));

        Soal7.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                Soal7ActionPerformed(evt);
```

```java
        }

    });

    PanelDaftarSoal.add(Soal7);


    Soal8.setText("8");

    Soal8.setFocusable(false);

    Soal8.setPreferredSize(new java.awt.Dimension(50, 23));

    Soal8.addActionListener(new
java.awt.event.ActionListener() {

        public void actionPerformed(java.awt.event.ActionEvent
evt) {

            Soal8ActionPerformed(evt);

        }

    });

    PanelDaftarSoal.add(Soal8);


    Soal9.setText("9");

    Soal9.setFocusable(false);

    Soal9.setPreferredSize(new java.awt.Dimension(50, 23));

    Soal9.addActionListener(new
java.awt.event.ActionListener() {

        public void actionPerformed(java.awt.event.ActionEvent
evt) {

            Soal9ActionPerformed(evt);

        }

    });
```

```java
        PanelDaftarSoal.add(Soal9);


        Soal10.setText("10");

        Soal10.setFocusable(false);

        Soal10.setPreferredSize(new java.awt.Dimension(50, 23));

        Soal10.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                Soal10ActionPerformed(evt);

            }

        });

        PanelDaftarSoal.add(Soal10);


        Soal11.setText("11");

        Soal11.setFocusable(false);

        Soal11.setPreferredSize(new java.awt.Dimension(50, 23));

        Soal11.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                Soal11ActionPerformed(evt);

            }

        });

        PanelDaftarSoal.add(Soal11);
```

```java
        Soal12.setText("12");

        Soal12.setFocusable(false);

        Soal12.setPreferredSize(new java.awt.Dimension(50, 23));

        Soal12.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                Soal12ActionPerformed(evt);

            }

        });

        PanelDaftarSoal.add(Soal12);


        Soal13.setText("13");

        Soal13.setFocusable(false);

        Soal13.setPreferredSize(new java.awt.Dimension(50, 23));

        Soal13.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                Soal13ActionPerformed(evt);

            }

        });

        PanelDaftarSoal.add(Soal13);


        Soal14.setText("14");

        Soal14.setFocusable(false);
```

```java
        Soal14.setPreferredSize(new java.awt.Dimension(50, 23));

        Soal14.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                Soal14ActionPerformed(evt);

            }

        });

        PanelDaftarSoal.add(Soal14);


        Soal15.setText("15");

        Soal15.setFocusable(false);

        Soal15.setPreferredSize(new java.awt.Dimension(50, 23));

        Soal15.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                Soal15ActionPerformed(evt);

            }

        });

        PanelDaftarSoal.add(Soal15);


        Soal16.setText("16");

        Soal16.setFocusable(false);

        Soal16.setPreferredSize(new java.awt.Dimension(50, 23));

        Soal16.addActionListener(new
java.awt.event.ActionListener() {
```

```java
        public void actionPerformed(java.awt.event.ActionEvent
evt) {

                Soal16ActionPerformed(evt);

            }

        });

        PanelDaftarSoal.add(Soal16);


        PanelUtamaDaftarSoal.add(PanelDaftarSoal,
java.awt.BorderLayout.CENTER);



PanelPreviousNextFinish.setBorder(javax.swing.BorderFactory.create
EmptyBorder(0, 0, 45, 0));

        PanelPreviousNextFinish.setLayout(new
java.awt.BorderLayout());



PanelNext.setBorder(javax.swing.BorderFactory.createEmptyBorder(0,
15, 0, 15));

        PanelNext.setLayout(new java.awt.BorderLayout());



JudulNextButton.setHorizontalAlignment(javax.swing.SwingConstants.
CENTER);

        JudulNextButton.setText("Next Button");


JudulNextButton.setHorizontalTextPosition(javax.swing.SwingConstan
ts.CENTER);
```

```java
        PanelNext.add(JudulNextButton,
java.awt.BorderLayout.NORTH);


        NextButton.setText("-->");

        NextButton.setFocusable(false);

        NextButton.setPreferredSize(new java.awt.Dimension(60,
23));

        NextButton.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                NextButtonActionPerformed(evt);

            }

        });

        PanelNext.add(NextButton, java.awt.BorderLayout.CENTER);


        PanelPreviousNextFinish.add(PanelNext,
java.awt.BorderLayout.NORTH);



PanelPrevious.setBorder(javax.swing.BorderFactory.createEmptyBorde
r(0, 15, 0, 15));

        PanelPrevious.setLayout(new java.awt.BorderLayout());



JudulPreviousButton.setHorizontalAlignment(javax.swing.SwingConsta
nts.CENTER);

        JudulPreviousButton.setText("Previous Button");
```

```java
JudulPreviousButton.setHorizontalTextPosition(javax.swing.SwingCon
stants.CENTER);

        PanelPrevious.add(JudulPreviousButton,
java.awt.BorderLayout.NORTH);


        PreviousButton.setText("<--");

        PreviousButton.setFocusable(false);

        PreviousButton.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                PreviousButtonActionPerformed(evt);

