Details

Note that this is an open ended question.

I have provided you with a very basic implementation for a set container class. Here are your objectives.

- Currently, it uses an array to hold the set elements. Convert that into a Linked List. Note that you are not allowed to use stock LinkedList provided by Java. You need to start from scratch. Most of the code provided in the LinkedList class we discussed can be used here. You are even allowed to use the entire LinkedList class, if that is what you want.
- Make sure the set container can hold any type of element as long as they are comparable. Note that you need only the equality check because you cannot have the same elements more than once in a set. As you know from basic set theory, order doesn't matter.
- Make sure the set class is iterable and show me that you can iterate over a set using enhanced for loop.
- Also, show me all your methods are working with clear test cases
- Do not forget excellent documentation.

I do not want you to copy the set implementation from somewhere and submit it as yours. It should be a modified version of what I have provided. As I mentioned, this is an open ended question and **your team (up to five people)** can come up with your own design decisions (such as come up with a package hierarchy, etc). Eventually, all the methods should work and it is your responsibility to provide test cases to show me that they are working. **Since this is a team project, only one team member needs to submit, and there should be a document (Note that you can add a text file to your NB project for that purpose) that explains each member's contribution to the project**.

Do not plagiarize. Then, you will not only get a zero but also will be in trouble. Here are the goals of this project.

- Understand "crappy" code with minimal documentation
- Learn to improve the code
- Learn more about LinkedLists
- Learn ethical collaboration
- Learn to work as a group for a common goal
- Polish all the skills you learned in CSC 230 in one project
- **Finally, of course 5 points towards your final grade**

You all are welcome to discuss this in our Discord Server. Good luck!!!

Set.zip