Homework 5 Due February 23rd 11:00 AM 100 points

CS 2235

Data Structures and Algorithms

- 1. Using the SinglyLinkedList class from the lectures (the code will be posted to Moodle), modify your code from Homework 4 to use a singly linked list rather than the Scoreboard class for problems 1,2 and 3.
- **2.** Create a DoublyLinkedList class using the SinglyLinkedList class as a reference.
 - Note*Hint* Pages 136-137 from the book contain much of the code and you are welcome to reference them; just make sure you understand it (these slides will be posted to Moodle for your reference).
- **3.** Finally, modify your code from Homework 4 once again, this time using the DoublyLikedList. (Again, only parts 1-3)

Make sure to submit Java files for your SinglyLinkedList, DoublyLinkedList, GameEntry and both Scoreboards. As always, attach screenshots to demonstrate your code works.

Note: Sorting with Linked List can be challenging. We have yet to really discuss the nature of sorting algorithms, so for this assignment your Linked Lists **do not** have to be sorted.

Scoring

- 1. 10% Code compiles without errors.
- 2. 25% SinglyLinkedList class coded and used for first Scoreboard.
- 3. 15%- Scoreboard properly populated, with contents and summary printed using SinglyLinkedList.
- 4. 25%- DoublyLinkedList class coded and used for second Scoreboard.
- 5. 15%- Scoreboard properly populated, with contents and summary printed using DoublyLinkedList.
- 6. 10% Meaningful comments and header and proper use of abstraction (Use methods! Do not fill your main with lots of code).