**PRA TAS**



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import javax.swing.\*;

import java.awt.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

public class frmNilMahasiswa extends JFrame implements ActionListener {

    private JLabel lblNIM, lblNama, lblJenisKelamin, lblMataKuliah, lblNilaiKuis, lblNilaiTugas, lblNilaiTTS, lblNilaiTAS,

            lblTotalNilai, lblNilaiHuruf;

    private JTextField txtNIM, txtNama, txtNilaiKuis, txtNilaiTugas, txtNilaiTTS, txtNilaiTAS, txtTotalNilai, txtNilaiHuruf;

    private JRadioButton rbLakiLaki, rbPerempuan;

    private ButtonGroup bgJenisKelamin;

    private JComboBox<String> cmbMataKuliah;

    private JButton btnHitung, btnTampil;

    private JTextArea txtAreaDetail, txtAreaTampil;

    public frmNilMahasiswa() {

        setTitle("frmNilMahasiswa");

        setSize(600, 400);

        setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

        setLocationRelativeTo(null);

        setLayout(new BorderLayout());

        JPanel panelInput = new JPanel();

        panelInput.setLayout(new GridLayout(14, 2));

        lblNIM = new JLabel("NIM");

        panelInput.add(lblNIM);

        txtNIM = new JTextField();

        panelInput.add(txtNIM);

        lblNama = new JLabel("Nama Mahasiswa");

        panelInput.add(lblNama);

        txtNama = new JTextField();

        panelInput.add(txtNama);

        lblJenisKelamin = new JLabel("Jenis Kelamin");

        panelInput.add(lblJenisKelamin);

        rbLakiLaki = new JRadioButton("Laki-Laki");

        rbPerempuan = new JRadioButton("Perempuan");

        bgJenisKelamin = new ButtonGroup();

        bgJenisKelamin.add(rbLakiLaki);

        bgJenisKelamin.add(rbPerempuan);

        JPanel pnlJenisKelamin = new JPanel();

        pnlJenisKelamin.add(rbLakiLaki);

        pnlJenisKelamin.add(rbPerempuan);

        panelInput.add(pnlJenisKelamin);

        lblMataKuliah = new JLabel("Mata Kuliah");

        panelInput.add(lblMataKuliah);

        String[] mataKuliah = {"pemrograman berorientasi objek", "sistem basis data", "aljabar linier",

                "logika informatika", "algoritma dan struktur data"};

        cmbMataKuliah = new JComboBox<>(mataKuliah);

        panelInput.add(cmbMataKuliah);

        lblNilaiKuis = new JLabel("Nilai Kuis");

        panelInput.add(lblNilaiKuis);

        txtNilaiKuis = new JTextField();

        panelInput.add(txtNilaiKuis);

        lblNilaiTugas = new JLabel("Nilai Tugas");

        panelInput.add(lblNilaiTugas);

        txtNilaiTugas = new JTextField();

        panelInput.add(txtNilaiTugas);

        lblNilaiTTS = new JLabel("Nilai TTS");

        panelInput.add(lblNilaiTTS);

        txtNilaiTTS = new JTextField();

        panelInput.add(txtNilaiTTS);

        lblNilaiTAS = new JLabel("Nilai TAS");

        panelInput.add(lblNilaiTAS);

        txtNilaiTAS = new JTextField();

        panelInput.add(txtNilaiTAS);

        lblTotalNilai = new JLabel("Total Nilai");

        panelInput.add(lblTotalNilai);

        txtTotalNilai = new JTextField();

        txtTotalNilai.setEditable(false);

        panelInput.add(txtTotalNilai);

        lblNilaiHuruf = new JLabel("Nilai Huruf");

        panelInput.add(lblNilaiHuruf);

        txtNilaiHuruf = new JTextField();

        txtNilaiHuruf.setEditable(false);

        panelInput.add(txtNilaiHuruf);

        btnHitung = new JButton("Hitung");

        btnHitung.addActionListener(this);

        panelInput.add(btnHitung);

        btnTampil = new JButton("Tampil");

        btnTampil.addActionListener(this);

        panelInput.add(btnTampil);

        txtAreaDetail = new JTextArea();

