

**CTU 2024**

**Software Development**

SUBJECT NAME: Advanced Java Semester 2

SUBJECT CODE: JD522

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**1<sup>st</sup> April 2024:**

## Question 1

Project Description: Registration and login feature

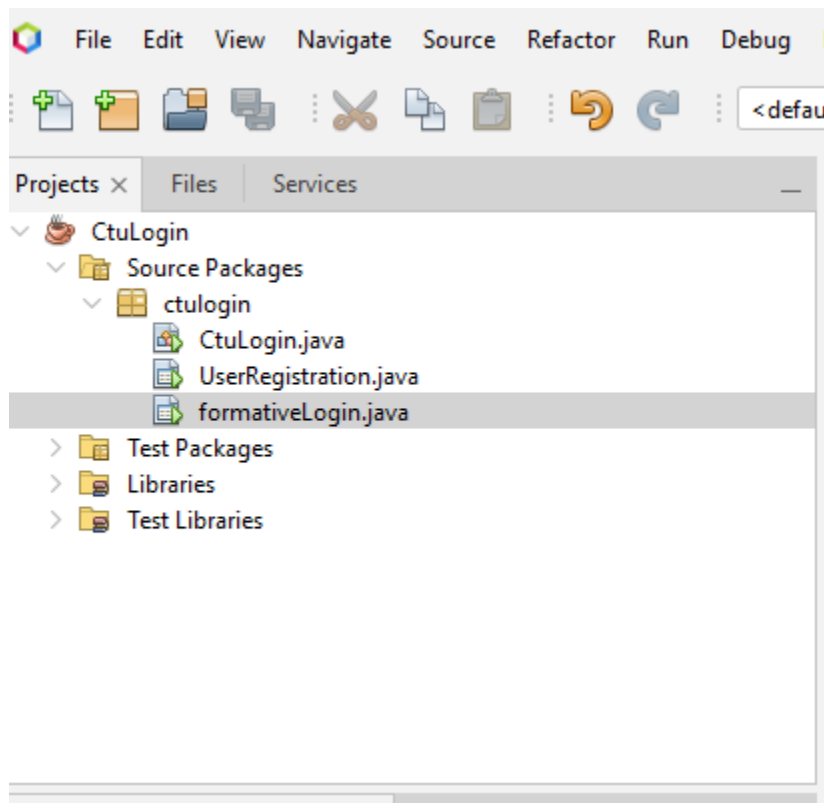
In this project, you will use GUI to create a registration and login feature. This feature needs to allow users

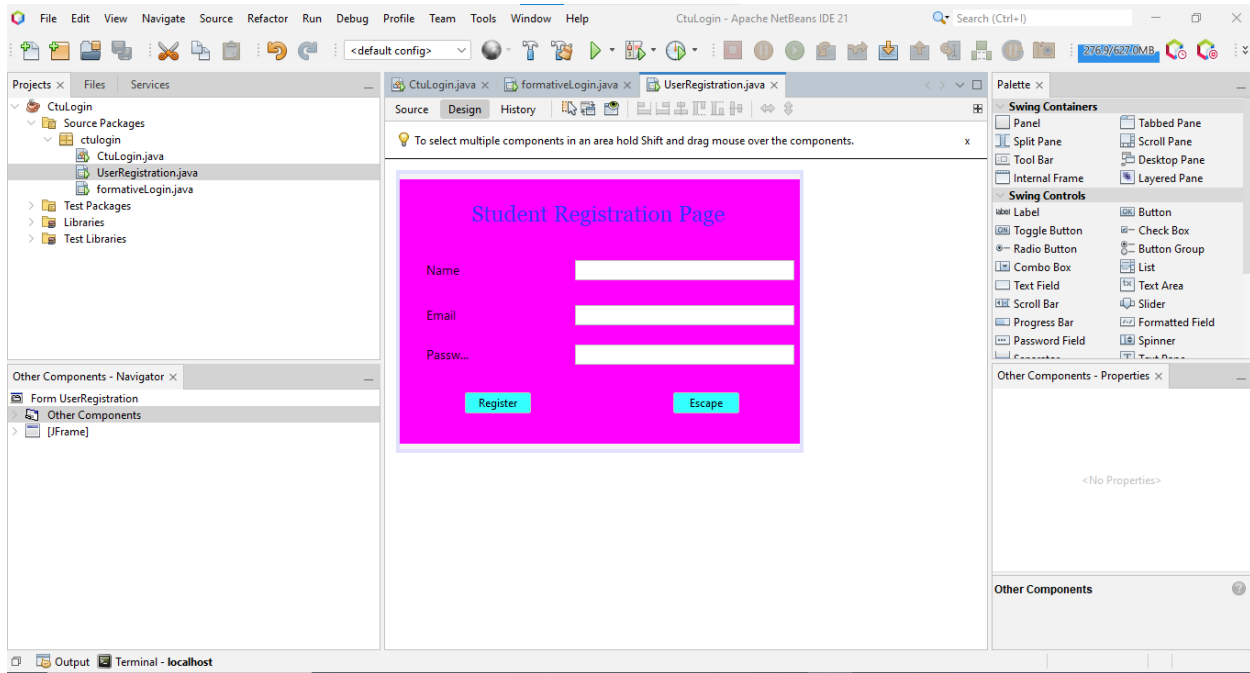
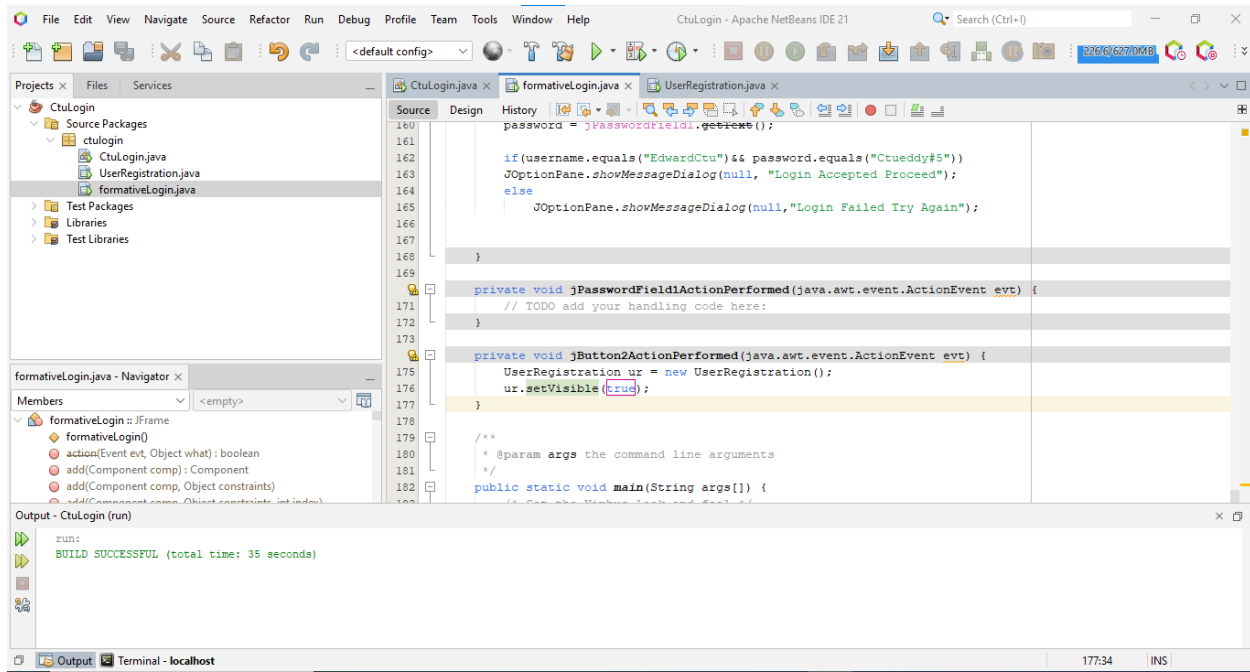
to (Read through the entire task before you start any work): Failure to GUI will result in zero.

