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CS 2420

Analysis Document

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.

- Yes, there were definitely times where I wish I had a partner. The inability to discuss my thought process on a particular issue and compare it with another's definitely made it more difficult. I actually had someone whom I met in the Cade lab that I would talk to about some of the issues that arose. Just getting another point of view on the issue can help open more ideas and thoughts in my own mind, thus resolving the issue.

2A). Java's built-in classes Comparable and Comparator are both interfaces for doing comparisons among objects. What is the difference in the two interfaces?

- A Comparator is its own definition of how to compare two objects, and can be used to compare objects in a way that might not align with the natural ordering.
- Comparable uses the compareTo method of the class as defining the "natural" ordering of that object.

2B). Give a situation when it is best to use each.

- I would use the Comparable interface when comparing Strings.
- I would use the Comparator interface when comparing fruit. I must specify how the ordering of fruit is to be, because it's biased.

2C). is it possible to change the extra features in LibraryGeneric such that the Comparable interface is used instead of Comparator? Why or why not?

- Yes, I could potentially use Comparator and specify the way the ordering is to be done, but it wouldn't make sense to do that because there is already a "natural" way of ordering them and I don't like double the work.

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

- Yes, I utilize my time very well. If I didn't then my assignment would be turned in late. I could have attempted to start on the assignment a little earlier so that I don't flirt with turning it in on the last day. Although the assignment is done within 8+ hours before the deadline, it wouldn't hurt to turn it in earlier as to avoid any potential issues that could arise.

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

- It's important because it allows us as a programmer to create a program that will work for a variety of problems. I don't want to have to create 15 different methods to solve an issue for a specific type when I can create only a few methods that will handle any type. Makes it easier to program and most importantly edit or change any of the source code.

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

- 13+ hours