DATA VALIDATION DOCUMENTATION

**GCC Project**

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Data Validation task to verify user input and rectify mismatches.

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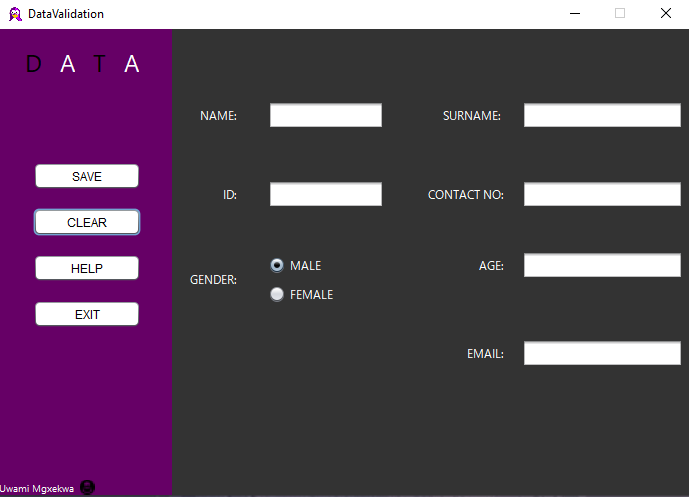
**Length Check** **8**

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## Fields

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name and Type of Field** | **Input Component** | **Reason for Input Component** | Data Validation – Name of Rule (e.g. Format, length, presence, check digit, range, type, logic) | **Reason For Data Validation** |
| Name : String | Text Field | User can enter in their name | Presence Check  Type Check | Name can’t be empty  The name should be in Alphabetical letters. |
| Surname : String | Text Field | User can enter in their surname | Presence Check  Type Check | Surname can’t be empty  The Surname should be in Alphabetical letters. |
| ID : String | Text Field | User can enter in their unique ID | Presence Check  Type Check  Length Check | The ID should be filled in  The ID should have 13 numbers |
| Contact NO. : Integer | Text Field | User can enter in their cell number | Presence Check  Type Check  Length Check | The Cell No. number should be filled in  It should be an integer  Cell No. should be less than 11 digits |
| Age : Integer | Text Field | User can enter in their age | Presence Check  Type Check  Length Check | User should enter valid age below 100 |
| Email : String | Text Field | User can enter in their email | Presence Check  Type Check  Format Check | User should put an E-mail in the field  E-mail should be in the correct format |
| Gender : Boolean | Radio Button | User can choose their gender | Presence Check | User should select one gender |

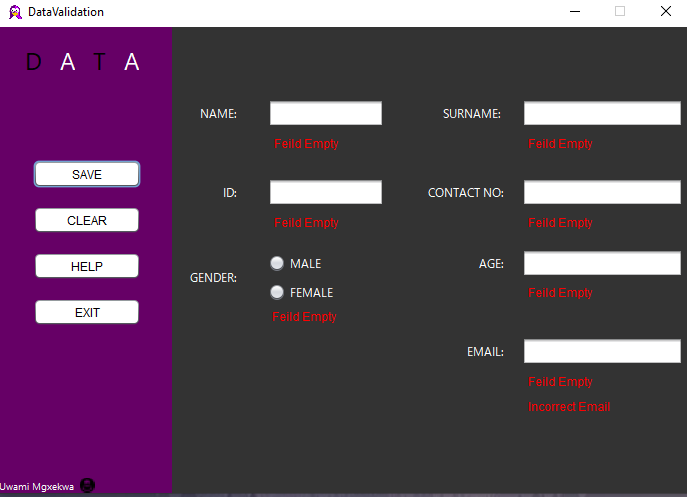
## Before Testing



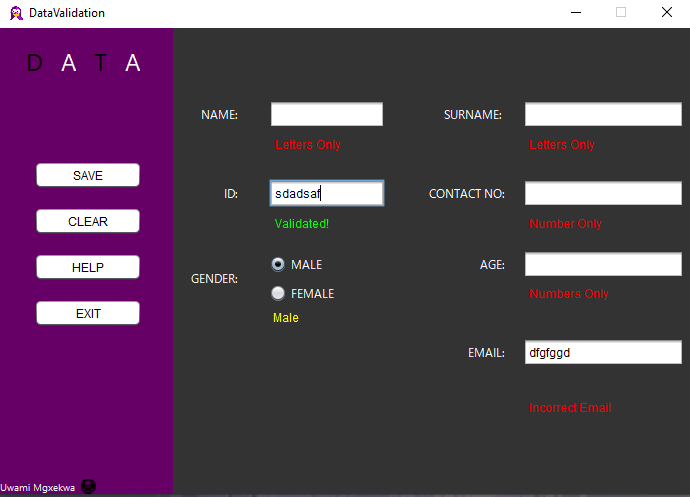
## C:\Users\user\Desktop\JAVA\DataValidation\AfterTesting.PNGAfter Testing

