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APLIKASI DATA KARYAWAN

PEMROGRAMAN JAVA LANJUT
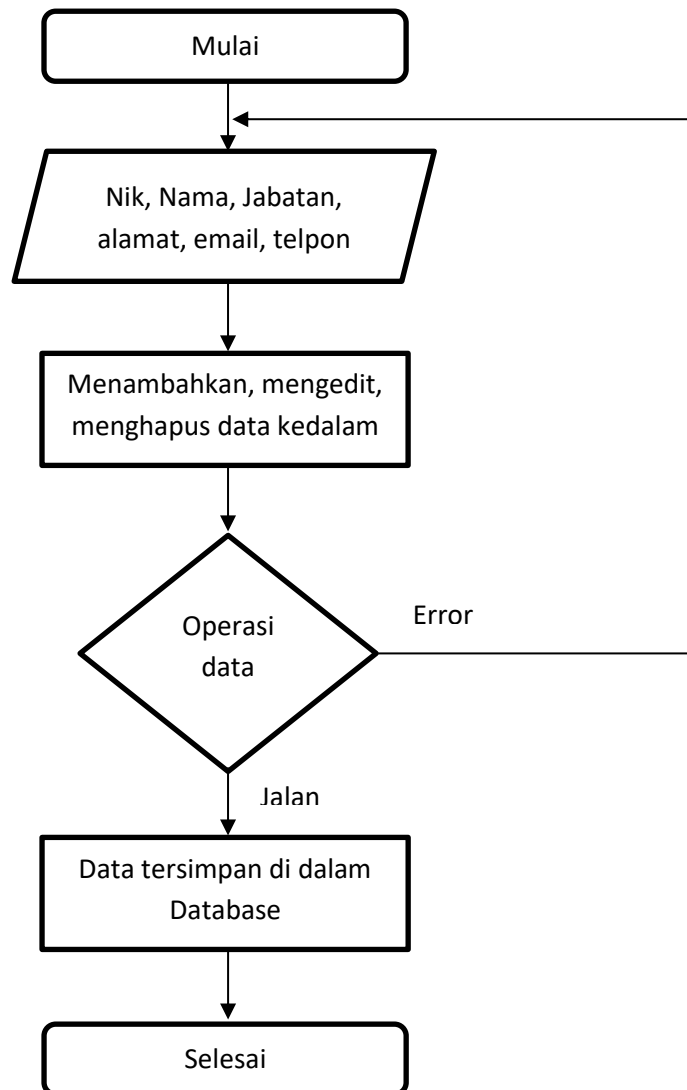
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PROGRAM STUDI TEKNIK INFORMATIKA

FAKULTAS ILMU KOMPUTER

UNIVERSITAS MUSLIM INDONESIA

MAKASSAR

2020

Pendahuluan

Aplikasi ini yang dapat membantu suatu perusahaan ataupun instansi dalam melakukan proses penginputan data karyawan secara terstruktur.

Flow Chart

```
                    ┌─────────────────┐
                    │      Mulai      │
                    └─────────────────┘
                             │
                             ▼
                  ╱───────────────────╲
                 ╱  Nik, Nama, Jabatan, ╲
                ╱   alamat, email, telpon ╲
                 ╲───────────────────────╱
                             │
                             ▼
                    ┌─────────────────┐
                    │ Menambahkan,    │
                    │ mengedit,       │
                    │ menghapus data  │
                    │ kedalam         │
                    └─────────────────┘
                             │
                             ▼
                         ╱───────╲
                        ╱ Operasi ╲      Error
                        ╲  data   ╱─────────────►
                         ╲───────╱
                             │ Jalan
                             ▼
                    ┌─────────────────┐
                    │ Data tersimpan  │
                    │ di dalam        │
                    │ Database        │
                    └─────────────────┘
                             │
                             ▼
                    ┌─────────────────┐
                    │     Selesai     │
                    └─────────────────┘
```

Source Code

- Koneksi ke database

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

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

/**
 *
 * @author Hari Aspriyono
 */
public class Konfig {

    private static Connection MySQLConfig;

    public static Connection configDB()throws SQLException{
        try{
            String url = "jdbc:mysql://localhost:3306/final";
            String user = "root";
            String pass = "";

