Lab 02 – Double Integer Linked List

# Problem

We were issued the task of designing a Java class for an integer double linked list. We then had to write a driver class to test and utilize all of the assigned methods and constructors given to us in the assignment. Our required constructors included a default and parameterized constructor, and our methods included: goToNext, goToPrev, getDataAtCurrent, setDataAtCurrent, insertNodeAfterCurrent, deleteCurrentNode, showList, and inList.

# Proposed Solution

Based on the example demonstrated in class, I resolved to design a linked list class with several nodes, and each node would need to include a link to the previous node, as well as a link to the next node. I would need to initialize a head node, as well as a current node that would possibly shift based on what method has recently been used.

# Tests and Results

I had significant issues completing the assignment in the given time, and really did not have much spare time to write the driver class to test the methods I wrote in the IntDoubleLinkedList. My two trial runs of the driver program resulted in NullPointer exceptions, more than likely caused by my not initializing any nodes. I was unable to discover or rectify the source of this issue before time, so I submitted what I had completed.

# Problems Encountered

I checked the dropbox for any new assignments on Tuesday when I return homed from class, but I must have missed the new lab assignment. I went to lab on Wednesday morning with the intention of submitting my lab report from the previous lab and then working on the Tic Tac Toe program I had worked on the night before. Upon arriving at lab, I discovered we had a new Lab to work on, and attempted to finish in the time provided. I was sadly unable to fully finish what I was working on, so the code is sadly untested / unfinished. Future projects will be better, as I am now attempting to work on concepts given to us in class the evening of, in preparation for lab the next day.

I had NullPointer exceptions in my only compile / run of the program, and was unable to get help from either of the TA’s before I had to submit the assignment due to time. I blame no-one but myself, I should have checked the night before so I could start on the lab sooner.

I needed to instantiate the nodes at the start, so they were not null.

# Conclusions and Discussions

I feel that this lab a good review and expansion of the concepts JJ went over in class, and I hope to learn more about this type of data structure.