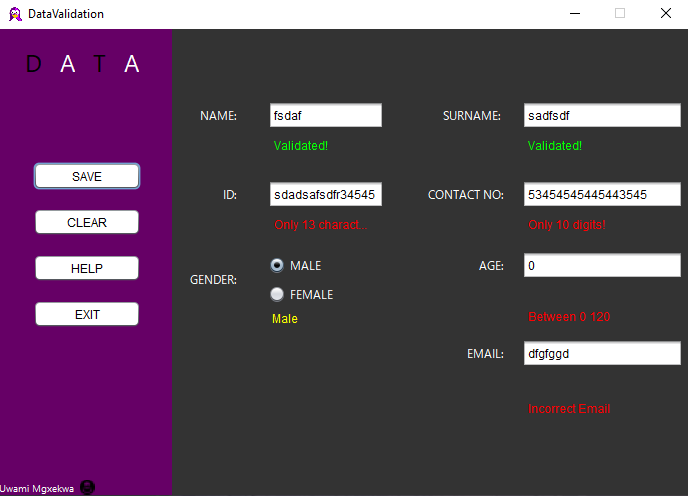
## C:\Users\user\Desktop\JAVA\DataValidation\IfAllInputIsValid.PNGIf All Input Is Valid

Presence Check



Type Check



Length Check

Code

/\*

 \* 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 datavalidation;

import java.awt.Color;

import java.awt.Image;

import static java.lang.Double.parseDouble;

import static java.lang.Integer.parseInt;

import javax.swing.ImageIcon;

import javax.swing.JOptionPane;

/\*\*

 \*

 \* @author user

 \*/

public class ValidationForm extends javax.swing.JFrame {

    /\*\*

     \* Creates new form ValidationForm

     \*/

    public ValidationForm() {

        initComponents();

        Image icon = new ImageIcon("C:/Users/user/Desktop/JAVA/DataValidation/src/datavalidation/peng.png").getImage();

        this.setIconImage(icon);

    }

    /\*\*

     \* 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() {

        jPanel1 = new javax.swing.JPanel();

        jPanel3 = new javax.swing.JPanel();

        jLabel1 = new javax.swing.JLabel();

        validateBtn = new javax.swing.JButton();

        clearBtn = new javax.swing.JButton();

        jLabel4 = new javax.swing.JLabel();

        jLabel5 = new javax.swing.JLabel();

        jLabel6 = new javax.swing.JLabel();

        jLabel7 = new javax.swing.JLabel();

        helpBtn = new javax.swing.JButton();

        jLabel8 = new javax.swing.JLabel();

        exitBtn = new javax.swing.JButton();

        txtName = new javax.swing.JTextField();

        jLabel2 = new javax.swing.JLabel();

        jLabel3 = new javax.swing.JLabel();

        txtSurname = new javax.swing.JTextField();

        lblNameResult = new javax.swing.JLabel();

        lblSurnameResult = new javax.swing.JLabel();

        jLabel9 = new javax.swing.JLabel();

        txtID = new javax.swing.JTextField();

        txtContact = new javax.swing.JTextField();

        jLabel10 = new javax.swing.JLabel();

        lblIDResult = new javax.swing.JLabel();

        lblContactResult = new javax.swing.JLabel();

        maleRadio = new javax.swing.JRadioButton();

        femaleRadio = new javax.swing.JRadioButton();

        jLabel11 = new javax.swing.JLabel();

        jLabel12 = new javax.swing.JLabel();

        txtAge = new javax.swing.JTextField();

        txtEmail = new javax.swing.JTextField();

        jLabel13 = new javax.swing.JLabel();

        lblDOBResult = new javax.swing.JLabel();

        lblGenderResult = new javax.swing.JLabel();

        lblEmail = new javax.swing.JLabel();

        lblNameRadio = new javax.swing.JLabel();

        lblBlank = new javax.swing.JLabel();

        lblAge = new javax.swing.JLabel();

