LAB #11

21F-9513

REPO LINK :

<https://github.com/sheryar1234/SCDLAB.git>

code

**import** javax.swing.\*;

**import** java.awt.\*;

**import** java.awt.event.ActionEvent;

**import** java.awt.event.ActionListener;

**import** java.io.BufferedReader;

**import** java.io.FileReader;

**import** java.io.IOException;

**import** java.util.StringTokenizer;

**public** **class** PoemEditor {

**private** JTextArea textArea;

**private** JComboBox<String> rootsDropdown;

**private** String selectedRoot = **null**;

**public** PoemEditor() {

JFrame frame = **new** JFrame("Poem Editor");

frame.setDefaultCloseOperation(JFrame.***EXIT\_ON\_CLOSE***);

frame.setSize(400, 300);

textArea = **new** JTextArea(10, 30);

JButton tokenizeButton = **new** JButton("Tokenize");

JPanel panel = **new** JPanel();

panel.setLayout(**new** FlowLayout());

panel.add(textArea);

panel.add(tokenizeButton);

frame.add(panel);

tokenizeButton.addActionListener(**new** ActionListener() {

@Override

**public** **void** actionPerformed(ActionEvent e) {

String text = textArea.getText();

StringTokenizer tokenizer = **new** StringTokenizer(text);

JFrame tokenizedFrame = **new** JFrame("Tokenized Words");

tokenizedFrame.setLayout(**new** FlowLayout());

**while** (tokenizer.hasMoreTokens()) {

String token = tokenizer.nextToken();

JTextField textField = **new** JTextField(token, 20);

textField.setEditable(**false**);

JButton rootButton = **new** JButton("Assign Root");

rootButton.addActionListener(**new** ActionListener() {

@Override

**public** **void** actionPerformed(ActionEvent e) {

textField.setText(token + " (Root: " + selectedRoot + ")");

}

});

JPanel wordPanel = **new** JPanel();

wordPanel.setLayout(**new** BorderLayout());

wordPanel.add(rootButton, BorderLayout.***NORTH***);

wordPanel.add(textField, BorderLayout.***CENTER***);

tokenizedFrame.add(wordPanel);

}

rootsDropdown = **new** JComboBox<>();

tokenizedFrame.add(rootsDropdown);

**try** {

BufferedReader reader = **new** BufferedReader(**new** FileReader("Roots.txt"));

String line;

**while** ((line = reader.readLine()) != **null**) {

String[] words = line.split("\\s+");

**for** (String word : words) {

rootsDropdown.addItem(word);

}

}

reader.close();

} **catch** (IOException ex) {

ex.printStackTrace();

}

rootsDropdown.addActionListener(**new** ActionListener() {

@Override

**public** **void** actionPerformed(ActionEvent e) {

selectedRoot = (String) rootsDropdown.getSelectedItem();

}

});

tokenizedFrame.pack();

tokenizedFrame.setVisible(**true**);

}

});

frame.setVisible(**true**);

}

**public** **static** **void** main(String[] args) {

SwingUtilities.*invokeLater*(() -> **new** PoemEditor());

}

}

OUTPUT:

