**TUGAS**



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**TEKNIK INFORMATIKA-S1**

**FAKULTAS TEKNIK DAN INFORMATIKA**

**UNIVERSITAS AKI**

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import java.text.DecimalFormat;

import java.text.DecimalFormatSymbols;

import javax.swing.DefaultListModel;

public class frmMataKuliah extends javax.swing.JFrame {

DefaultListModel pilih;

    public frmMataKuliah() {

        initComponents();

        pilih = new DefaultListModel();

        lstPilih.setModel(pilih);

    }

    @SuppressWarnings("unchecked")

    private void initComponents() {

        txtKuliah = new javax.swing.JTextField();

        btnHapus = new javax.swing.JButton();

        jLabel5 = new javax.swing.JLabel();

        cboAngkatan = new javax.swing.JComboBox<String>();

        btnHitung = new javax.swing.JButton();

        jScrollPane3 = new javax.swing.JScrollPane();

        txaResume = new javax.swing.JTextArea();

        btnSelesai = new javax.swing.JButton();

        lblTerpilih = new javax.swing.JLabel();

        jLabel1 = new javax.swing.JLabel();

        jScrollPane1 = new javax.swing.JScrollPane();

        lstMataKuliah = new javax.swing.JList<String>();

        btnCopy = new javax.swing.JButton();

        jLabel2 = new javax.swing.JLabel();

        jScrollPane2 = new javax.swing.JScrollPane();

        lstPilih = new javax.swing.JList<String>();

        jLabel3 = new javax.swing.JLabel();

        jLabel4 = new javax.swing.JLabel();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT\_ON\_CLOSE);

        txtKuliah.setEditable(false);

        txtKuliah.setBackground(new java.awt.Color(255, 255, 255));

        txtKuliah.setBorder(javax.swing.BorderFactory.createBevelBorder(javax.swing.border.BevelBorder.RAISED));

        btnHapus.setBackground(new java.awt.Color(153, 153, 153));

        btnHapus.setText("Hapus MK Terpilih");

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

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

                btnHapusActionPerformed(evt);

            }

        });

        jLabel5.setText("Angkatan");

        cboAngkatan.setModel(new javax.swing.DefaultComboBoxModel(new String[] { "2018", "2019", "2020", "2021", "2022" }));

        btnHitung.setBackground(new java.awt.Color(153, 153, 153));

        btnHitung.setText("Hitung Biaya");

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

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

                btnHitungActionPerformed(evt);

            }

        });

        txaResume.setColumns(20);

        txaResume.setRows(5);

        jScrollPane3.setViewportView(txaResume);

        btnSelesai.setText("Selesai");

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

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

                btnSelesaiActionPerformed(evt);

            }

        });

        lblTerpilih.setBackground(new java.awt.Color(255, 255, 255));

        lblTerpilih.setFont(new java.awt.Font("Segoe UI", 1, 12)); // NOI18N

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

        lblTerpilih.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

        jLabel1.setText("DAFTAR MATA KULIAH");

        lstMataKuliah.setModel(new javax.swing.AbstractListModel() {

            String[] strings = { "Aljabar Linier dan Matriks", "Sistem Basis Data", "Pemrograman Berorientasi Objek", "Kalkulus", "Basis Data Non Relasional", "Pemrograman Basis Data", "Algoritma dan Pemrograman", "Pemrograman Web", "E-Bisnis", "Statistika" };

            public int getSize() { return strings.length; }

            public Object getElementAt(int i) { return strings[i]; }

        });

        lstMataKuliah.addListSelectionListener(new javax.swing.event.ListSelectionListener() {

            public void valueChanged(javax.swing.event.ListSelectionEvent evt) {

                lstMataKuliahValueChanged(evt);

            }

        });

        jScrollPane1.setViewportView(lstMataKuliah);

        btnCopy.setBackground(new java.awt.Color(153, 153, 153));

        btnCopy.setText(">>");

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

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

                btnCopyActionPerformed(evt);