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

        setTitle("DataValidation");

        setResizable(false);

        jPanel1.setBackground(new java.awt.Color(51, 51, 51));

        jPanel3.setBackground(new java.awt.Color(102, 0, 102));

        jLabel1.setBackground(new java.awt.Color(0, 0, 0));

        jLabel1.setFont(new java.awt.Font("Yu Gothic UI", 0, 24)); // NOI18N

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

        jLabel1.setText("D");

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

        validateBtn.setForeground(new java.awt.Color(0, 0, 0));

        validateBtn.setText("SAVE");

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

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

                validateBtnActionPerformed(evt);

            }

        });

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

        clearBtn.setForeground(new java.awt.Color(0, 0, 0));

        clearBtn.setText("CLEAR");

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

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

                clearBtnActionPerformed(evt);

            }

        });

        jLabel4.setBackground(new java.awt.Color(255, 255, 255));

        jLabel4.setFont(new java.awt.Font("Segoe UI", 0, 10)); // NOI18N

        jLabel4.setForeground(new java.awt.Color(255, 255, 255));

        jLabel4.setText("Uwami Mgxekwa");

        jLabel5.setFont(new java.awt.Font("Yu Gothic UI", 0, 24)); // NOI18N

        jLabel5.setForeground(new java.awt.Color(255, 255, 255));

        jLabel5.setText("A");

        jLabel6.setFont(new java.awt.Font("Yu Gothic UI", 0, 24)); // NOI18N

        jLabel6.setForeground(new java.awt.Color(0, 0, 0));

        jLabel6.setText("T");

        jLabel7.setFont(new java.awt.Font("Yu Gothic UI", 0, 24)); // NOI18N

        jLabel7.setForeground(new java.awt.Color(255, 255, 255));

        jLabel7.setText("A");

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

        helpBtn.setForeground(new java.awt.Color(0, 0, 0));

        helpBtn.setText("HELP");

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

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

                helpBtnActionPerformed(evt);

            }

        });

        jLabel8.setIcon(new javax.swing.ImageIcon("C:\\Users\\user\\Desktop\\JAVA\\DataValidation\\src\\datavalidation\\me.png")); // NOI18N

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

        exitBtn.setForeground(new java.awt.Color(0, 0, 0));

        exitBtn.setText("EXIT");

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

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

                exitBtnActionPerformed(evt);

            }

        });

        javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);

        jPanel3.setLayout(jPanel3Layout);

        jPanel3Layout.setHorizontalGroup(

            jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

            .addGroup(jPanel3Layout.createSequentialGroup()

                .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                    .addGroup(jPanel3Layout.createSequentialGroup()

                        .addGap(34, 34, 34)

                        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

                            .addComponent(validateBtn, javax.swing.GroupLayout.DEFAULT\_SIZE, 108, Short.MAX\_VALUE)

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

                            .addComponent(helpBtn, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

                            .addComponent(exitBtn, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)))

                    .addGroup(jPanel3Layout.createSequentialGroup()

                        .addComponent(jLabel4)

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

                        .addComponent(jLabel8))

                    .addGroup(jPanel3Layout.createSequentialGroup()

                        .addGap(26, 26, 26)

                        .addComponent(jLabel1)

                        .addGap(18, 18, 18)

                        .addComponent(jLabel5)

                        .addGap(18, 18, 18)

                        .addComponent(jLabel6)

                        .addGap(18, 18, 18)

                        .addComponent(jLabel7)))

                .addContainerGap(31, Short.MAX\_VALUE))

        );

        jPanel3Layout.setVerticalGroup(

            jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

            .addGroup(jPanel3Layout.createSequentialGroup()

                .addGap(17, 17, 17)

                .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

                    .addComponent(jLabel1)

                    .addComponent(jLabel5)

                    .addComponent(jLabel6)

                    .addComponent(jLabel7))

                .addGap(84, 84, 84)

                .addComponent(validateBtn)

                .addGap(18, 18, 18)

                .addComponent(clearBtn)

                .addGap(18, 18, 18)

                .addComponent(helpBtn)

                .addGap(18, 18, 18)

                .addComponent(exitBtn)

                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 152, Short.MAX\_VALUE)

                .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)

                    .addComponent(jLabel8)

                    .addComponent(jLabel4)))

        );

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

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

                txtNameKeyPressed(evt);

