

## CSCI4448: Homework 1

### Java/OOP

You may work on this assignment either alone, as a pair, or as a group of 3 (I highly recommend you work in a group, I made this a bigger assignment so that you do work in groups).

There are two parts. For Part 1, each person will submit their answers into Moodle under the Homework #1 quiz which will be automatically graded.

For Part 2, you will submit a zipped file with the .java files specified and a single .PDF with the code and output as specified. Name the .PDF with each person's lastname

**Lastname1\_Lastname2\_Lastname3\_HW1Part2.pdf**

If you work as a pair or group of 3 then you must have only ONE person submit a zipped file as specified into Moodle (penalty if other group members also submit). Put everyone's full name at the top of your .PDF and each .java file. Name the zip

**Lastname1\_Lastname2\_Lastname3\_HW1.zip**

*If you cheat by falsifying your output where it doesn't match to the code you list, you will each get a negative score for this assignment for violating the Boulder Honor Code.*

---

### Part 2

1. Create a class named `UserUtility` that has a static method named `createUsername` that takes two parameters: their first name and their last name (in that order) and returns a username as the first 3 characters of their first name plus the last 3 characters of their last name.

Then create a driver program that prints the result of calling your method statically with "Liz" and "Boese" as the parameters.

Copy your code into your document in this order:

- a. `UserUtility.java`
- b. Your driver program
- c. Screenshot showing the output of running your program

2. Using the code on Moodle, change only the `Media`, `Book` and `DVD` classes to implement the `Comparable` interface and use the driver program (without changing it) to sort them correctly.

Expected output:

```
1999: Dare to go Solo [DVD]
2000: Dare to go Solo [DVD]
2006: Dare to go Solo [DVD]
2012: Dare to go Solo [DVD]
1970: Intro to Programming [DVD]
2011: Intro to Programming [DVD]
Dare to go Solo by Elizabeth Boese
Dare to go Solo by Wise Travelguy
Intro to Programming with Java Applets by Elizabeth Boe
Intro to Programming with Java Applets by Elizabeth Boese
```

Copy your code into your document in this order:

- a. `Media.java`
- b. `Book.java`
- c. `DVD.java`
- d. Screenshot showing the output of running your program