# CALIFORNIA STATE POLYTECHNIC UNIVERSITY

# **Computer Science Department**

CS 2400 (4) T. Nguyen/F22

PROJECT: 1 (100 points)
DUE DATE: 9/26/2022

# **Description:**

- 1. Implement the interface BagInterface and the class ArrayBag
- 2. Implement the class JavaKeywords that uses the interface and class in part 1:
  - a. Reads the Java keywords from the file on the intranet /user/tvnguyen7/data/javakeywords.txt and stores the keywords in a bag.
  - b. Checks all the command line parameters and outputs if they are Java keywords using the information stored in the bag.
  - c. Show the testing of all the interfaces that are not used in part 2.b.
  - d. **NO** input to program in part 2.c. Hardcode your tests.
- 3. No package.

# Required I/O:

For example, the command:

java JavaKeywords while total if will produce the following output:

```
Java Keywords by F. Last

# Java keywords loaded.

while is a keyword
total is not a keyword
if is a keyword

your testing output here...
```

F. Last is your first initial and last name. # is a value that is the number of keywords read.

### Turn in:

- 1. There will be 3 Java source files: BagInterface.java, ArrayBag.java, and JavaKeywords.java
- 2. Compress these files into a zip file and submit it to my intranet dropbox with the name:

**bronconame-p.zip** where **bronconame** is the part before your @cpp.edu email address, in lowercase.

```
zip p1 BagInterface.java ArrayBag.java JavaKeywords.java
scp p1.zip bronconame@login.cpp.edu:/user/tvnguyen7/cs2400-002/bronconame-p1.zip
```

3. This is how I will grade your project:

```
unzip bronconame-p1
javac JavaKeywords.java
java JavaKeywords while total
```

# **Grading Guide:**

- 80%: Program correctness
- 20%: Coding efficiency, style, comments, formats, report

**Notes:** The following information is required in the beginning of every source file.

```
//
            Last, First
    Name:
//
    Homework: #
//
   Due: date
// Course: cs-2400-02-f22
//
//
    Description:
//
             A brief description of the project.
//
```

# Hints:

To copy the data file to your computer, use the command:

```
scp bronconame@login.cpp.edu:/user/tvnguyen7/data/javakeywords.txt .
```