1.Create an account by entering a username, password, first name, and last name. The system needs to check that the following conditions are met and reply with the appropriate output message.

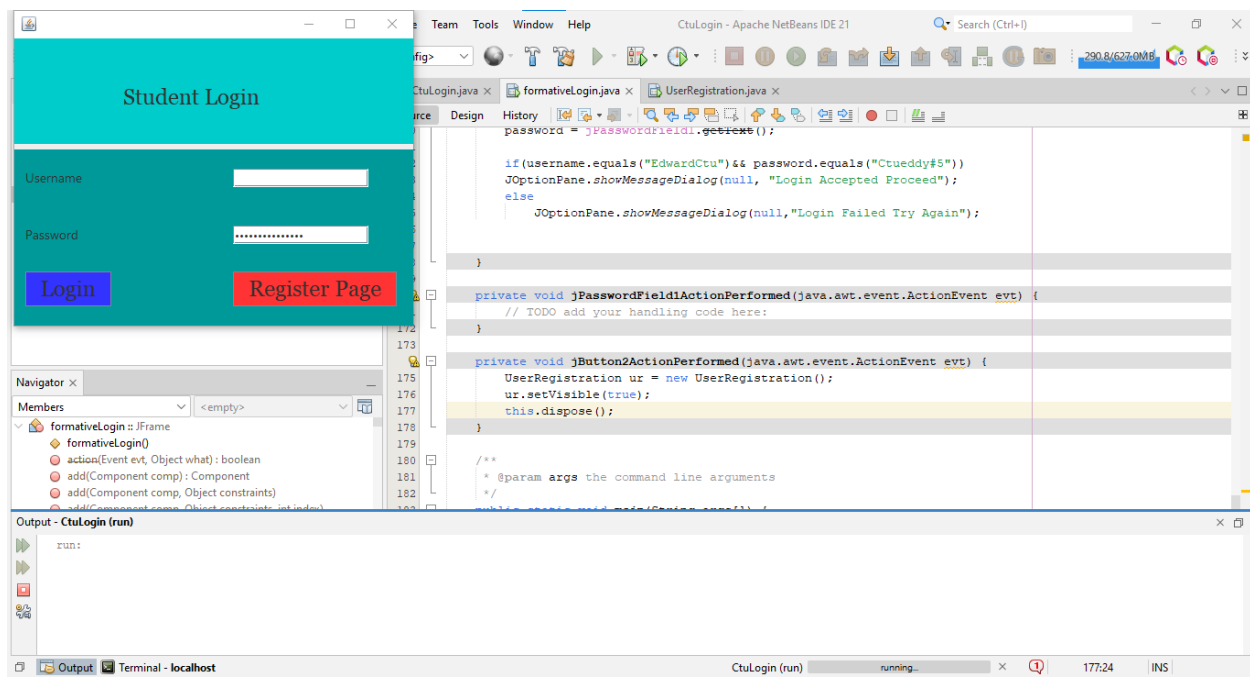
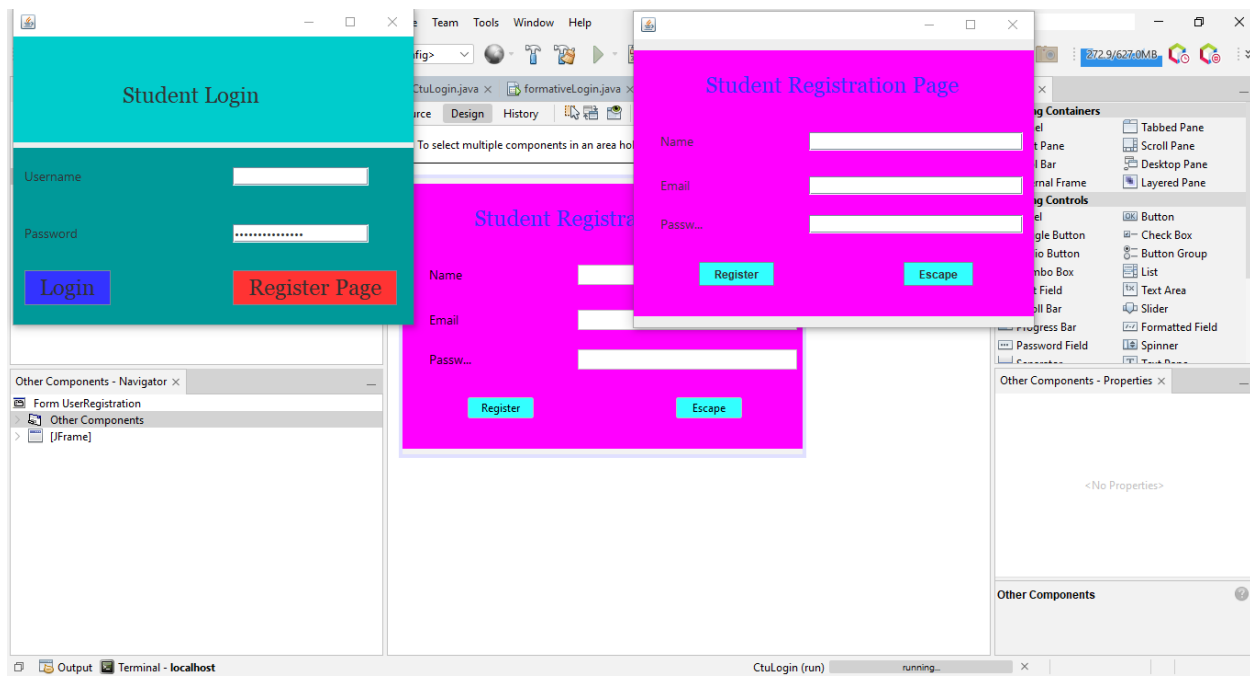
**Answer:**