            }

        });

        jLabel2.setText("MATA KULIAH YANG DIPILIH");

        jScrollPane2.setViewportView(lstPilih);

        jLabel3.setText("MATA KULIAH TERPILIH");

        jLabel4.setText("BANYAKNYA MATA KULIAH TERPILIH");

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());

        getContentPane().setLayout(layout);

        layout.setHorizontalGroup(

            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

            .addGroup(layout.createSequentialGroup()

                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                    .addGroup(layout.createSequentialGroup()

                        .addGap(16, 16, 16)

                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

                                .addComponent(txtKuliah)

                                .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

                                .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT\_SIZE, 178, Short.MAX\_VALUE)

                                .addComponent(jLabel3, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

                                .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED\_SIZE, 64, javax.swing.GroupLayout.PREFERRED\_SIZE))

                            .addComponent(cboAngkatan, javax.swing.GroupLayout.PREFERRED\_SIZE, 64, javax.swing.GroupLayout.PREFERRED\_SIZE)))

                    .addGroup(layout.createSequentialGroup()

                        .addContainerGap()

                        .addComponent(btnHitung)

                        .addGap(18, 18, 18)

                        .addComponent(btnSelesai)))

                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                    .addGroup(layout.createSequentialGroup()

                        .addGap(76, 76, 76)

                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                            .addGroup(layout.createSequentialGroup()

                                .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED\_SIZE, 203, javax.swing.GroupLayout.PREFERRED\_SIZE)

                                .addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE))

                            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()

                                .addGap(0, 55, Short.MAX\_VALUE)

                                .addComponent(lblTerpilih, javax.swing.GroupLayout.PREFERRED\_SIZE, 35, javax.swing.GroupLayout.PREFERRED\_SIZE)

                                .addGap(33, 33, 33)

                                .addComponent(btnHapus)

                                .addGap(36, 36, 36))))

                    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()

                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)

                            .addGroup(layout.createSequentialGroup()

                                .addGap(0, 0, Short.MAX\_VALUE)

                                .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED\_SIZE, 249, javax.swing.GroupLayout.PREFERRED\_SIZE))

                            .addGroup(layout.createSequentialGroup()

                                .addComponent(btnCopy, javax.swing.GroupLayout.PREFERRED\_SIZE, 52, javax.swing.GroupLayout.PREFERRED\_SIZE)

                                .addGap(18, 26, Short.MAX\_VALUE)

                                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)

                                    .addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED\_SIZE, 0, Short.MAX\_VALUE)

                                    .addComponent(jScrollPane3, javax.swing.GroupLayout.DEFAULT\_SIZE, 249, Short.MAX\_VALUE))))

                        .addGap(19, 19, 19))))

        );

        layout.setVerticalGroup(

            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

            .addGroup(layout.createSequentialGroup()

                .addGap(14, 14, 14)

                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                    .addComponent(jLabel2, javax.swing.GroupLayout.Alignment.TRAILING)

                    .addComponent(jLabel1))

                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                    .addGroup(layout.createSequentialGroup()

                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                            .addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED\_SIZE, 191, javax.swing.GroupLayout.PREFERRED\_SIZE)

                            .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED\_SIZE, 191, javax.swing.GroupLayout.PREFERRED\_SIZE)))

                    .addGroup(layout.createSequentialGroup()

                        .addGap(89, 89, 89)

                        .addComponent(btnCopy)))

                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

                    .addComponent(jLabel3)

                    .addComponent(jLabel4))

                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                    .addComponent(lblTerpilih, javax.swing.GroupLayout.PREFERRED\_SIZE, 22, javax.swing.GroupLayout.PREFERRED\_SIZE)

                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

                        .addComponent(txtKuliah, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

                        .addComponent(btnHapus)))

                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)

                    .addGroup(layout.createSequentialGroup()

                        .addComponent(jLabel5)

                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

                        .addComponent(cboAngkatan, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

                            .addComponent(btnHitung)

                            .addComponent(btnSelesai)))

                    .addComponent(jScrollPane3, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE))

                .addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE))

        );

        pack();

    }// </editor-fold>

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

        // TODO add your handling code here:

        int index = lstPilih.getSelectedIndex();