            }

        });

        jLabel2.setFont(new java.awt.Font("Yu Gothic UI", 0, 12)); // NOI18N

        jLabel2.setForeground(new java.awt.Color(255, 255, 255));

        jLabel2.setText("NAME: ");

        jLabel3.setFont(new java.awt.Font("Yu Gothic UI", 0, 12)); // NOI18N

        jLabel3.setForeground(new java.awt.Color(255, 255, 255));

        jLabel3.setText("SURNAME: ");

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

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

                txtSurnameKeyPressed(evt);

            }

        });

        jLabel9.setFont(new java.awt.Font("Yu Gothic UI", 0, 12)); // NOI18N

        jLabel9.setForeground(new java.awt.Color(255, 255, 255));

        jLabel9.setText("ID: ");

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

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

                txtIDActionPerformed(evt);

            }

        });

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

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

                txtIDKeyPressed(evt);

            }

        });

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

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

                txtContactKeyPressed(evt);

            }

        });

        jLabel10.setFont(new java.awt.Font("Yu Gothic UI", 0, 12)); // NOI18N

        jLabel10.setForeground(new java.awt.Color(255, 255, 255));

        jLabel10.setText("CONTACT NO:");

        maleRadio.setFont(new java.awt.Font("Yu Gothic UI", 0, 12)); // NOI18N

        maleRadio.setForeground(new java.awt.Color(255, 255, 255));

        maleRadio.setText("MALE");

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

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

                maleRadioActionPerformed(evt);

            }

        });

        femaleRadio.setFont(new java.awt.Font("Yu Gothic UI", 0, 12)); // NOI18N

        femaleRadio.setForeground(new java.awt.Color(255, 255, 255));

        femaleRadio.setText("FEMALE");

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

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

                femaleRadioActionPerformed(evt);

            }

        });

        jLabel11.setFont(new java.awt.Font("Yu Gothic UI", 0, 12)); // NOI18N

        jLabel11.setForeground(new java.awt.Color(255, 255, 255));

        jLabel11.setText("GENDER:");

        jLabel12.setFont(new java.awt.Font("Yu Gothic UI", 0, 12)); // NOI18N

        jLabel12.setForeground(new java.awt.Color(255, 255, 255));

        jLabel12.setText("AGE:");

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

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

                txtAgeActionPerformed(evt);

            }

        });

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

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

                txtAgeKeyPressed(evt);

            }

        });

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

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

                txtEmailActionPerformed(evt);

            }

        });

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

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

                txtEmailKeyPressed(evt);

            }

        });

        jLabel13.setFont(new java.awt.Font("Yu Gothic UI", 0, 12)); // NOI18N

        jLabel13.setForeground(new java.awt.Color(255, 255, 255));

        jLabel13.setText("EMAIL:");

        javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);

        jPanel1.setLayout(jPanel1Layout);

        jPanel1Layout.setHorizontalGroup(

            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

            .addGroup(jPanel1Layout.createSequentialGroup()

                .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                    .addGroup(jPanel1Layout.createSequentialGroup()

                        .addGap(28, 28, 28)

                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)

                            .addComponent(jLabel9)

                            .addComponent(jLabel2)))

                    .addGroup(jPanel1Layout.createSequentialGroup()

                        .addGap(18, 18, 18)

                        .addComponent(jLabel11)))

                .addGap(28, 28, 28)

                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

                    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jPanel1Layout.createSequentialGroup()

                        .addComponent(maleRadio)

                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

                        .addComponent(jLabel12))

                    .addGroup(jPanel1Layout.createSequentialGroup()

                        .addComponent(txtName, javax.swing.GroupLayout.PREFERRED\_SIZE, 116, javax.swing.GroupLayout.PREFERRED\_SIZE)

                        .addGap(59, 59, 59)

                        .addComponent(jLabel3))

                    .addGroup(jPanel1Layout.createSequentialGroup()

                        .addComponent(txtID, javax.swing.GroupLayout.PREFERRED\_SIZE, 116, javax.swing.GroupLayout.PREFERRED\_SIZE)

                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

                        .addComponent(jLabel10))

                    .addGroup(jPanel1Layout.createSequentialGroup()

                        .addGap(6, 6, 6)

                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                            .addComponent(lblNameResult, javax.swing.GroupLayout.PREFERRED\_SIZE, 81, javax.swing.GroupLayout.PREFERRED\_SIZE)