### Registration Page

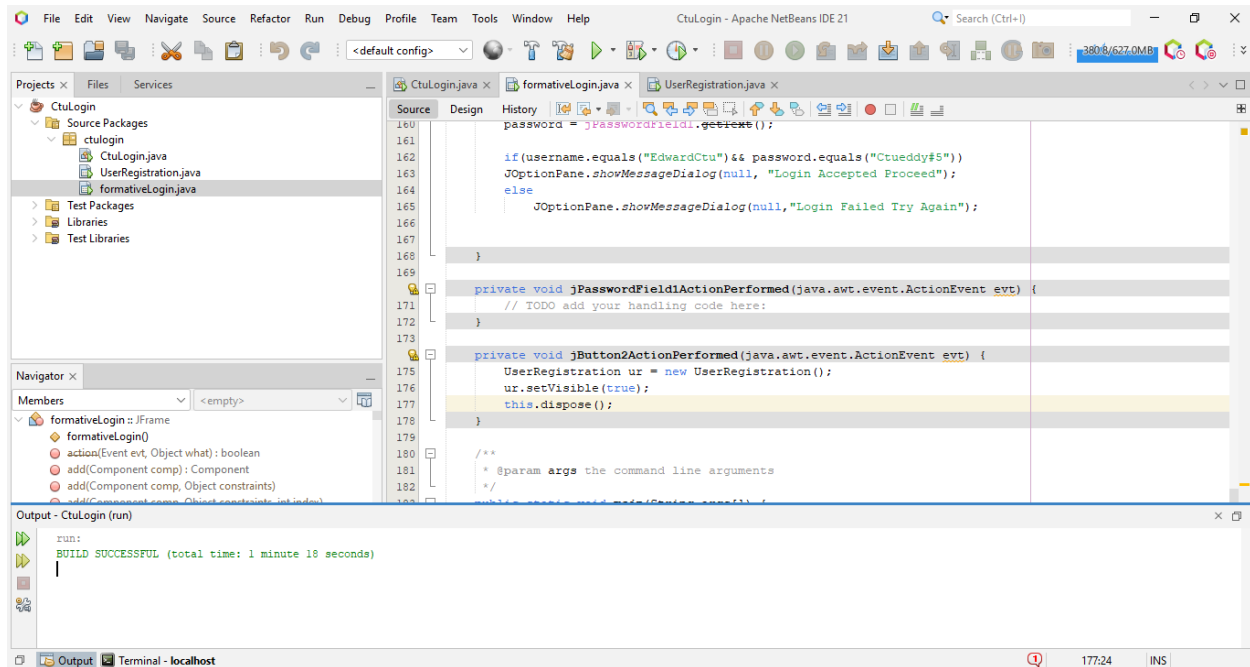
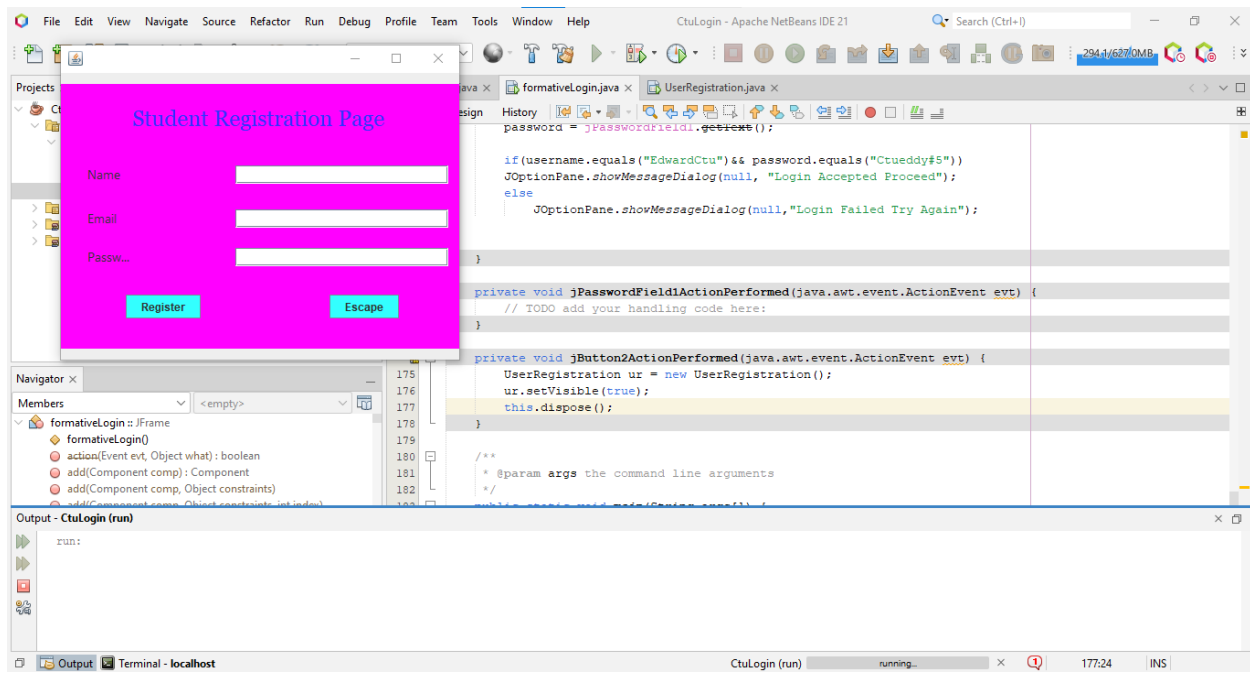