            }

        });

        PanelPrevious.add(PreviousButton,
java.awt.BorderLayout.SOUTH);


        PanelPreviousNextFinish.add(PanelPrevious,
java.awt.BorderLayout.CENTER);



PanelFinish.setBorder(javax.swing.BorderFactory.createEmptyBorder(
0, 15, 0, 15));

        PanelFinish.setLayout(new java.awt.BorderLayout());
```

```java
JudulFinishButton.setHorizontalAlignment(javax.swing.SwingConstant
s.CENTER);

        JudulFinishButton.setText("Finish Button");


JudulFinishButton.setHorizontalTextPosition(javax.swing.SwingConst
ants.CENTER);

        PanelFinish.add(JudulFinishButton,
java.awt.BorderLayout.NORTH);



        FinishButton.setText("Fin");

        FinishButton.setFocusable(false);

        FinishButton.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                FinishButtonActionPerformed(evt);

            }

        });

        PanelFinish.add(FinishButton,
java.awt.BorderLayout.SOUTH);



        PanelPreviousNextFinish.add(PanelFinish,
java.awt.BorderLayout.PAGE_END);



        PanelUtamaDaftarSoal.add(PanelPreviousNextFinish,
java.awt.BorderLayout.PAGE_END);
```

```java
        getContentPane().add(PanelUtamaDaftarSoal,
java.awt.BorderLayout.WEST);


        PanelUtamaSoaldanPilihan.setLayout(new
java.awt.BorderLayout());


        PanelSoal.setPreferredSize(new java.awt.Dimension(621,
100));

        PanelSoal.setLayout(new java.awt.GridLayout(1, 0));


        LabelSoal.setFont(new java.awt.Font("Segoe UI", 1, 20));
// NOI18N

        LabelSoal.setText(new String(String.valueOf(numberPosition
+ 1)) + ". " + ArraySoaldanJawaban[0][numberPosition]);


LabelSoal.setBorder(javax.swing.BorderFactory.createEmptyBorder(1,
95, 1, 1));


LabelSoal.setHorizontalTextPosition(javax.swing.SwingConstants.CEN
TER);

        PanelSoal.add(LabelSoal);


        PanelUtamaSoaldanPilihan.add(PanelSoal,
java.awt.BorderLayout.NORTH);


        PanelUtamaPilihan.setCursor(new
java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

        PanelUtamaPilihan.setEnabled(false);
```

```java
        PanelUtamaPilihan.setLayout(new
javax.swing.BoxLayout(PanelUtamaPilihan,
javax.swing.BoxLayout.Y_AXIS));


        PanelUtamaPilihan1.setPreferredSize(new
Dimension(PanelUtamaPilihan1.getWidth(),PanelUtamaPilihan.getHeigh
t()/4));

        PanelUtamaPilihan1.setLayout(new java.awt.BorderLayout());


        PanelButtonPilihan1.setPreferredSize(new
java.awt.Dimension(100, 100));

        PanelButtonPilihan1.setLayout(new
java.awt.GridBagLayout());


        ButtonPilihan1.setText("A");

        ButtonPilihan1.setFocusable(false);


ButtonPilihan1.setHorizontalTextPosition(javax.swing.SwingConstant
s.CENTER);

        ButtonPilihan1.setPreferredSize(new java.awt.Dimension(50,
50));

        ButtonPilihan1.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                ButtonPilihan1ActionPerformed(evt);

            }

        });
```

```java
        PanelButtonPilihan1.add(ButtonPilihan1, new
java.awt.GridBagConstraints());


        PanelUtamaPilihan1.add(PanelButtonPilihan1,
java.awt.BorderLayout.WEST);


        PanelJawabanPilihan1.setLayout(new java.awt.GridLayout(1,
0));


        LabelPilihan1.setFont(new java.awt.Font("Segoe UI", 0,
18)); // NOI18N

LabelPilihan1.setText(ArraySoaldanJawaban[1][numberPosition]);
        LabelPilihan1.setToolTipText("");

LabelPilihan1.setHorizontalTextPosition(javax.swing.SwingConstants
.LEADING);

        PanelJawabanPilihan1.add(LabelPilihan1);


        PanelUtamaPilihan1.add(PanelJawabanPilihan1,
java.awt.BorderLayout.CENTER);


        PanelUtamaPilihan.add(PanelUtamaPilihan1);


        PanelUtamaPilihan2.setPreferredSize(new
Dimension(PanelUtamaPilihan2.getWidth(),PanelUtamaPilihan.getHeigh
t()/4));

        PanelUtamaPilihan2.setLayout(new java.awt.BorderLayout());
```

```java
        PanelButtonPilihan2.setPreferredSize(new
java.awt.Dimension(100, 100));

        PanelButtonPilihan2.setLayout(new
java.awt.GridBagLayout());


        ButtonPilihan2.setText("B");

        ButtonPilihan2.setFocusable(false);


ButtonPilihan2.setHorizontalTextPosition(javax.swing.SwingConstant
s.CENTER);