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

        return MySQLConfig;
    }
}
```

- Pengolahan data Karyawan

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

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

/**
 *
 * @author Hari Aspriyono
 */
public class Karyawan extends javax.swing.JFrame {

    private void kosongkan_form(){
        txtNIK.setEditable(true);
        txtNIK.setText(null);
        txtNama.setText(null);
        cbJabatan.setSelectedItem(this);
        txtAlamat.setText(null);
        txtEmail.setText(null);
        txtTelp.setText(null);
    }
```

```java
30    private void tampilkan_data(){

31
32        DefaultTableModel model = new DefaultTableModel();
33        model.addColumn("No.");
34        model.addColumn("NIP");
35        model.addColumn("Nama Karyawan");
36        model.addColumn("Jabatan");
37        model.addColumn("Alamat");
38        model.addColumn("Email");
39        model.addColumn("No. Telpon");
40
41        try{
42            int no = 1;
43            String sql = "SELECT * FROM karyawan";
44            java.sql.Connection conn = (Connection)Konfig.configDB();
45            java.sql.Statement stm = conn.createStatement();
46            java.sql.ResultSet res = stm.executeQuery(sql);
47
48            while(res.next()){
49                model.addRow(new Object[]{no++,res.getString(1),res.getString(2)
50            }
51            tabelKaryawan.setModel(model);
52        }catch (SQLException e){
53            System.out.println("Error : " + e.getMessage());
54        }
55    }
56
60    public Karyawan() {
61        initComponents();
62        tampilkan_data();
63        kosongkan_form();
64    }
65
66    /**
67     * This method is called from within the constructor to initialize the form.
68     * WARNING: Do NOT modify this code. The content of this method is always
69     * regenerated by the Form Editor.
70     */
71    @SuppressWarnings("unchecked")
72    Generated Code
202
203    private void tbKeluarActionPerformed(java.awt.event.ActionEvent evt) {
204        // TODO add your handling code here:
205        System.exit(0);
206    }
207
208    private void tbTambahActionPerformed(java.awt.event.ActionEvent evt) {
209        // TODO add your handling code here:
210        kosongkan_form();
211    }
212
213    private void tbSimpanActionPerformed(java.awt.event.ActionEvent evt) {
214        // TODO add your handling code here:
215        try{
216            String sql = "INSERT INTO karyawan VALUES ('"+txtNIK.getText()+"','"
217            java.sql.Connection conn = (Connection)Konfig.configDB();
218            java.sql.PreparedStatement pstm = conn.prepareStatement(sql);
219            pstm.execute();
220            JOptionPane.showMessageDialog(null, "Proses Simpan Data Berhasil..")
221            tampilkan_data();
222            kosongkan_form();
223        }catch(HeadlessException | SQLException e){
224            JOptionPane.showMessageDialog(this, e.getMessage());
225        }
226    }
227
228    private void tabelKaryawanMouseClicked(java.awt.event.MouseEvent evt) {
229        // TODO add your handling code here:
230        int baris = tabelKaryawan.rowAtPoint(evt.getPoint());
231        String nik = tabelKaryawan.getValueAt(baris, 1).toString();
232        txtNIK.setText(nik);
233
234        String nama = tabelKaryawan.getValueAt(baris, 2).toString();