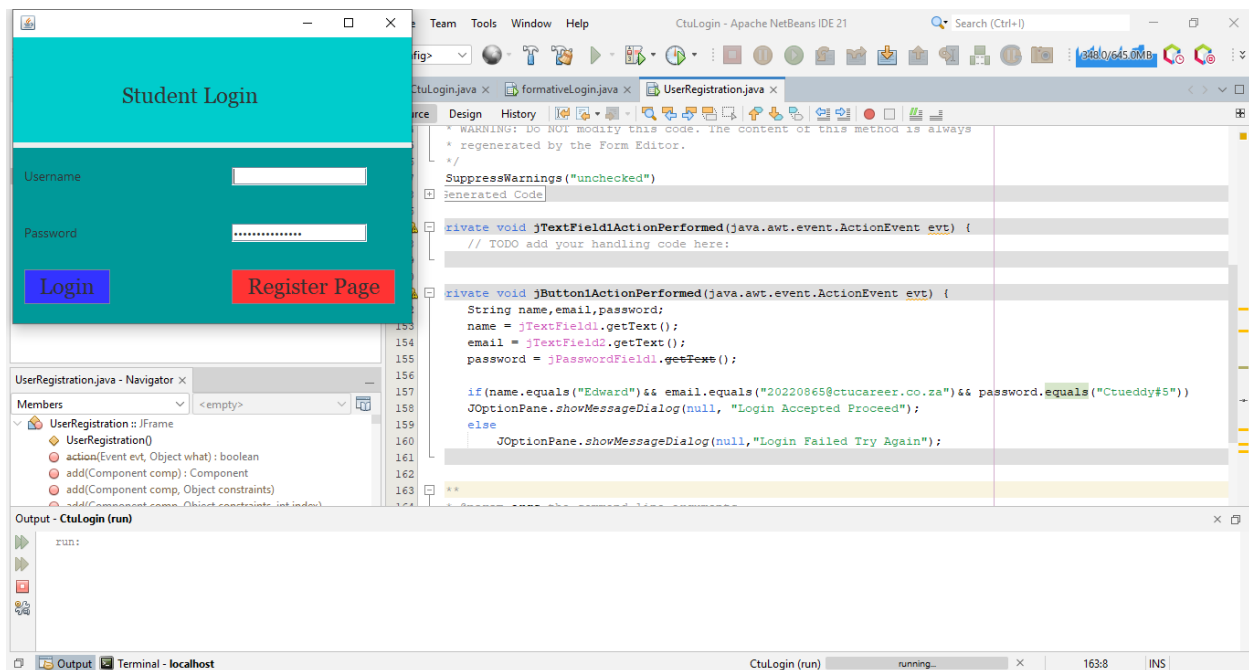


**Both pages to auto populate**

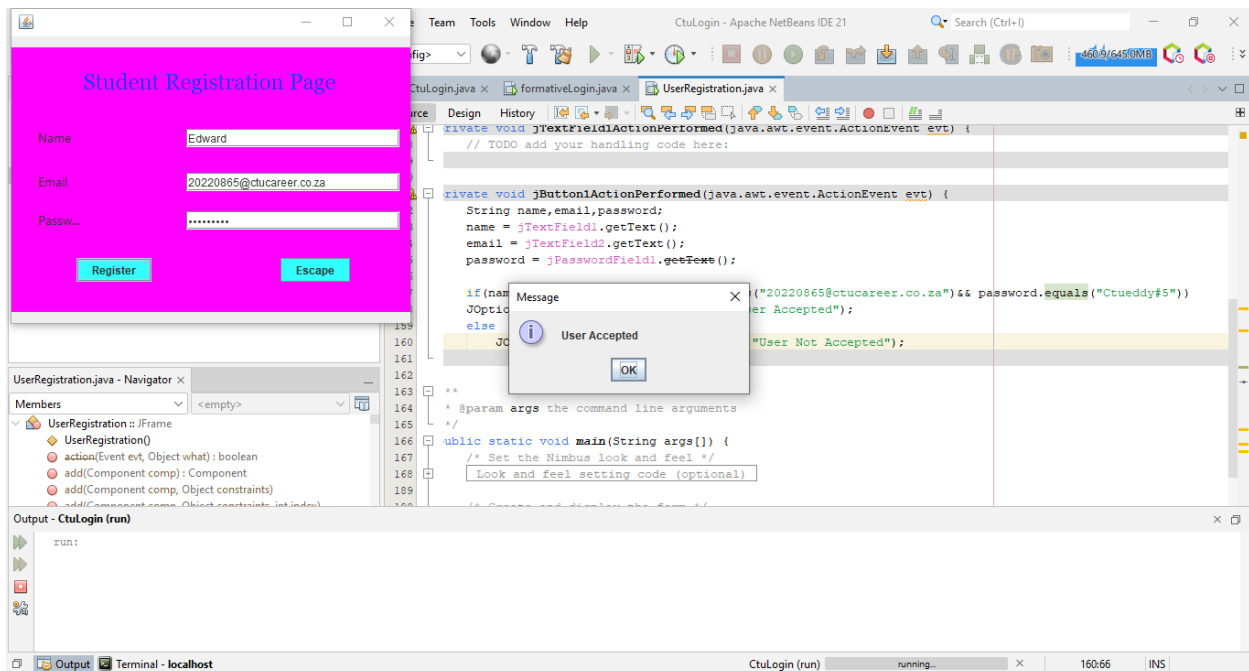