        ButtonPilihan2.setPreferredSize(new java.awt.Dimension(50,
50));

        ButtonPilihan2.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                ButtonPilihan2ActionPerformed(evt);

            }

        });

        PanelButtonPilihan2.add(ButtonPilihan2, new
java.awt.GridBagConstraints());


        PanelUtamaPilihan2.add(PanelButtonPilihan2,
java.awt.BorderLayout.WEST);


        PanelJawabanPilihan2.setLayout(new java.awt.GridLayout(1,
0));
```

```java
        LabelPilihan2.setFont(new java.awt.Font("Segoe UI", 0,
18)); // NOI18N

LabelPilihan2.setText(ArraySoaldanJawaban[2][numberPosition]);

LabelPilihan2.setHorizontalTextPosition(javax.swing.SwingConstants
.CENTER);

        PanelJawabanPilihan2.add(LabelPilihan2);


        PanelUtamaPilihan2.add(PanelJawabanPilihan2,
java.awt.BorderLayout.CENTER);


        PanelUtamaPilihan.add(PanelUtamaPilihan2);


        PanelUtamaPilihan3.setPreferredSize(new
Dimension(PanelUtamaPilihan3.getWidth(),PanelUtamaPilihan.getHeigh
t()/4));

        PanelUtamaPilihan3.setLayout(new java.awt.BorderLayout());


        PanelButtonPilihan3.setPreferredSize(new
java.awt.Dimension(100, 100));

        PanelButtonPilihan3.setLayout(new
java.awt.GridBagLayout());


        ButtonPilihan3.setText("C");

        ButtonPilihan3.setFocusable(false);
```

```java
ButtonPilihan3.setHorizontalTextPosition(javax.swing.SwingConstant
s.CENTER);

        ButtonPilihan3.setPreferredSize(new java.awt.Dimension(50,
50));

        ButtonPilihan3.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                ButtonPilihan3ActionPerformed(evt);

            }

        });

        gridBagConstraints = new java.awt.GridBagConstraints();

        gridBagConstraints.gridx = 0;

        gridBagConstraints.gridy = 0;

        gridBagConstraints.anchor =
java.awt.GridBagConstraints.NORTHWEST;

        gridBagConstraints.insets = new java.awt.Insets(32, 0, 33,
0);

        PanelButtonPilihan3.add(ButtonPilihan3,
gridBagConstraints);


        PanelUtamaPilihan3.add(PanelButtonPilihan3,
java.awt.BorderLayout.WEST);


        PanelJawabanPilihan3.setLayout(new java.awt.GridLayout(1,
0));
```

```java
        LabelJawabanPilihan3.setFont(new java.awt.Font("Segoe UI",
0, 18)); // NOI18N


LabelJawabanPilihan3.setText(ArraySoaldanJawaban[3][numberPosition
]);


LabelJawabanPilihan3.setHorizontalTextPosition(javax.swing.SwingCo
nstants.CENTER);

        PanelJawabanPilihan3.add(LabelJawabanPilihan3);


        PanelUtamaPilihan3.add(PanelJawabanPilihan3,
java.awt.BorderLayout.CENTER);


        PanelUtamaPilihan.add(PanelUtamaPilihan3);


        PanelUtamaPilihan4.setPreferredSize(new
Dimension(PanelUtamaPilihan4.getWidth(),PanelUtamaPilihan.getHeigh
t()/4));
        PanelUtamaPilihan4.setLayout(new java.awt.BorderLayout());


        PanelButtonPilihan4.setPreferredSize(new
java.awt.Dimension(100, 100));
        PanelButtonPilihan4.setLayout(new
java.awt.GridBagLayout());


        ButtonPilihan4.setText("D");
        ButtonPilihan4.setFocusable(false);
```

```java
ButtonPilihan4.setHorizontalTextPosition(javax.swing.SwingConstant
s.CENTER);

        ButtonPilihan4.setPreferredSize(new java.awt.Dimension(50,
50));

        ButtonPilihan4.addActionListener(new
java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent
evt) {

                ButtonPilihan4ActionPerformed(evt);

            }

        });

        gridBagConstraints = new java.awt.GridBagConstraints();

        gridBagConstraints.gridx = 0;

        gridBagConstraints.gridy = 0;

        gridBagConstraints.anchor =
java.awt.GridBagConstraints.NORTHWEST;

        gridBagConstraints.insets = new java.awt.Insets(31, 0, 31,
0);

        PanelButtonPilihan4.add(ButtonPilihan4,
gridBagConstraints);


        PanelUtamaPilihan4.add(PanelButtonPilihan4,
java.awt.BorderLayout.WEST);


        PanelJawabanPilihan4.setLayout(new java.awt.GridLayout(1,
0));
```

```java
        LabelJawabanPilihan4.setFont(new java.awt.Font("Segoe UI",
0, 18)); // NOI18N

LabelJawabanPilihan4.setText(ArraySoaldanJawaban[4][numberPosition
]);