                            .addComponent(lblIDResult, javax.swing.GroupLayout.PREFERRED\_SIZE, 97, javax.swing.GroupLayout.PREFERRED\_SIZE)))

                    .addGroup(jPanel1Layout.createSequentialGroup()

                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                            .addGroup(jPanel1Layout.createSequentialGroup()

                                .addComponent(femaleRadio)

                                .addGap(11, 11, 11))

                            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jPanel1Layout.createSequentialGroup()

                                .addComponent(lblNameRadio, javax.swing.GroupLayout.PREFERRED\_SIZE, 66, javax.swing.GroupLayout.PREFERRED\_SIZE)

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

                        .addComponent(lblGenderResult, javax.swing.GroupLayout.PREFERRED\_SIZE, 54, javax.swing.GroupLayout.PREFERRED\_SIZE))

                    .addComponent(jLabel13, javax.swing.GroupLayout.Alignment.TRAILING))

                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                    .addGroup(jPanel1Layout.createSequentialGroup()

                        .addGap(18, 18, 18)

                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

                            .addComponent(txtSurname)

                            .addComponent(txtContact, javax.swing.GroupLayout.DEFAULT\_SIZE, 161, Short.MAX\_VALUE)

                            .addComponent(txtAge)

                            .addGroup(jPanel1Layout.createSequentialGroup()

                                .addGap(6, 6, 6)

                                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

                                    .addComponent(lblSurnameResult, javax.swing.GroupLayout.PREFERRED\_SIZE, 79, javax.swing.GroupLayout.PREFERRED\_SIZE)

                                    .addComponent(lblDOBResult, javax.swing.GroupLayout.DEFAULT\_SIZE, 143, Short.MAX\_VALUE)

                                    .addComponent(lblContactResult, javax.swing.GroupLayout.PREFERRED\_SIZE, 142, javax.swing.GroupLayout.PREFERRED\_SIZE)

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

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

                                    .addComponent(lblEmail, javax.swing.GroupLayout.DEFAULT\_SIZE, 139, Short.MAX\_VALUE))))

                        .addGap(0, 6, Short.MAX\_VALUE))

                    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jPanel1Layout.createSequentialGroup()

                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

                        .addComponent(txtEmail, javax.swing.GroupLayout.PREFERRED\_SIZE, 161, javax.swing.GroupLayout.PREFERRED\_SIZE)

                        .addContainerGap())))

        );

        jPanel1Layout.setVerticalGroup(

            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

            .addComponent(jPanel3, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

            .addGroup(jPanel1Layout.createSequentialGroup()

                .addGap(72, 72, 72)

                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

                    .addComponent(jLabel2)

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

                    .addComponent(jLabel3)

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

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

                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

                    .addComponent(lblNameResult, javax.swing.GroupLayout.DEFAULT\_SIZE, 21, Short.MAX\_VALUE)

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

                .addGap(24, 24, 24)

                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

                    .addComponent(jLabel9)

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

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

                    .addComponent(jLabel10))

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

                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

                    .addComponent(lblIDResult, javax.swing.GroupLayout.DEFAULT\_SIZE, 20, Short.MAX\_VALUE)

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

                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                    .addGroup(jPanel1Layout.createSequentialGroup()

                        .addGap(37, 37, 37)

                        .addComponent(jLabel11))

                    .addGroup(jPanel1Layout.createSequentialGroup()

                        .addGap(17, 17, 17)

                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

                            .addComponent(jLabel12)

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

                            .addComponent(maleRadio))

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

                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

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

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

                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                            .addGroup(jPanel1Layout.createSequentialGroup()

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

                                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

                                    .addComponent(lblGenderResult, javax.swing.GroupLayout.DEFAULT\_SIZE, 19, Short.MAX\_VALUE)

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

                            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jPanel1Layout.createSequentialGroup()

                                .addGap(1, 1, 1)

                                .addComponent(lblAge, javax.swing.GroupLayout.PREFERRED\_SIZE, 24, javax.swing.GroupLayout.PREFERRED\_SIZE)))))

                .addGap(11, 11, 11)

                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

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

                    .addComponent(jLabel13))

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

                .addComponent(lblBlank, javax.swing.GroupLayout.PREFERRED\_SIZE, 20, javax.swing.GroupLayout.PREFERRED\_SIZE)

