

CSC319 – J3 JAVA STREAMS API – REVIEW EXERCISE

Due date: 16 May 2024, by NOON on CSCMS

Instruction: Work the following problems and zip all your answers into one (1) single *.zip* file for submission.

Q1. Consider the code below, where you can find definitions of the related classes and variables in the accompanied *.zip* file. Your task in this question is to refactor the given code using the Streams API and lambda expressions. Write a Java application to verify that your refactored code works correctly. Here are the additional requirements:

- You must write one (1) Java file only. This file should compile together with the provided Java code to produce the executable Java application;
- Prepare this Java file in such a way that both the original code (method) and the refactored code (method) co-exist in the same class.

```
// Here is the code to be refactored
public Set<String> findLongTracks(List<Album> albums) {
    Set<String> trackNames = new HashSet<>();
    for(Album album : albums) {
        for (Track track : album.getTrackList()) {
            if (track.getLength() > 60) {
                String name = track.getName();
                trackNames.add(name);
            }
        }
    }
    return trackNames;
}
```