235        txtNama.setText(nama);
236
237        String jab = tabelKaryawan.getValueAt(baris, 3).toString();
238        cbJabatan.setSelectedItem(jab);
239
240        String alamat = tabelKaryawan.getValueAt(baris, 4).toString();
241        txtAlamat.setText(alamat);
242
```
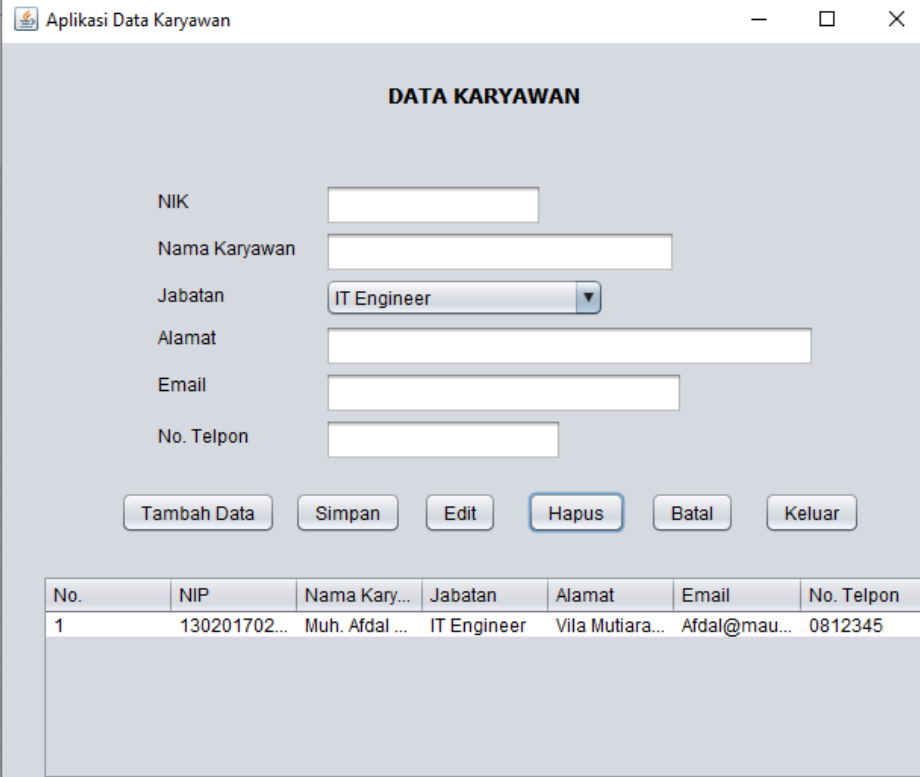
```java
            String email = tabelKaryawan.getValueAt(baris, 5).toString();
            txtEmail.setText(email);

            String telp = tabelKaryawan.getValueAt(baris, 6).toString();
            txtTelp.setText(telp);

        }

    private void tbEditActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        try{
            String sql = "UPDATE karyawan SET nik='"+txtNIK.getText()+"',nama='"
            java.sql.Connection conn = (Connection)Konfig.configDB();
            java.sql.PreparedStatement pstm = conn.prepareStatement(sql);
            pstm.execute();
            JOptionPane.showMessageDialog(null, "Edit Data Berhasil...");
        }catch(HeadlessException | SQLException e){
            JOptionPane.showMessageDialog(this, e.getMessage());
        }
        tampilkan_data();
        kosongkan_form();
    }

    private void tbHapusActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        try{
            String sql = "DELETE FROM karyawan WHERE nik='"+txtNIK.getText()+"'"
            java.sql.Connection conn = (Connection)Konfig.configDB();
            java.sql.PreparedStatement pstm = conn.prepareStatement(sql);
            pstm.execute();

            JOptionPane.showMessageDialog(null, "Hapus Data Berhasil...");
        }catch(HeadlessException | SQLException e){
            JOptionPane.showMessageDialog(this, e.getMessage());
        }
        tampilkan_data();
        kosongkan_form();
    }

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

    /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        Look and feel setting code (optional)

        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new Karyawan().setVisible(true);
            }
        });
    }

    // Variables declaration - do not modify
    private javax.swing.JComboBox<String> cbJabatan;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JLabel jLabel5;
    private javax.swing.JLabel jLabel6;
    private javax.swing.JLabel jLabel7;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTable tabelKaryawan;
    private javax.swing.JButton tbBatal;
    private javax.swing.JButton tbEdit;
    private javax.swing.JButton tbHapus;
    private javax.swing.JButton tbKeluar;
    private javax.swing.JButton tbSimpan;
    private javax.swing.JButton tbTambah;
    private javax.swing.JTextField txtAlamat;
    private javax.swing.JTextField txtEmail;
    private javax.swing.JTextField txtNIK;
    private javax.swing.JTextField txtNama;
    private javax.swing.JTextField txtTelp;
    // End of variables declaration
}
```

- Output

- Kesimpulan

  Aplikasi ini memudahkan bagi perusahaan dalam melakukan pengolahan data kepada setiap karyawan yang terdaftar

- Saran

  Adapun aplikasi di atas masih jauh dari kata sempurna masih banyak keterbatasan dalam pengolahan data, jadi saran dan kritik dari teman-teman sekalian sangat diharapkan guna perkembangan dan kelengkapan dari aplikasi penginputan data karyawan ini

- Daftar Pustaka

  https://www.tutupkurung.com/2018/12/contoh-aplikasi-database-sederhana-java-mysql.html