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

                .addComponent(lblEmail, javax.swing.GroupLayout.PREFERRED\_SIZE, 18, javax.swing.GroupLayout.PREFERRED\_SIZE)

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

        );

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

        getContentPane().setLayout(layout);

        layout.setHorizontalGroup(

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

            .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

        );

        layout.setVerticalGroup(

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

            .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

        );

        pack();

        setLocationRelativeTo(null);

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

    private void helpBtnActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_helpBtnActionPerformed

        // TODO add your handling code here:

        dispose();

        new Help().setVisible(true);

    }//GEN-LAST:event\_helpBtnActionPerformed

    private void validateBtnActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_validateBtnActionPerformed

        // TODO add your handling code here:

        /\*int IntAge = Integer.parseInt(age);

        int calculate = 2022-IntAge;

        String myString = String.valueOf(calculate);\*/

            String age = txtAge.getText();

            if(age.contains("18")||age.contains("19")||age.contains("20")||age.contains("21")||age.contains("22")||age.contains("23")||age.contains("24")||age.contains("25")||age.contains("26")||age.contains("27")||age.contains("28")||age.contains("29")||age.contains("30")||age.contains("31")||age.contains("32")||age.contains("33")||age.contains("34")||age.contains("35")||age.contains("36")||age.contains("37")||age.contains("38")||age.contains("39")||age.contains("40")||age.contains("41")||age.contains("42")||age.contains("43")||age.contains("44")||age.contains("45")||age.contains("46")||age.contains("47")||age.contains("48")||age.contains("49")||age.contains("50")||age.contains("51")||age.contains("52")||age.contains("53")||age.contains("54")||age.contains("55")||age.contains("56")||age.contains("57")||age.contains("58")||age.contains("59")||age.contains("60")||age.contains("61")||age.contains("62")||age.contains("63")||age.contains("64")||age.contains("65")||age.contains("66")||age.contains("67")||age.contains("68")||age.contains("69")||age.contains("70")||age.contains("71")||age.contains("72")||age.contains("73")||age.contains("74")||age.contains("75")||age.contains("76")||age.contains("77")||age.contains("78")||age.contains("79")||age.contains("80")||age.contains("81")||age.contains("82")||age.contains("83")||age.contains("84")||age.contains("85")||age.contains("86")||age.contains("87")||age.contains("88")||age.contains("89")||age.contains("90")||age.contains("91")||age.contains("92")||age.contains("93")||age.contains("94")||age.contains("95")||age.contains("96")||age.contains("97")||age.contains("98")||age.contains("99")||age.contains("100")||age.contains("101")||age.contains("102")||age.contains("103")||age.contains("104")||age.contains("105")||age.contains("106")||age.contains("107")||age.contains("108")||age.contains("109")||age.contains("110")||age.contains("111")||age.contains("112")||age.contains("113")||age.contains("114")||age.contains("115")||age.contains("117")||age.contains("118")||age.contains("119")||age.contains("120")){

                lblAge.setText("Above 18");

                lblAge.setForeground(Color.green);

            }

            else{

                if(age.contains("17")||age.contains("16")||age.contains("15")||age.contains("14")||age.contains("13")||age.contains("12")||age.contains("11")||age.contains("10")||age.contains("9")||age.contains("8")||age.contains("7")||age.contains("6")||age.contains("5")||age.contains("4")||age.contains("3")||age.contains("2")||age.contains("1")){

                    lblAge.setText("Below 18");

                    lblAge.setForeground(Color.red);

            }

            else{

                    lblAge.setText("Between 0 120");

                    lblAge.setForeground(Color.red);

                }

            }

            String email = txtEmail.getText();

            String name = txtName.getText();

            String surname = txtSurname.getText();

            String ID = txtID.getText();

            String contact = txtContact.getText();

            if(name.isBlank()){

                lblNameResult.setText("Feild Empty");

                lblNameResult.setForeground(Color.red);

            }

            else{

                lblNameResult.setText("Validated!");

                lblNameResult.setForeground(Color.green);

            }

            if(surname.isBlank()){

                lblSurnameResult.setText("Feild Empty");

                lblSurnameResult.setForeground(Color.red);

            }

            else{

                lblSurnameResult.setText("Validated!");

                lblSurnameResult.setForeground(Color.green);

            }

            if(ID.isBlank()){

                lblIDResult.setText("Feild Empty");

                lblIDResult.setForeground(Color.red);