## User Registration info

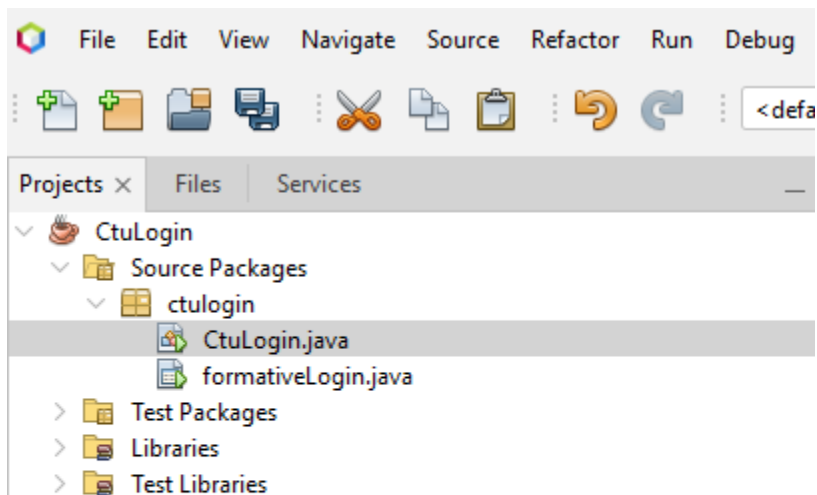
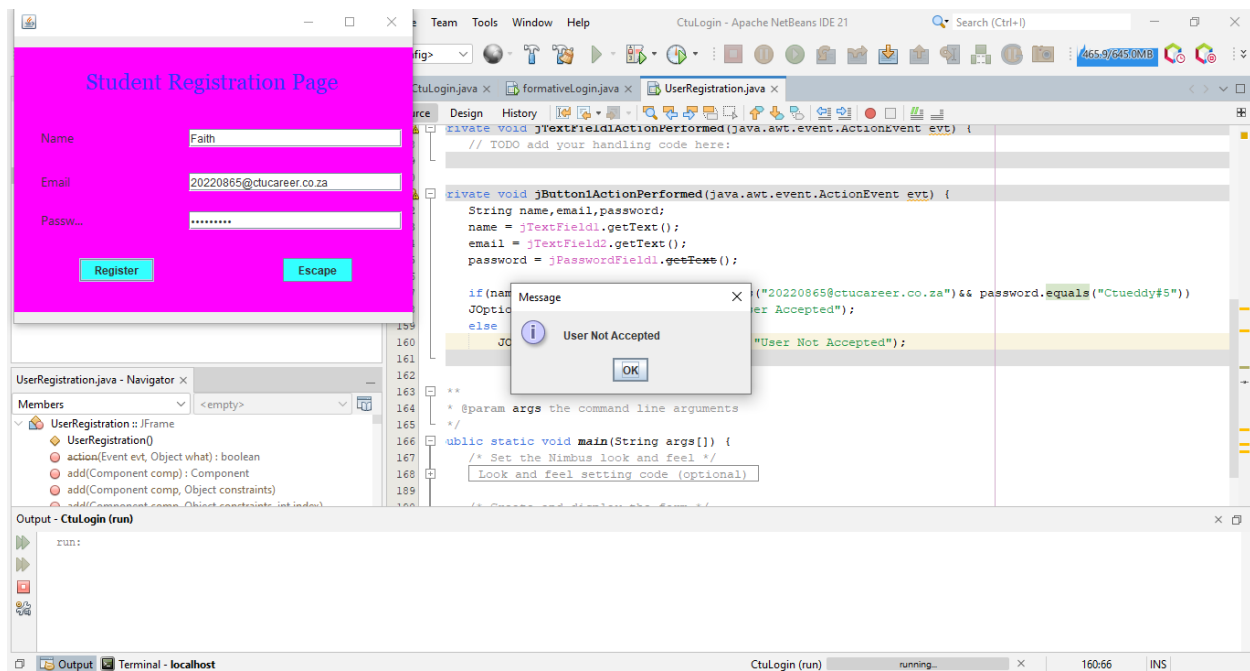




