Lingxi Zhong
U0770136

When you are satisfied that your program is correct, write a brief analysis document (.pdf format only). The analysis document is 20% of your Assignment 2 grade. Ensure that your analysis document addresses the following.

1. This assignment is traditionally done with Pair Programming. Were there times you wish you had a partner to bounce ideas off of? We will ask you to compare your experiences with these first, "single" to assignments to the paired assignments later on in the semester. Please use your answer here for reference later.

 Absolutely, there were several times where I wanted to ask a partner if they might have a more efficient idea of writing the code, or just to look over and see if my code was efficient. A lot of the methods I wrote I think would benefit from having another point of view. Especially ideas like, "Do you think a for loop for all of these cases is the best idea" etc.

2. Java's built-in classes Comparable and Comparator are both interfaces for doing comparisons among objects. What is the difference in the two interfaces? Give a situation when it is best to use each. Is it possible to change the extra features in LibraryGeneric such that the Comparable interface is used instead of Comparator? Why or why not?

The two interfaces are very similar. Comparator is better used when you want to assign a custom comparison technique to a type of object/data that you typically don't control. Comparable is useful for when all you have to do is specify how objects are compared. I think that it should be possible for the assignment to use comparable instead of comparator because the compareTo methods for the data types for this assignment were already there

3. Comment about the efficiency of your programming time. Did you utilize the time spent on this assignment effectively? How might it be improved?

I think I was pretty efficient in the shorter than desired time I spent on the assignment. I think the time I did spend was very effective, although it would be greatly improved if I started the assignment earlier and had more time to think about it. Although working in a tighter time frame makes me code more quickly since I'm more focused, mistakes are more common and as a result debugging/testing takes longer than it might usually.

4. Reiterate why writing Generic code is important for this course. Phrase your answer in terms of Data Structures and Algorithms.

5. How many hours did you spend on this assignment?

About 5 hours