            }

            else{

                lblIDResult.setText("Validated!");

                lblIDResult.setForeground(Color.green);

            }

            if(contact.isBlank()){

                lblContactResult.setText("Feild Empty");

                lblContactResult.setForeground(Color.red);

            }

            else{

                lblContactResult.setText("Validated!");

                lblContactResult.setForeground(Color.green);

            }

            if(contact.length()>10){

                lblContactResult.setText("Only 10 digits!");

                lblContactResult.setForeground(Color.red);

            }

            if(ID.length()>13){

                lblIDResult.setText("Only 13 characters");

                lblIDResult.setForeground(Color.red);

            }

            if(age.isBlank()){

                lblDOBResult.setText("Feild Empty");

                lblDOBResult.setForeground(Color.red);

                lblAge.setText("");

            }

            else{

                lblDOBResult.setText("");

            }

            if(!maleRadio.isSelected()&&!femaleRadio.isSelected()){

                lblNameRadio.setText("Feild Empty");

                lblNameRadio.setForeground(Color.red);

            }

            else if(maleRadio.isSelected()){

                lblNameRadio.setText("Male");

                lblNameRadio.setForeground(Color.yellow);

            }

            else if(femaleRadio.isSelected()){

                lblNameRadio.setText("Female");

                lblNameRadio.setForeground(Color.yellow);

            }

            if(email.isBlank()){

                lblBlank.setText("Feild Empty");

                lblBlank.setForeground(Color.red);

            }

            else{

                lblBlank.setText("");

            }

            if(!email.contains("@")||!email.contains(".com")){

                lblEmail.setText("Incorrect Email");

                lblEmail.setForeground(Color.red);

            }

            else{

                lblEmail.setText("Validated");

                lblEmail.setForeground(Color.green);

            }

    }//GEN-LAST:event\_validateBtnActionPerformed

    private void clearBtnActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_clearBtnActionPerformed

        // TODO add your handling code here:

            txtName.setText("");

            txtSurname.setText("");

            txtID.setText("");

            txtContact.setText("");

            lblNameResult.setText("");

            lblSurnameResult.setText("");

            lblContactResult.setText("");

            lblIDResult.setText("");

            txtAge.setText("");

            lblDOBResult.setText("");

            txtEmail.setText("");

            lblEmail.setText("");

            lblNameRadio.setText("");

            lblBlank.setText("");

            lblAge.setText("");

    }//GEN-LAST:event\_clearBtnActionPerformed

    private void txtContactKeyPressed(java.awt.event.KeyEvent evt) {//GEN-FIRST:event\_txtContactKeyPressed

        // TODO add your handling code here:

        char c = evt.getKeyChar();

        if(Character.isLetter(c)){

            txtContact.setEditable(false);

            lblContactResult.setText("Number Only");

            lblContactResult.setForeground(Color.red);

        }

        else{

            lblContactResult.setForeground(Color.green);

            lblContactResult.setText("Valid");

            txtContact.setEditable(true);

        }

    }//GEN-LAST:event\_txtContactKeyPressed

    private void txtNameKeyPressed(java.awt.event.KeyEvent evt) {//GEN-FIRST:event\_txtNameKeyPressed

        // TODO add your handling code here:

        char c = evt.getKeyChar();

        if(Character.isLetter(c)||Character.isWhitespace(c)||Character.isISOControl(c)){

            txtName.setEditable(true);

            lblNameResult.setForeground(Color.green);

            lblNameResult.setText("Valid");

        }

        else{

            txtName.setEditable(false);

            lblNameResult.setText("Letters Only");

            lblNameResult.setForeground(Color.red);

        }

    }//GEN-LAST:event\_txtNameKeyPressed

    private void txtSurnameKeyPressed(java.awt.event.KeyEvent evt) {//GEN-FIRST:event\_txtSurnameKeyPressed

        // TODO add your handling code here:

        char c = evt.getKeyChar();

        if(Character.isLetter(c)||Character.isWhitespace(c)||Character.isISOControl(c)){

            txtSurname.setEditable(true);

            lblSurnameResult.setForeground(Color.green);

            lblSurnameResult.setText("Valid");

        }

        else{

            txtSurname.setEditable(false);

            lblSurnameResult.setText("Letters Only");

            lblSurnameResult.setForeground(Color.red);

        }

    }//GEN-LAST:event\_txtSurnameKeyPressed

    private void exitBtnActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_exitBtnActionPerformed