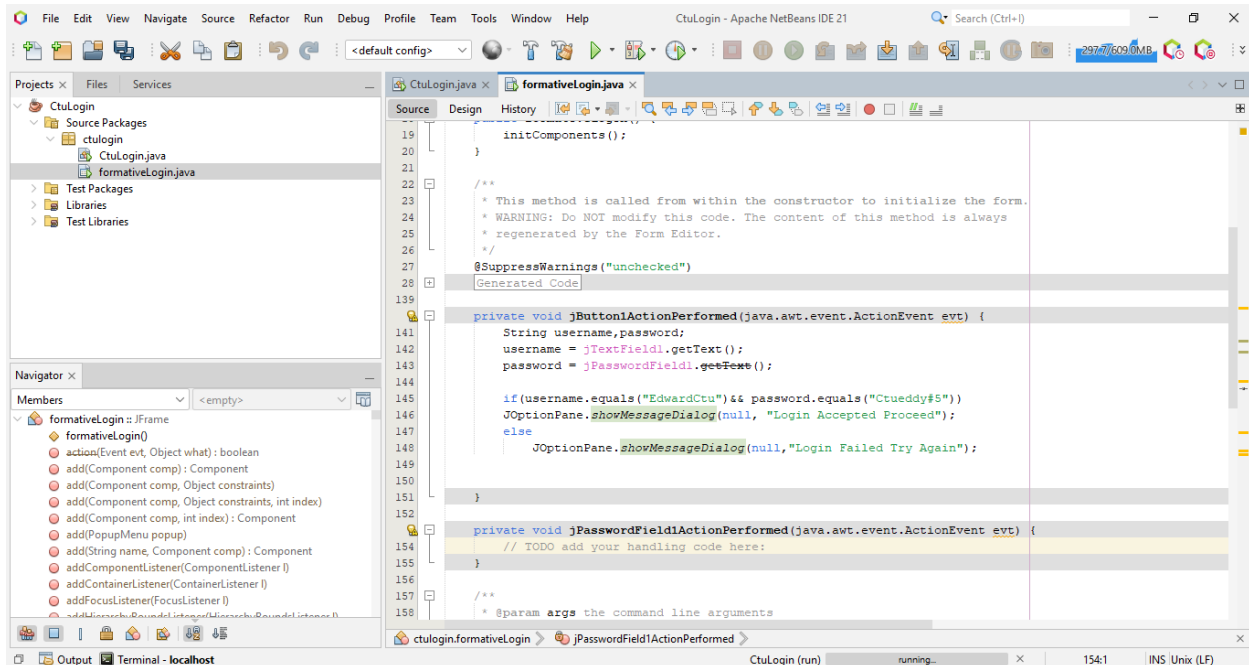
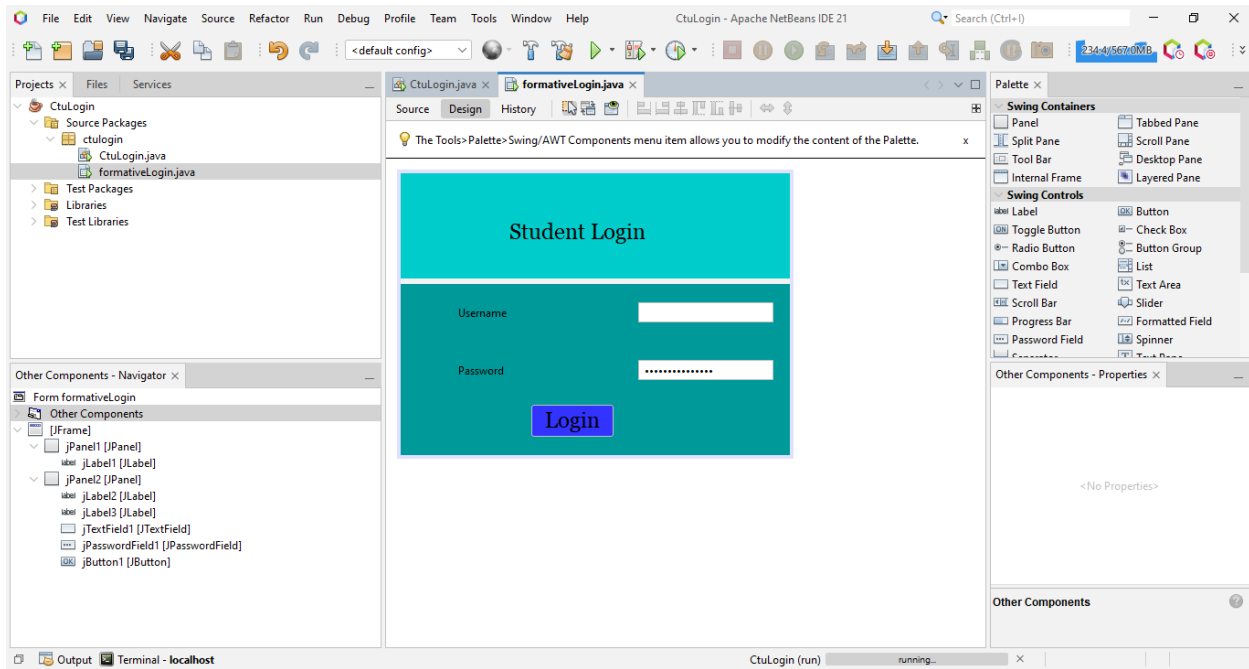
**User is Accepted**



