CSCD 340
Lab 3

One of the most important data structures that will be used is a Linked List. It is important that we develop a **VERY** generic linked list that we can use during the course of the quarter.

Node Specifics

- void pointer for data
- next pointer
- prev pointer
- Declared in the header file named linkedList.h

LinkedList Specifics

- Node pointer for head (Dummy Head)
- int size
- Declared in the header file named linkedList.h
- NOTE: The List will **NOT** be circular

Specific Information

- You will not use gets – use scanf, fscanf, fgets
- For the specific functions I have provided documented .h files. The comments are Javadoc style. Look through the .h files. To view the documentation open the html folder and find index.html.
- I have provided the menu functions and the file utils functions.
- I have provided a Makefile you must use.
- I have provided .h files. You CANNOT change them in any fashion. If you need to add anything add it to linkedList/requiredIncludes.h
- The purpose is to create a generic linked list with a void * and function pointers and the type should not matter. In our case the type is a book and type stock. Please examine the appropriate .h files to understand the structures.
- You will create an output file that shows the run of the program using valgrind. This output file should show that no memory is being leaked.
- I have provided unchangeable cscd340Lab3.c

What You Must Complete

- You must complete the functions in linkedList.c (See linkedList.h)
- You must complete the functions in listUtils.c (See listUtils.h)

- From Lab1 I have provided
    - myInt/myInt.C

TO TURN IN

A zip file, in Canvas, of the Lab3 folder containing

- all files required to compile and run your code
- all output file(s)
- my Makefile
- a test run named cscd340Lab3val.txt – testing all aspects including showing your code is leak free.

We should be able to download the zip and compile your code, and then run your code.

Name your zip, your last name first letter of your first name lab3.zip (Example: steinerslab3.zip)