LabelJawabanPilihan4.setHorizontalTextPosition(javax.swing.SwingCo
nstants.CENTER);

        PanelJawabanPilihan4.add(LabelJawabanPilihan4);


        PanelUtamaPilihan4.add(PanelJawabanPilihan4,
java.awt.BorderLayout.CENTER);


        PanelUtamaPilihan.add(PanelUtamaPilihan4);


        PanelUtamaSoaldanPilihan.add(PanelUtamaPilihan,
java.awt.BorderLayout.CENTER);


        getContentPane().add(PanelUtamaSoaldanPilihan,
java.awt.BorderLayout.CENTER);


        pack();
        setLocationRelativeTo(null);
    }// </editor-fold>//GEN-END:initComponents



    private void Soal5ActionPerformed(java.awt.event.ActionEvent
evt) {//GEN-FIRST:event_Soal5ActionPerformed
```

```java
        if(evt.getSource()==Soal5){

            numberPosition = 4;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_Soal5ActionPerformed


    private void Soal6ActionPerformed(java.awt.event.ActionEvent
evt) {//GEN-FIRST:event_Soal6ActionPerformed

        if(evt.getSource()==Soal6){

            numberPosition = 5;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_Soal6ActionPerformed


    private void Soal12ActionPerformed(java.awt.event.ActionEvent
evt) {//GEN-FIRST:event_Soal12ActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Soal12){

            numberPosition = 11;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_Soal12ActionPerformed


    private void Soal13ActionPerformed(java.awt.event.ActionEvent
evt) {//GEN-FIRST:event_Soal13ActionPerformed

        // TODO add your handling code here:
```

```java
        if(evt.getSource()==Soal13){

            numberPosition = 12;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_Soal13ActionPerformed


    private void Soal15ActionPerformed(java.awt.event.ActionEvent
evt) {//GEN-FIRST:event_Soal15ActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Soal15){

            numberPosition = 14;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_Soal15ActionPerformed


    private void Soal1ActionPerformed(java.awt.event.ActionEvent
evt) {//GEN-FIRST:event_Soal1ActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Soal1){

            numberPosition = 0;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_Soal1ActionPerformed


    private void Soal2ActionPerformed(java.awt.event.ActionEvent
evt) {//GEN-FIRST:event_Soal2ActionPerformed
```

```java
        // TODO add your handling code here:

        if(evt.getSource()==Soal2){

            numberPosition = 1;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_Soal2ActionPerformed


    private void Soal3ActionPerformed(java.awt.event.ActionEvent
evt) {//GEN-FIRST:event_Soal3ActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Soal3){

            numberPosition = 2;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_Soal3ActionPerformed


    private void Soal4ActionPerformed(java.awt.event.ActionEvent
evt) {//GEN-FIRST:event_Soal4ActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Soal4){

            numberPosition = 3;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_Soal4ActionPerformed
```

```java
    private void Soal7ActionPerformed(java.awt.event.ActionEvent
evt) {//GEN-FIRST:event_Soal7ActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Soal7){

            numberPosition = 6;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_Soal7ActionPerformed


    private void Soal8ActionPerformed(java.awt.event.ActionEvent
evt) {//GEN-FIRST:event_Soal8ActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Soal8){

            numberPosition = 7;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_Soal8ActionPerformed


    private void Soal9ActionPerformed(java.awt.event.ActionEvent
evt) {//GEN-FIRST:event_Soal9ActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Soal9){

            numberPosition = 8;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_Soal9ActionPerformed
```

```java
    private void Soal10ActionPerformed(java.awt.event.ActionEvent
evt) {//GEN-FIRST:event_Soal10ActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Soal10){

            numberPosition = 9;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_Soal10ActionPerformed


    private void Soal11ActionPerformed(java.awt.event.ActionEvent
evt) {//GEN-FIRST:event_Soal11ActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Soal11){

            numberPosition = 10;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_Soal11ActionPerformed


    private void Soal14ActionPerformed(java.awt.event.ActionEvent
evt) {//GEN-FIRST:event_Soal14ActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Soal14){

            numberPosition = 13;

            AnyActionPerformed(evt);

        }
```

```java
    }//GEN-LAST:event_Soal14ActionPerformed


    private void Soal16ActionPerformed(java.awt.event.ActionEvent
evt) {//GEN-FIRST:event_Soal16ActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==Soal16){

            numberPosition = 15;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_Soal16ActionPerformed


    private void
ButtonPilihan1ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_ButtonPilihan1ActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==ButtonPilihan1){

            ArrayOfAnswers[numberPosition] = "jawaban1";

            if(!ArrayOfAnswerStatus[numberPosition]){

                ArrayOfAnswerStatus[numberPosition] = true;

            }

            else{

                AnyActionPerformed(evt);

            }

            ButtonPilihan1.setBackground(Color.green);

            ButtonPilihan1.setOpaque(true);

            this.revalidate();
```

```java
        }
    }//GEN-LAST:event_ButtonPilihan1ActionPerformed


    private void
ButtonPilihan2ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_ButtonPilihan2ActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==ButtonPilihan2){