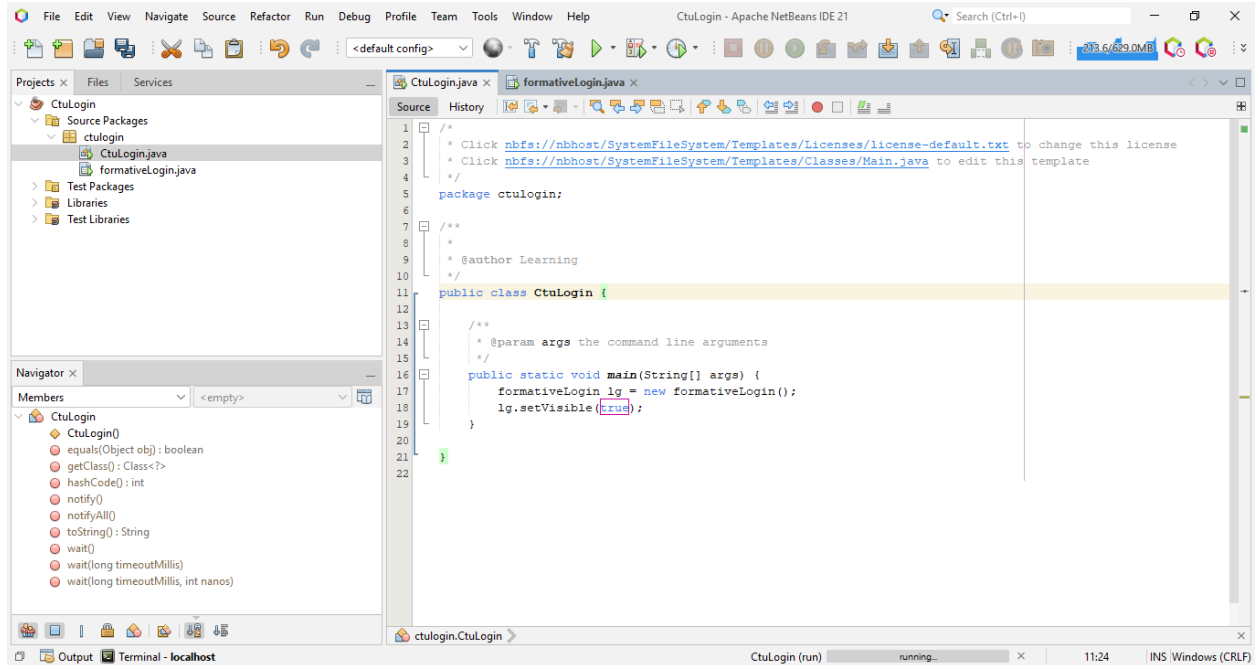
If wrong details enter user is rejected



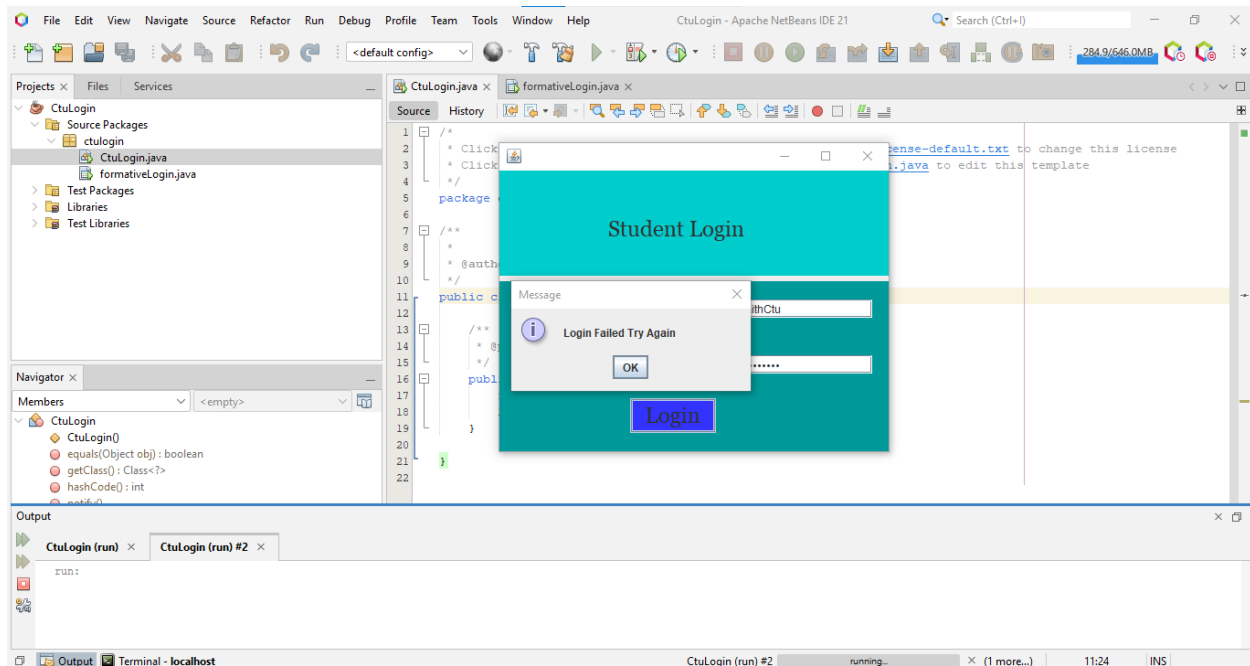
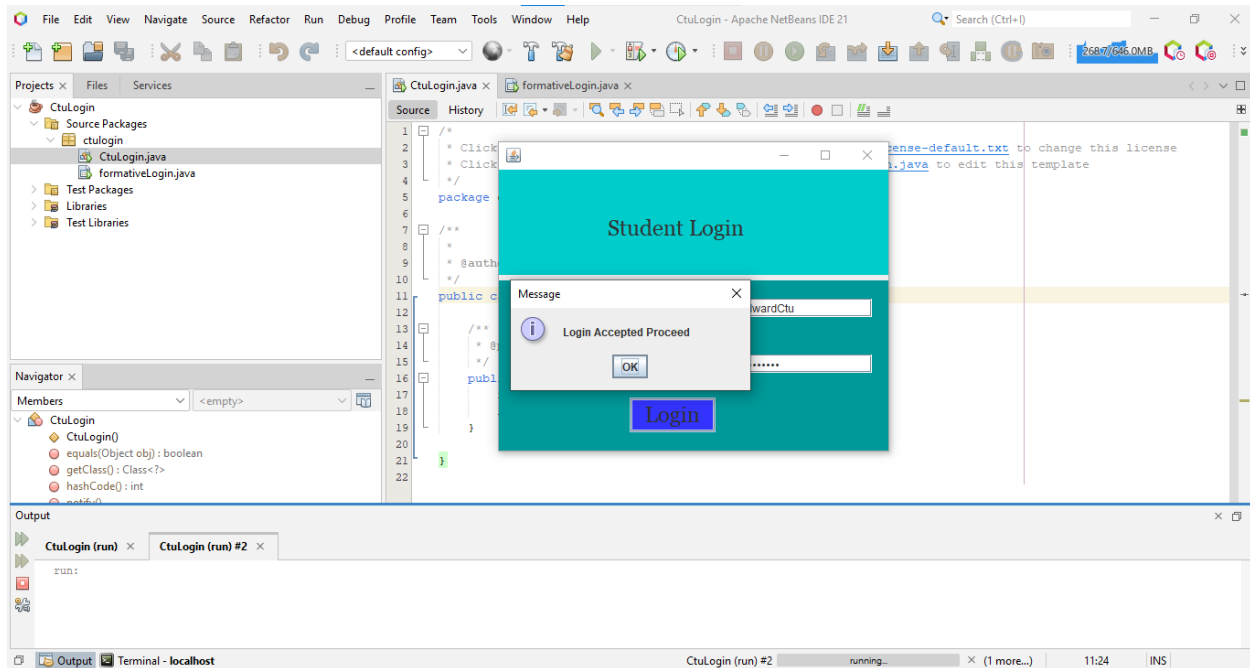
## Login Page







