CST8288 OOP with Design Patterns Lab 3:   Data Structure

Domain

In Lab 2 we created a set of test in advance of lab 3. In this lab you will create the concrete implementation of java.util.Deque using a DoublyLinkedList rules. **Not all methods** need to be implemented. You will only implement the required methods.

What is Deque in Java?

The Deque is a double-ended queue. It helps in adding and removing data elements from a data structure from either head or tail. It can be used either as a FIFO or a LIFO.
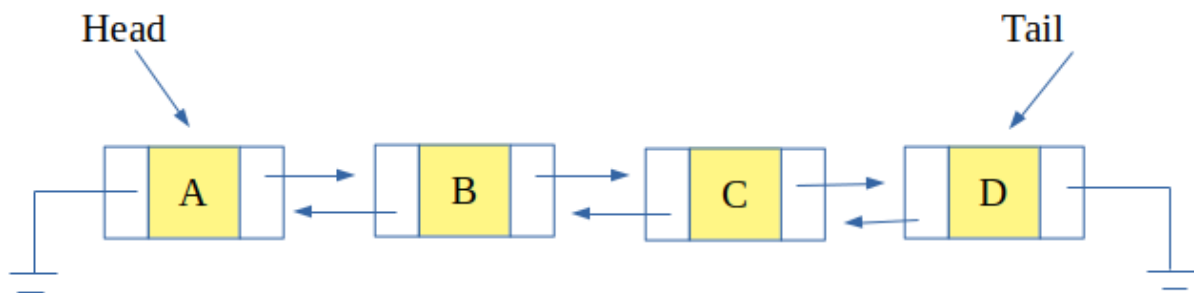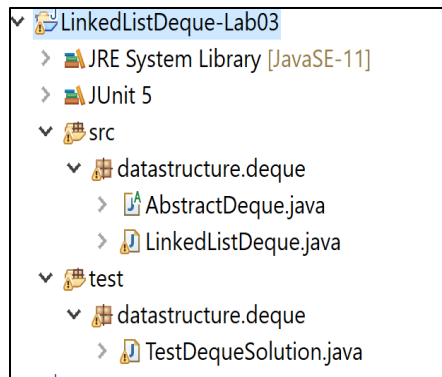

Attachment

1. AbstractDeque.java (don't touch it)
2. LinkedListDeque.java (to complete the implementation of the 6 methods)

Requirement

1. Make sure that your project structure like the following:

2. Inside the "LinkedListDeque.java", Implement the following methods:
    1. offerLast
    2. pollFirst
    3. peekFirst
    4. size
    5. isEmpty
    6. clear
3. You can use your solution of lab 2 ("TestDequeSolution.java") or the posted solution for lab 2 to test your implementation. I will post it next week (due to late submission of lab 2).
    1. You can find it in Content/Solutions.

Submission

You need to submit a zip file of your source code.
[firstName]-[lastName]-[labSection#].zip