        //yang di-remove adalah listData model-nya

        pilih.remove(index);

        int size = pilih.getSize();

        //txtTerpilih.setText(Integer.toString(size));

        lblTerpilih.setText(Integer.toString(size));

    }

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

        // TODO add your handling code here:

        int nPilih = Integer.parseInt(lblTerpilih.getText());

        int i = cboAngkatan.getSelectedIndex();

        String isian = cboAngkatan.getSelectedItem().toString();

        // hitung Biaya

        double nPerMK = 0;

        DecimalFormat kursIndonesia = (DecimalFormat) DecimalFormat.getCurrencyInstance();

        DecimalFormatSymbols formatRp = new DecimalFormatSymbols();

        formatRp.setCurrencySymbol("Rp. ");

        formatRp.setMonetaryDecimalSeparator(',');

        formatRp.setGroupingSeparator('.');

        kursIndonesia.setDecimalFormatSymbols(formatRp);

        switch (i) {

            case 0: nPerMK = 1000000;break;

            case 1: nPerMK = 900000;break;

            case 2: nPerMK = 800000;break;

            case 3: nPerMK = 700000;break;

            default : nPerMK = 500000;

        }

        double nBiaya = nPerMK \* nPilih;

        // Isikan Resume Ke textArea txtResume

        String sResume = "Anda Angkatan : "+isian+"\n"+

        "Banyak Mata Kuliah dipilih :"+

        Integer.toString(nPilih)+"\n"+

        "Biaya Per Mata Kuliah : "+

        //Integer.toString(nPerMK)+"\n"+

        kursIndonesia.format(nPerMK)+"\n"+

        //System.out.printf("Harga Rupiah: %s %n", kursIndonesia.format(harga));

        //"TOTAL BIAYA : "+Integer.toString(nBiaya);

        "TOTAL BIAYA : " + kursIndonesia.format(nBiaya);

        txaResume.setText(sResume);

    }

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

        // TODO add your handling code here:

        dispose();

    }

    private void lstMataKuliahValueChanged(javax.swing.event.ListSelectionEvent evt) {

        String kuliah = lstMataKuliah.getSelectedValue();

        txtKuliah.setText(kuliah);

    }

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

        // TODO add your handling code here:

        // tambahkan tulisan di listKuliah yang dipilih

        // ke dalam ListData Model pilih

        pilih.addElement(lstMataKuliah.getSelectedValue());

        // setelah ditambah, hitung jumlah pilihan

        int size = pilih.getSize();

        //txtTerpilih.setText(Integer.toString(size));

        lblTerpilih.setText(Integer.toString(size));

    }

    /\*\*

     \* @param args the command line arguments

     \*/

    public static void main(String args[]) {

        /\* Set the Nimbus look and feel \*/

        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">

        /\* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.

         \* For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html

         \*/

        try {

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

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

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

                    break;

                }

            }

        } catch (ClassNotFoundException ex) {

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

        } catch (InstantiationException ex) {

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

        } catch (IllegalAccessException ex) {

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

        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

            java.util.logging.Logger.getLogger(frmMataKuliah.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 frmMataKuliah().setVisible(true);

            }

        });

    }

    // Variables declaration - do not modify

    private javax.swing.JButton btnCopy;

    private javax.swing.JButton btnHapus;

    private javax.swing.JButton btnHitung;

    private javax.swing.JButton btnSelesai;

    private javax.swing.JComboBox<String> cboAngkatan;

    private javax.swing.JLabel jLabel1;

    private javax.swing.JLabel jLabel2;

    private javax.swing.JLabel jLabel3;

    private javax.swing.JLabel jLabel4;

    private javax.swing.JLabel jLabel5;

    private javax.swing.JScrollPane jScrollPane1;

    private javax.swing.JScrollPane jScrollPane2;

    private javax.swing.JScrollPane jScrollPane3;

    private javax.swing.JLabel lblTerpilih;

    private javax.swing.JList<String> lstMataKuliah;

    private javax.swing.JList<String> lstPilih;

    private javax.swing.JTextArea txaResume;

    private javax.swing.JTextField txtKuliah;

    // End of variables declaration

}

