

CO871 Assessment 2

Introduction

In this assignment you will work with an existing project, **WordCount**. You are expected to complete the following tasks by using lambda expression, method reference and stream in Java.

Deadline and Submission

- The submission deadline is at **11:55pm on Monday 22 Nov 2021**.
A mark of zero will be awarded for late or non submission of the coursework.
- You should upload your Java file `Main.java` using the submission link on the module Moodle page before the submission deadline.

Important

Before working on the tasks below, you should

- a) download the file `WordCount.zip` from Moodle and unzip the file before working on the project;
- b) carefully study the given code and make sure you understand them well. *Please do ask if you have any queries.*
- c) write your solutions to the following tasks between the lines

```
// START OF YOUR CODE  
  
and  
  
// END OF YOUR CODE
```

Tasks

1. [5 marks] Identify the longest line in the list `lyrics` and print out the longest line and its length in the terminal.
2. [8 marks] Collect all words in `lyrics` and store them in a local variable named `words` of type `List<String>`.

Note:

- *All words stored in `words` should be in lower case.*
- *You should make use of the list `words` in Tasks 3 & 4.*

3. [5 marks] Print out a list of distinct words with 6 characters in an alphabetical order.
4. [12 marks] Calculate the frequency of each unique word in `words` and then print out the words and their frequencies of all the words that have at least 4 characters and occur more than 5 times. The output should be ordered by frequency.