

Assignment 2- Analysis

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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.*

I think that the general idea of working in teams is good, because it is a great way to exchange ideas and discuss about them. But personally, when it comes to homework, I usually prefer to do it on my own, with my own time restrictions and be fully focused on the whole project.

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?*

Comparator gives the ability to provide custom comparison logic for types that you have no control over, or in the case where you want different types of comparisons with the same object.

Comparable allows specifying the natural ordering of the objects that we are, but you can implement just one method (compareTo()) for an object.

So in our case, the Comparable interface would be insufficient because we have methods for comparing by ISBN, author name and due date, and all are different from each other, so implementing a single 'compareTo()' will not be enough.

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 believe that most of the time went on creating tests for the code, especially when testing the sorting methods, due to the large amounts of data that needed to be entered manually. But overall I think the programming time was efficient enough. I think all this can be improved by practicing more, as I'm fairly new to Java, and still learning all the tricks and differences between it and C++.

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

I believe that writing generic code is important for this course because we will be working with things such as sorting algorithms, which can be used for all kinds of data types, as well as generic data structures that can be used for holding different types of data, while still working in the same way.

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

I spent around 3-4 hours on this assignment, and the actual method coding took the least amount of time.