

# CSC 220 – Lab 12

November 28, 2017

**Due:** Monday, December 4, 11:59pm

## **Objective:**

Exercise interfaces and Collections in Java.

## **Java program:**

1. Download the files from the Lab12 folder on Canvas into an empty folder on your workstation. Do NOT modify any of the files you download.
2. Write a class `ArrayListWords` that implements `CollectionWords` using an `ArrayList`. Your class should contain a single field:

```
private ArrayList<WordRecord> aList;
```

3. Write a class `HashMapWords` that implements `CollectionWords` using a `HashMap`. Your class should contain a single field:

```
private HashMap<String, Integer> map;
```

4. Run the Benchmark driver application.

## **What to turn in:**

Use proper indentation and comments. Jar your `ArrayListWords.java` and `HashMapWords.java` files into a file called `Lab12.jar`. When you're done, upload the JAR file to Canvas, by the deadline.