//Name: Vivek Vishwanath Shetye

//Student ID: 1001821620

import java.io.DataInputStream;

import java.io.DataOutputStream;

import java.net.Socket;

import javax.swing.JOptionPane;

public class ClientRegister extends javax.swing.JFrame

{

static String info;

//Code automatically generated by the IDE

public ClientRegister()

{

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">

private void initComponents() {

jPanel1 = new javax.swing.JPanel();

idText = new javax.swing.JTextField();

connectButton = new javax.swing.JButton();

jLabel1 = new javax.swing.JLabel();

jLabel2 = new javax.swing.JLabel();

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

jPanel1.setBackground(new java.awt.Color(255, 204, 153));

idText.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N

idText.setBorder(null);

connectButton.setText("Connect");

connectButton.setBorder(null);

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

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

connectButtonActionPerformed(evt);

}

});

jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N

jLabel1.setText("User Registration");

jLabel2.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N

jLabel2.setText("Username:");

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

jPanel1.setLayout(jPanel1Layout);

jPanel1Layout.setHorizontalGroup(

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

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

.addGap(28, 28, 28)

.addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED\_SIZE, 135, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 35, Short.MAX\_VALUE)

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

.addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT\_SIZE, 213, Short.MAX\_VALUE)

.addComponent(idText))

.addGap(71, 71, 71)

.addComponent(connectButton, javax.swing.GroupLayout.PREFERRED\_SIZE, 128, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(27, 27, 27))

);

jPanel1Layout.setVerticalGroup(

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

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

.addContainerGap(44, Short.MAX\_VALUE)

.addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED\_SIZE, 40, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(41, 41, 41)

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

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

.addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED\_SIZE, 59, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(114, 114, 114))

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

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

.addComponent(connectButton, javax.swing.GroupLayout.PREFERRED\_SIZE, 59, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGroup(jPanel1Layout.createSequentialGroup()

.addGap(2, 2, 2)

.addComponent(idText)))

.addGap(116, 116, 116))))

);

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();

}// </editor-fold>

/\*CODE REFERENCED FROM:

\*Designing a Swing GUI in NetBeans IDE --> https://netbeans.org/kb/docs/java/quickstart-gui.html

\*Establish a Socket Connection --> https://www.geeksforgeeks.org/socket-programming-in-java/

\*Reading and writing from socket --> https://www.javatpoint.com/socket-programming

\*/

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

try

{

String id = idText.getText(); //Receive Username from the User

Socket s = new Socket("localhost",2089); //Connect to the server over a socket to register the username.

DataInputStream din = new DataInputStream(s.getInputStream()); //Reading from the socket

DataOutputStream dout = new DataOutputStream(s.getOutputStream()); //Writing to a socket

dout.writeUTF(id); //Writes to a string in UTF-8 format

String i = new DataInputStream(s.getInputStream()).readUTF();

if(i.equals("Username not available. Please try another username.")) //Detecting conflict in Username.

{

JOptionPane.showMessageDialog(this,"Username not available. Please try another username.\n");

}

else

{

new Myclient(id,s).setVisible(true); //Send data to the server for user registration

this.dispose();

}

}

catch(Exception ex)

{

ex.printStackTrace();

}

}

/\*\* Code automatically generated by IDE

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

} catch (InstantiationException ex) {

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

} catch (IllegalAccessException ex) {

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

} catch (javax.swing.UnsupportedLookAndFeelException ex) {

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

}

});

}

// Variables declaration - do not modify

private javax.swing.JButton connectButton;

private javax.swing.JTextField idText;

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel2;

private javax.swing.JPanel jPanel1;

// End of variables declaration

}