        JScrollPane scrollPaneDetail = new JScrollPane(txtAreaDetail);

        JPanel panelTampil = new JPanel(new BorderLayout());

        txtAreaTampil = new JTextArea();

        txtAreaTampil.setEditable(false);

        JScrollPane scrollPaneTampil = new JScrollPane(txtAreaTampil);

        panelTampil.add(scrollPaneTampil, BorderLayout.CENTER);

        JSplitPane splitPane = new JSplitPane(JSplitPane.HORIZONTAL\_SPLIT, scrollPaneDetail, panelTampil);

        splitPane.setDividerLocation(300);

        splitPane.setOneTouchExpandable(true);

        add(panelInput, BorderLayout.WEST);

        add(splitPane, BorderLayout.CENTER);

        setVisible(true);

    }

    @Override

    public void actionPerformed(ActionEvent e) {

        if (e.getSource() == btnHitung) {

            hitungTotalNilai();

        } else if (e.getSource() == btnTampil) {

            tampilkanDataDetail();

        }

    }

    private void hitungTotalNilai() {

        double nilaiKuis = Double.parseDouble(txtNilaiKuis.getText());

        double nilaiTugas = Double.parseDouble(txtNilaiTugas.getText());

        double nilaiTTS = Double.parseDouble(txtNilaiTTS.getText());

        double nilaiTAS = Double.parseDouble(txtNilaiTAS.getText());

        double totalNilai = 0.15 \* nilaiKuis + 0.2 \* nilaiTugas + 0.3 \* nilaiTTS + 0.35 \* nilaiTAS;

        txtTotalNilai.setText(String.valueOf(totalNilai));

        String nilaiHuruf;

        if (totalNilai >= 85) {

            nilaiHuruf = "A";

        } else if (totalNilai >= 70) {

            nilaiHuruf = "B";

        } else if (totalNilai >= 60) {

            nilaiHuruf = "C";

        } else if (totalNilai >= 50) {

            nilaiHuruf = "D";

        } else {

            nilaiHuruf = "E";

        }

        txtNilaiHuruf.setText(nilaiHuruf);

    }

    private void tampilkanDataDetail() {

        String data = "NIM: " + txtNIM.getText() + "\n" +

                "Nama Mahasiswa: " + txtNama.getText() + "\n" +

                "Jenis Kelamin: " + (rbLakiLaki.isSelected() ? "Laki-Laki" : "Perempuan") + "\n" +

                "Mata Kuliah: " + cmbMataKuliah.getSelectedItem() + "\n" +

                "Nilai Kuis: " + txtNilaiKuis.getText() + "\n" +

                "Nilai Tugas: " + txtNilaiTugas.getText() + "\n" +

                "Nilai TTS: " + txtNilaiTTS.getText() + "\n" +

                "Nilai TAS: " + txtNilaiTAS.getText() + "\n" +

                "Total Nilai: " + txtTotalNilai.getText() + "\n" +

                "Nilai Huruf: " + txtNilaiHuruf.getText() + "\n";

        txtAreaDetail.setText(data);

        String tampilData = "NIM: " + txtNIM.getText() + "\n" +

                "Nama Mahasiswa: " + txtNama.getText() + "\n" +

                "Total Nilai: " + txtTotalNilai.getText() + "\n" +

                "Nilai Huruf: " + txtNilaiHuruf.getText() + "\n";

        txtAreaTampil.setText(tampilData);

    }

    public static void main(String[] args) {

        SwingUtilities.invokeLater(new Runnable() {

            @Override

            public void run() {

                new frmNilMahasiswa();

            }

        });

    }

}