        // TODO add your handling code here:

        System.exit(0);

    }//GEN-LAST:event\_exitBtnActionPerformed

    private void maleRadioActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_maleRadioActionPerformed

        // TODO add your handling code here:

        if(maleRadio.isSelected()){

            lblNameRadio.setText("Male");

            lblNameRadio.setForeground(Color.yellow);

        }

        else if(!maleRadio.isSelected()&&!femaleRadio.isSelected()){

            lblNameRadio.setText("");

        }

    }//GEN-LAST:event\_maleRadioActionPerformed

    private void txtEmailActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_txtEmailActionPerformed

        // TODO add your handling code here:

    }//GEN-LAST:event\_txtEmailActionPerformed

    private void txtEmailKeyPressed(java.awt.event.KeyEvent evt) {//GEN-FIRST:event\_txtEmailKeyPressed

        // TODO add your handling code here:

    }//GEN-LAST:event\_txtEmailKeyPressed

    private void femaleRadioActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_femaleRadioActionPerformed

        // TODO add your handling code here:

        if(femaleRadio.isSelected()){

            lblNameRadio.setText("Female");

            lblNameRadio.setForeground(Color.yellow);

        }

        else if(!maleRadio.isSelected()&&!femaleRadio.isSelected()){

            lblNameRadio.setText("");

        }

    }//GEN-LAST:event\_femaleRadioActionPerformed

    private void txtAgeKeyPressed(java.awt.event.KeyEvent evt) {//GEN-FIRST:event\_txtAgeKeyPressed

        // TODO add your handling code here:

        char c = evt.getKeyChar();

        if(Character.isLetter(c)){

            txtAge.setEditable(false);

            lblDOBResult.setText("Numbers Only");

            lblDOBResult.setForeground(Color.red);

        }

        else{

            lblDOBResult.setForeground(Color.green);

            lblDOBResult.setText("Valid");

            txtAge.setEditable(true);

        }

    }//GEN-LAST:event\_txtAgeKeyPressed

    private void txtAgeActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_txtAgeActionPerformed

        // TODO add your handling code here:

    }//GEN-LAST:event\_txtAgeActionPerformed

    private void txtIDKeyPressed(java.awt.event.KeyEvent evt) {//GEN-FIRST:event\_txtIDKeyPressed

        // TODO add your handling code here:

    }//GEN-LAST:event\_txtIDKeyPressed

    private void txtIDActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_txtIDActionPerformed

        // TODO add your handling code here:

    }//GEN-LAST:event\_txtIDActionPerformed

    /\*\*

     \* @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(ValidationForm.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

        } catch (InstantiationException ex) {

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

        } catch (IllegalAccessException ex) {

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

        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

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

        }

        //</editor-fold>

        /\* Create and display the form \*/

        java.awt.EventQueue.invokeLater(() -> {

            new ValidationForm().setVisible(true);

        });

    }

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

    private javax.swing.JButton clearBtn;

    private javax.swing.JButton exitBtn;

    private javax.swing.JRadioButton femaleRadio;

    private javax.swing.JButton helpBtn;

    private javax.swing.JLabel jLabel1;

    private javax.swing.JLabel jLabel10;

    private javax.swing.JLabel jLabel11;

    private javax.swing.JLabel jLabel12;

    private javax.swing.JLabel jLabel13;

    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.JLabel jLabel8;

    private javax.swing.JLabel jLabel9;

    private javax.swing.JPanel jPanel1;

    private javax.swing.JPanel jPanel3;

    private javax.swing.JLabel lblAge;

    private javax.swing.JLabel lblBlank;

    private javax.swing.JLabel lblContactResult;

    private javax.swing.JLabel lblDOBResult;

    private javax.swing.JLabel lblEmail;

    private javax.swing.JLabel lblGenderResult;

    private javax.swing.JLabel lblIDResult;

    private javax.swing.JLabel lblNameRadio;

    private javax.swing.JLabel lblNameResult;

    private javax.swing.JLabel lblSurnameResult;

    private javax.swing.JRadioButton maleRadio;

    private javax.swing.JTextField txtAge;

    private javax.swing.JTextField txtContact;

    private javax.swing.JTextField txtEmail;

    private javax.swing.JTextField txtID;

    private javax.swing.JTextField txtName;

    private javax.swing.JTextField txtSurname;

    private javax.swing.JButton validateBtn;

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

}