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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.

      Yes, I think bouncing ideas off a partner or friend can be very helpful especially when you are stuck on a specific aspect of an assignment. Two heads are better than one!

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?

For the comparable interface it allows you to sort by the natural ordering of the things you are sorting i.e alphabetical for letters, numeric for numbers, and chronological order. In the Comparator interface you determine the form of ordering in the system. In other words you have the ability to define in what manner you want the items sorted so it doesn't necessarily have to maintain a natural order. A comparable interface is well when the natural order of sorting your items would suffice and anyone else using your program would want to start in the same way. The comparator would best be used to organize items out of your control or items where you would want to override or sort by something other than the natural order provided by comparable. An example of comparable would be to sort names in an alphabetical order and comparator would be to sort those names according to length. It would be possible to use comparable for the OrderByIsbn, and OrderByDueDate as it is sorting the values in numeric order, and ascending order, however for the sort by author you would not as the break case Is decided by taking the title values to differentiate between a tie, something not possible in comparable.

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 did utilize my time well while doing this assignment. I spent time in the cade lab as well as at home. I believe I can improve in my start time for the assignment as I waited until Tuesday afternoon to start programming. This should affect me negatively later on as assignments get harder and more time consuming.

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

Generic code is important for this course so that multiple types of data structures can be implemented in a single algorithm. This increases the applicability of code as you can utilize it for multiple types of information. This can be seen in assignment2 as we initially had our library set to only one type of data

structure. This limited its utility and by implementing the generic interface it became much more useful and applicable.

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

I spent approximately 7 hours on this assignment.

Upload your document (as a .pdf only!) to the Assignment 2 page by 11:59pm on September 7th.