CS 1331 Homework 11

Due Sunday December 2nd, 8pm

ShapeLinkedList.java

Attached in the zip folder you will find the class files for a working solution to Homework 9, the Shape drawing assignment. The assignment has been modified so that the ability to remove Shapes from the display is now possible. Feel free to play around with the program before beginning the assignment. If for any issue you have problems running the class files, please contact a TA.

We have provided the source code for ShapeLinkedList.java. In its current form, the class is simply a wrapper for an ArrayList. Your assignment is to remove the ArrayList from the code, and replace it with your own Linked List implementation of Shape nodes. You are not allowed to use any imports. Your Linked List must be a singly-linked list with only a head reference.

Essentially, your assignment needs to do the following:

- Remove all references to ArrayList and any imports

- Do not modify any of the method headers (including the constructor)

- Create a Node class to hold Shape objects ONLY

- Have a head reference to the start of the linked list and no tail reference

- Re-implement all the methods to work with the Linked List

- It is probably also a good idea to keep an int 'counter' instance variable for the length of the list to use with the size method

We expect all work to be your own. You do not need to javadoc this assignment, but in-line comments would be appreciated (as those are sometimes more useful in a collaborative environment). There is a grace period until 2am as usual, with absolutely no exceptions past that.