|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |  |

Leviticus Smith

Professor Macon

CEN-3024c

3/23/2022

Module 6 UI Design

import java.awt.BorderLayout;

import java.io.File;

import java.io.FileNotFoundException;

import java.util.Collections;

import java.util.Comparator;

import java.util.HashMap;

import java.util.LinkedHashMap;

import java.util.LinkedList;

import java.util.List;

import java.util.Map;

import java.util.Scanner;

import javax.swing.JFrame;

import javax.swing.JPanel;

import javax.swing.JScrollPane;

import javax.swing.JTextArea;

import java.awt.BorderLayout;

import java.io.File;

import java.io.FileNotFoundException;

import java.util.Collections;

import java.util.Comparator;

import java.util.HashMap;

import java.util.LinkedHashMap;

import java.util.LinkedList;

import java.util.Map;

import java.util.Scanner;

import javax.swing.JFrame;

import javax.swing.JPanel;

import javax.swing.JScrollPane;

import javax.swing.JTextArea;

import java.util.List;

public class Leviticus\_Word\_Occurrences {

    public static void main (String[] args) throws FileNotFoundException {

        GUI();

    }

@Test

public void testAdd1Plus1() {

int x = 1; int y = 1.

assertEquals (2, myClass.add(x,y));

}

    public static Map<String, Integer> countWords (String fileName, Map<String, Integer> words) throws FileNotFoundException {

        Scanner file = new Scanner(new File(fileName));

        String word = null;

        while(file.hasNext()) {

            word = file.next();

            Integer count = words.get(word);

            if(count != null)

                count++;

            else {

                count = 1;

            }

            words.put(word, count);

        }

        file.close();

        return words;

    }

    public static HashMap<String, Integer> sortMap(Map<String, Integer> words){

        List<Map.Entry<String, Integer> > listWords = new LinkedList<Map.Entry<String, Integer>>(words.entrySet());

        Collections.sort(listWords, new Comparator<Map.Entry<String, Integer>>() {

            public int compare(Map.Entry<String, Integer> obj1, Map.Entry<String, Integer> obj2) {

                return(obj2.getValue().compareTo(obj1.getValue()));

            }

        });

                HashMap<String, Integer> tempMap = new LinkedHashMap<>();

        for(Map.Entry<String, Integer> entry : listWords) {

            tempMap.put(entry.getKey(), entry.getValue());

        }

        return tempMap;

    }

    public static void GUI() throws FileNotFoundException {

        JFrame frame = new JFrame();

        JPanel panel = new JPanel();

        JTextArea textArea = new JTextArea();

        JScrollPane scroll = new JScrollPane(textArea, JScrollPane.VERTICAL\_SCROLLBAR\_ALWAYS, JScrollPane.HORIZONTAL\_SCROLLBAR\_AS\_NEEDED);

        Map<String, Integer> words = new HashMap<>();

        countWords("TheRaven.txt", words);

        words = sortMap(words);

        for(Map.Entry entry : words.entrySet()) {

            textArea.append(entry.toString() + "\n");

        }

        frame.add(panel, BorderLayout.CENTER);

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

        frame.setSize(400, 300);

        frame.setTitle("Top Ten Word Occurrences");

        frame.add(scroll);

        frame.setVisible(true);

    }

}