            ArrayOfAnswers[numberPosition] = "jawaban2";

            if(!ArrayOfAnswerStatus[numberPosition]){

                ArrayOfAnswerStatus[numberPosition] = true;

            }

            else{

                AnyActionPerformed(evt);

            }

            ButtonPilihan2.setBackground(Color.green);

            ButtonPilihan2.setOpaque(true);

            this.revalidate();

        }
    }//GEN-LAST:event_ButtonPilihan2ActionPerformed


    private void
ButtonPilihan3ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_ButtonPilihan3ActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==ButtonPilihan3){
```

```java
            ArrayOfAnswers[numberPosition] = "jawaban3";

            if(!ArrayOfAnswerStatus[numberPosition]){

                ArrayOfAnswerStatus[numberPosition] = true;

            }

            else{

                AnyActionPerformed(evt);

            }

            ButtonPilihan3.setBackground(Color.green);

            ButtonPilihan3.setOpaque(true);

            this.revalidate();

        }

    }//GEN-LAST:event_ButtonPilihan3ActionPerformed


    private void
ButtonPilihan4ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_jButton1ActionPerformed

        // TODO add your handling code here:

        if(evt.getSource()==ButtonPilihan4){

            ArrayOfAnswers[numberPosition] = "jawaban4";

            if(!ArrayOfAnswerStatus[numberPosition]){

                ArrayOfAnswerStatus[numberPosition] = true;

            }

            else{

                AnyActionPerformed(evt);

            }

            ButtonPilihan4.setBackground(Color.green);
```

```java
        ButtonPilihan4.setOpaque(true);

        this.revalidate();

    }

    }//GEN-LAST:event_jButton1ActionPerformed


    private void
NextButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_NextButtonActionPerformed

        // TODO add your handling code here:

        if(numberPosition<15){

            numberPosition++;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_NextButtonActionPerformed


    private void
PreviousButtonActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_PreviousButtonActionPerformed

        // TODO add your handling code here:

        if(numberPosition>0){

            numberPosition--;

            AnyActionPerformed(evt);

        }

    }//GEN-LAST:event_PreviousButtonActionPerformed
```

```java
    private void
FinishButtonActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_FinishButtonActionPerformed

        int nilaiTotal = 0;

        for(int i=0; i<16; i++){

if(ArrayOfAnswers[i].equals(ArraySoaldanJawaban[5][i])){

                nilaiTotal += 10;

            }

        }

        int persentase = (nilaiTotal*100)/160;

        ScoreDisplayFrame scoreFrame = new
ScoreDisplayFrame(persentase);

        this.setVisible(false);

        scoreFrame.setVisible(true);

    }//GEN-LAST:event_FinishButtonActionPerformed


    private void AnyActionPerformed(java.awt.event.ActionEvent
evt){

        LabelSoal.setText(new
String(String.valueOf(numberPosition)) + ". " +
ArraySoaldanJawaban[0][numberPosition]);


LabelPilihan1.setText(ArraySoaldanJawaban[1][numberPosition]);


LabelPilihan2.setText(ArraySoaldanJawaban[2][numberPosition]);
```

```java
LabelJawabanPilihan3.setText(ArraySoaldanJawaban[3][numberPosition
]);


LabelJawabanPilihan4.setText(ArraySoaldanJawaban[4][numberPosition
]);


        ButtonPilihan1.setBackground(null);

        ButtonPilihan2.setBackground(null);

        ButtonPilihan3.setBackground(null);

        ButtonPilihan4.setBackground(null);


        if(ArrayOfAnswerStatus[numberPosition]==true){

            if(ArrayOfAnswers[numberPosition] == "jawaban1"){

                ButtonPilihan1.setBackground(Color.green);

                ButtonPilihan1.setOpaque(true);

            }
            else if(ArrayOfAnswers[numberPosition] == "jawaban2"){

                ButtonPilihan2.setBackground(Color.green);

                ButtonPilihan2.setOpaque(true);

            }
            else if(ArrayOfAnswers[numberPosition] == "jawaban3"){

                ButtonPilihan3.setBackground(Color.green);

                ButtonPilihan3.setOpaque(true);

            }
            else if(ArrayOfAnswers[numberPosition] == "jawaban4"){
```

```java
                ButtonPilihan4.setBackground(Color.green);

                ButtonPilihan4.setOpaque(true);

            }

        }

        this.revalidate();

    }

    /**

     * @param args the command line arguments

     */



    // Variables declaration - do not modify//GEN-BEGIN:variables

    private javax.swing.JButton ButtonPilihan1;

    private javax.swing.JButton ButtonPilihan2;

    private javax.swing.JButton ButtonPilihan3;

    private javax.swing.JButton FinishButton;

    private javax.swing.JLabel JudulFinishButton;

    private javax.swing.JLabel JudulNextButton;

    private javax.swing.JLabel JudulPreviousButton;

    private javax.swing.JLabel LabelJawabanPilihan3;

    private javax.swing.JLabel LabelJawabanPilihan4;

    private javax.swing.JLabel LabelJudulDaftarSoal;

    private javax.swing.JLabel LabelJudulUtama;

    private javax.swing.JLabel LabelPilihan1;

    private javax.swing.JLabel LabelPilihan2;

    private javax.swing.JLabel LabelSoal;
```

```java
    private javax.swing.JButton NextButton;

    private javax.swing.JPanel PanelButtonPilihan1;

    private javax.swing.JPanel PanelButtonPilihan2;

    private javax.swing.JPanel PanelButtonPilihan3;

    private javax.swing.JPanel PanelButtonPilihan4;

    private javax.swing.JPanel PanelDaftarSoal;

    private javax.swing.JPanel PanelFinish;

    private javax.swing.JPanel PanelJawabanPilihan1;

    private javax.swing.JPanel PanelJawabanPilihan2;

    private javax.swing.JPanel PanelJawabanPilihan3;

    private javax.swing.JPanel PanelJawabanPilihan4;

    private javax.swing.JPanel PanelJudul;

    private javax.swing.JPanel PanelJudulDaftarSoal;

    private javax.swing.JPanel PanelNext;

    private javax.swing.JPanel PanelPrevious;

    private javax.swing.JPanel PanelPreviousNextFinish;

    private javax.swing.JPanel PanelSoal;

    private javax.swing.JPanel PanelUtamaDaftarSoal;

    private javax.swing.JPanel PanelUtamaPilihan;

    private javax.swing.JPanel PanelUtamaPilihan1;

    private javax.swing.JPanel PanelUtamaPilihan2;

    private javax.swing.JPanel PanelUtamaPilihan3;

    private javax.swing.JPanel PanelUtamaPilihan4;

    private javax.swing.JPanel PanelUtamaSoaldanPilihan;

    private javax.swing.JButton PreviousButton;
```

```java
    private javax.swing.JButton Soal1;

    private javax.swing.JButton Soal10;

    private javax.swing.JButton Soal11;

    private javax.swing.JButton Soal12;

    private javax.swing.JButton Soal13;

    private javax.swing.JButton Soal14;

    private javax.swing.JButton Soal15;

    private javax.swing.JButton Soal16;

    private javax.swing.JButton Soal2;

    private javax.swing.JButton Soal3;

    private javax.swing.JButton Soal4;

    private javax.swing.JButton Soal5;

    private javax.swing.JButton Soal6;

    private javax.swing.JButton Soal7;

    private javax.swing.JButton Soal8;

    private javax.swing.JButton Soal9;

    private javax.swing.JButton ButtonPilihan4;

    private javax.swing.JDialog jDialog1;