**User Name and Password Accepted**



**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 ctulogin;

import javax.swing.JOptionPane;

/**
 *
 * @author Learning
 */
public class formativeLogin extends javax.swing.JFrame {

    /**
     * Creates new form formativeLogin
     */
    public formativeLogin() {
        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();
    jLabel1 = new javax.swing.JLabel();
    jPanel2 = new javax.swing.JPanel();
    jLabel2 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    jTextField1 = new javax.swing.JTextField();
    jPasswordField1 = new javax.swing.JPasswordField();
    jButton1 = new javax.swing.JButton();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

    jPanel1.setBackground(new java.awt.Color(0, 204, 204));

    jLabel1.setFont(new java.awt.Font("Georgia", 0, 24)); // NOI18N
    jLabel1.setText("Student Login");
    jLabel1.setToolTipText("");

    javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
    jPanel1.setLayout(jPanel1Layout);
    jPanel1Layout.setHorizontalGroup(
        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(119, 119, 119)
                .addComponent(jLabel1)
                .addGap(158, Short.MAX_VALUE))
    )
}
```

```

);

jPanel1Layout.setVerticalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(47, 47, 47)
            .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(33, Short.MAX_VALUE))
        );

jPanel2.setBackground(new java.awt.Color(0, 153, 153));

jLabel2.setText("Username");

jLabel3.setText("Password");

jPasswordField1.setText("jPasswordField1");
jPasswordField1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jPasswordField1ActionPerformed(evt);
    }
});

jButton1.setBackground(new java.awt.Color(51, 51, 255));
jButton1.setFont(new java.awt.Font("Georgia", 0, 24)); // NOI18N
jButton1.setText("Login");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

```

```
}  
});
```

```
javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);  
jPanel2.setLayout(jPanel2Layout);  
jPanel2Layout.setHorizontalGroup(  
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  
        .addGroup(jPanel2Layout.createSequentialGroup()  
            .addGap(63, 63, 63)  
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  
                .addComponent(jLabel2)  
                .addComponent(jLabel3))  
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,  
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)  
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,  
false)  
                .addComponent(jPasswordField1, javax.swing.GroupLayout.DEFAULT_SIZE, 148,  
Short.MAX_VALUE)  
                .addComponent(jTextField1))  
            .addGap(18, 18, 18))  
        .addGroup(jPanel2Layout.createSequentialGroup()  
            .addGap(143, 143, 143)  
            .addComponent(jButton1)  
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))  
    );  
jPanel2Layout.setVerticalGroup(  
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  
        .addGroup(jPanel2Layout.createSequentialGroup()  
            .addGap(20, 20, 20)  
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```

        .addComponent(jLabel2)

        .addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

        .addGap(41, 41, 41)

        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

        .addComponent(jLabel3)

        .addComponent(jPasswordField1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 27,
Short.MAX_VALUE)

        .addComponent(jButton1)

        .addGap(20, 20, 20))
);

```

```

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)

    .addComponent(jPanel2, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

);

layout.setVerticalGroup(

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

    .addGroup(layout.createSequentialGroup()

        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

        .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

```

```

);

pack();
} // </editor-fold>

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    String username,password;
    username = jTextField1.getText();
    password = jPasswordField1.getText();

    if(username.equals("EdwardCtu") && password.equals("Ctueddy#5"))
        JOptionPane.showMessageDialog(null, "Login Accepted Proceed");
    else
        JOptionPane.showMessageDialog(null, "Login Failed Try Again");

}

private void jPasswordField1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

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

    } catch (InstantiationException ex) {

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

    } catch (IllegalAccessException ex) {

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

    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

        java.util.logging.Logger.getLogger(formativeLogin.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 formativeLogin().setVisible(true);
    }
    });
}
```

```
// Variables declaration - do not modify
private javax.swing.JButton jButton1;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel2;
private javax.swing.JPasswordField jPasswordField1;
private javax.swing.JTextField jTextField1;
// End of variables declaration
}
```