

YU CSE2011 Summer 2016

Assignment 1

Weight 5%, Due on Tuesday June 14th, 2016 at 1:00PM

Collect/finish the Java code (interface and the complete working classes) from lecture slides for the following ADTs:

- 1) ArrayList ADT that uses an array internally (call it AArrayList)
- 2) ArrayList ADT that uses a linked list internally (call it LArrayList)
- 3) Queue ADT that uses an array internally (call it AQueue)
- 4) Queue ADT that uses a linked list internally (call it LQueue)

Make sure you keep the same method names as in the slides (automatic testing will be performed)!

For each method you develop, add comments and estimate the big-O running time of its algorithm. In the comments additionally explain the advantages of the array-based implementation over the linked-list-based implementation and vice versa. Keep your code nicely formatted and follow good programming practices. Try to make the code robust and try to use generics.

Code that works and is nicely formatted will give you 70% mark and the rest of the mark will come for the extras mentioned above.

No late submissions will be accepted.

Zip your files into a file a1.zip and submit using command:

submit 2011 a1 a1.zip