    // End of variables declaration//GEN-END:variables

}
```

SCREENSHOT APLIKASI

Login menggunakan akun yang tidak valid / tidak ada di dalam database

**Menu pemilihan matkul, dan bagian-bagiannya**
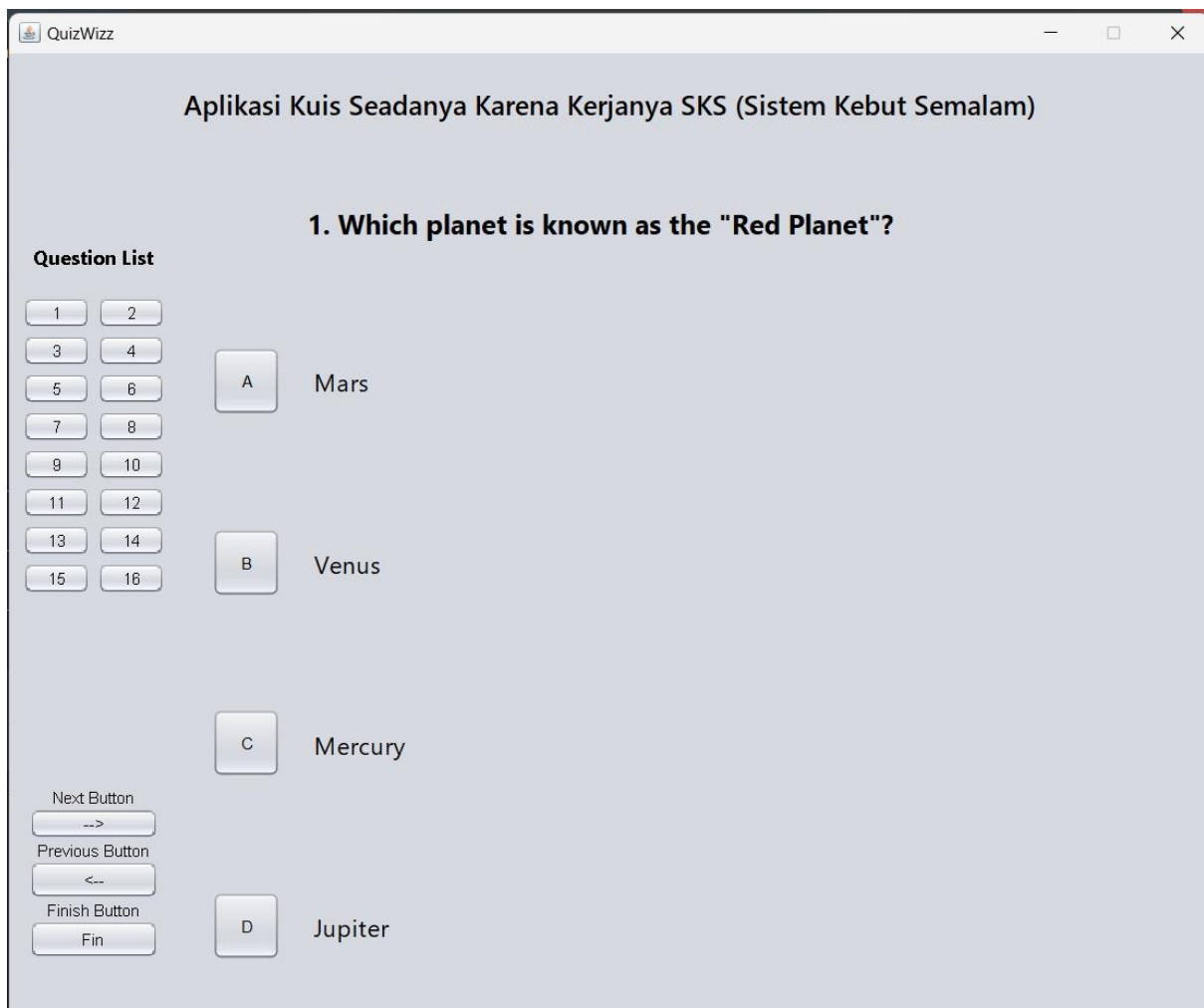
Tampilan utama aplikasi kuis
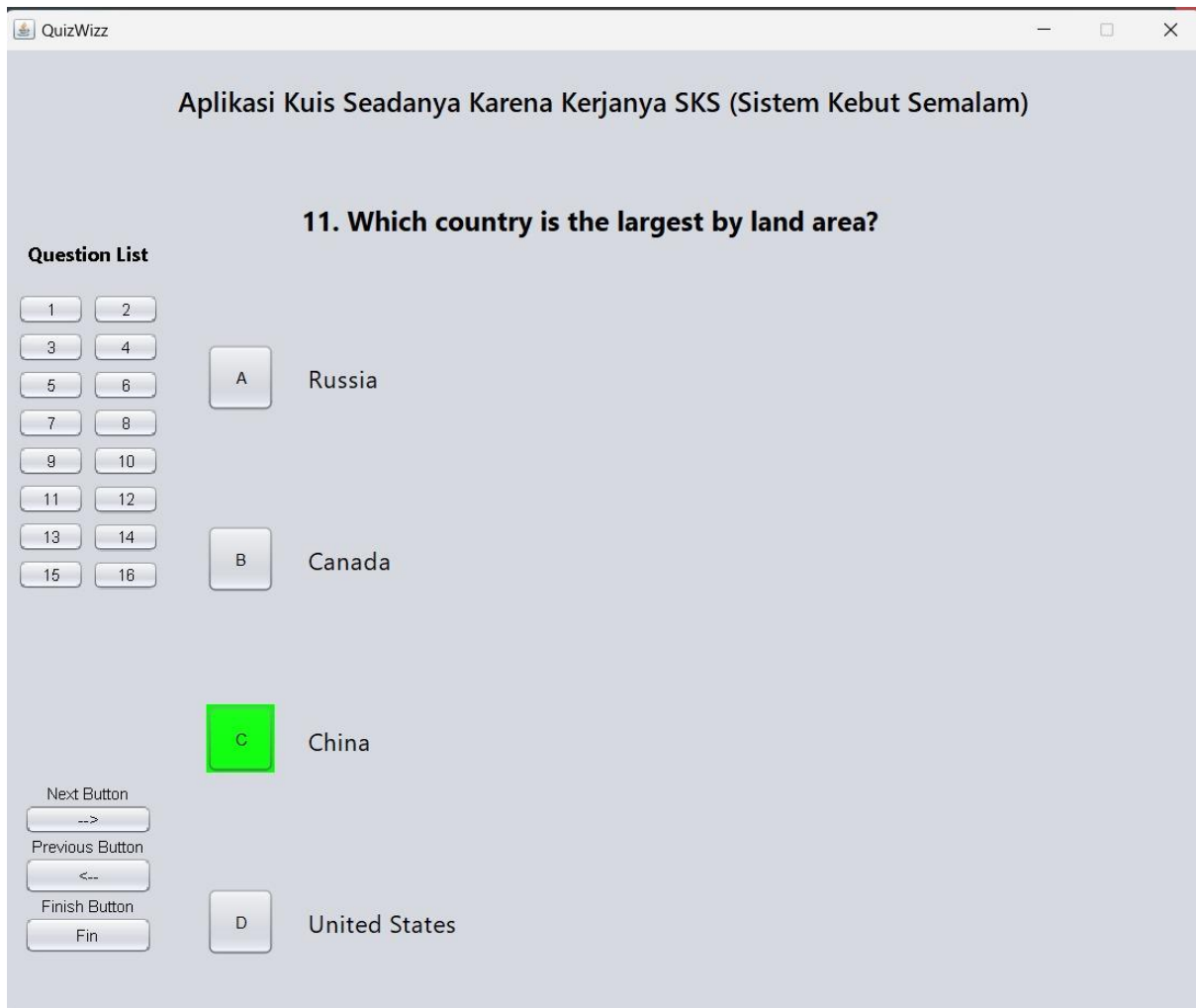
Jawaban yang dipilih, buttonnya akan berubah menjadi warna hijau untuk menandakan bahwa soal tersebut sudah dikerjakan

Tombol next dan previous di kiri bawah adalah untuk berpindah soal

