/\*

\* This program sets up a simple login UI with username and password fields

\* and an OK button. Upon clicking the button, the current frame is closed

\* and a new frame (Secon\_JFrame) is opened.

\*

\* Author: P5YC40\_K7113R

\*/

package lu7ui\_buttons; // Package declaration

import javax.swing.\*; // Import the Swing package for GUI components

import java.awt.event.\*; // Import the AWT event package for action events

public class LU7UI\_Buttons implements ActionListener {

private JFrame frame1; // Private to follow encapsulation principles

private JLabel label1, label2;

private JTextField t1, t2;

private JButton b1;

// Constructor to set up the GUI

public LU7UI\_Buttons() {

frame1 = new JFrame("Log In"); // Initialize the JFrame here

label1 = new JLabel("User Name");

label2 = new JLabel("Password");

t1 = new JTextField(20); // Fixed width to better fit the UI

t2 = new JTextField(20);

b1 = new JButton("OK");

frame1.setSize(400, 200); // Adjusted size to be more suitable

frame1.setVisible(true);

frame1.setLayout(null); // Using absolute positioning (not recommended but used here)

frame1.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE); // Changed to EXIT\_ON\_CLOSE to close the application

// Added components to the frame

frame1.add(label1);

frame1.add(t1);

frame1.add(label2);

frame1.add(t2);

frame1.add(b1);

// Set bounds for each component

label1.setBounds(20, 20, 100, 30); // Adjusted x and y to create space on the left

t1.setBounds(130, 20, 200, 30); // Adjusted width to fit the label and more spacious layout

label2.setBounds(20, 60, 100, 30);

t2.setBounds(130, 60, 200, 30);

b1.setBounds(20, 100, 100, 30);

// Registering the action listener

b1.addActionListener(this);

}

@Override

public void actionPerformed(ActionEvent e) {

frame1.dispose(); // Close the current frame

// Ensure Secon\_JFrame class exists and is properly implemented

new Secon\_JFrame(); // Create an instance to show the new frame

}

public static void main(String[] args) {

new LU7UI\_Buttons(); // Create an instance to show the frame

}

}```

Summary of Changes:

1. Imports and Package Setup:

- Ensured `import javax.swing.\*;` and `import java.awt.event.\*;` are correct and added comments.

2. Constructor Adjustments:

- Fixed the width of `JTextField` components for better UI spacing.

- Adjusted the size of the frame to be more suitable for the given component layout.

- Changed `frame1.setDefaultCloseOperation(JFrame.HIDE\_ON\_CLOSE);` to `JFrame.EXIT\_ON\_CLOSE` to ensure the application closes when the frame is closed.

- Used `frame1.add(b1);` instead of `frame1.getContentPane().add(b1);` for consistency.

- Adjusted component bounds for better spacing and alignment.

3. Action Listener:

- No changes needed, assuming `Secon\_JFrame` is a valid class and correctly implemented elsewhere.

4. Main Method:

- Changed the parameter name from `ag` to `args` which is the conventional name for command-line arguments.

- Used `new LU7UI\_Buttons();` to instantiate and display the GUI.