daftar soal pada question list juga bisa digunakan untuk berpindah soal dengan cara menekan button yang sudah dilabeli nomor soal

Tombol Finish di kiri bawah digunakan untuk mengumpulkan kuis yang sudah dikerjakan apabila dirasa sudah selesai
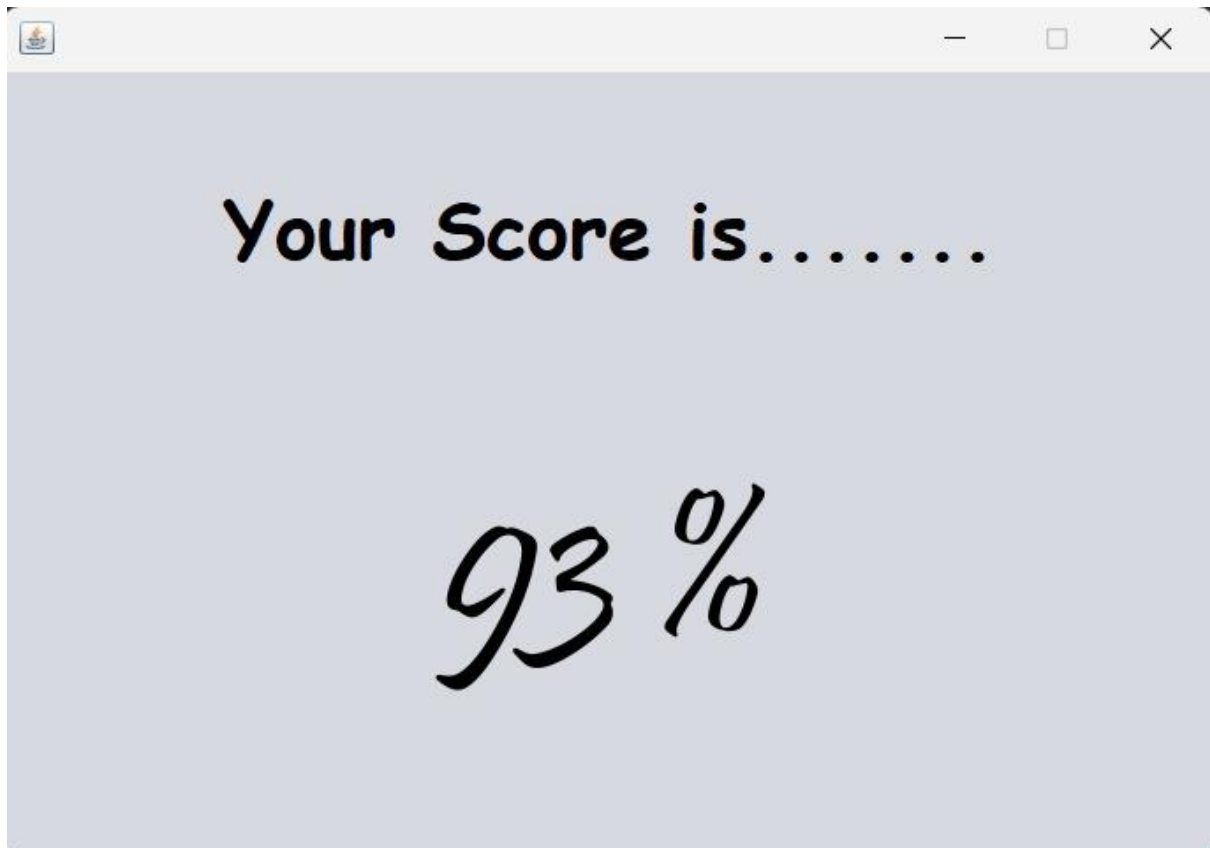
Tampilan skor setelah mengumpulkan jawaban kuis

Ketepatan jawaban dari user akan dihitung dan diubah menjadi persentase yang berperan sebagai nilai performa user dalam mengerjakan quiz yang sudah disediakan