Assignment 2 Report

**Linked List**

I could use a linked list in my implementation because I could add use it to store the Transaction Log, because they do not need to be in a specific order, all I will need to do is display the transaction log to the user, so I could just display the first element and then go to the next.

**Trees**

I could use this for the stock, if I wanted to display the information in a specific way, I would use trees, but other than that I don’t see a reason of including a tree, since they are not as efficient as the rest of them.

**Heaps**

I wont be using a Heap because I have no use for having a data store which needs to be sorted, so I will not be using a heap.

**Queues**

I could use the queue for the transaction log, because it will always add the latest transaction to the back, so it will always be in an order in which it was added, so using a queue would be a good idea.

**Stacks**

Same as queues, this would work in the same way, so I could use this for the transaction log, whichever is my preference.

**What I chose**

I will be using a vector, because I used a vector in the first assignment and it seemed to work well, and I have the most experience in vectors so I think it will go smoother if I use a vector rather than learning how to use a different data structure.

**Comparison between a procedural and object-oriented approach**

The procedural approach is a lot simpler because you don’t have to account for different classes, you just use one class, so it is easy to plan it out, because it is much more like something happens, and because that happened this other thing happened. Rather than with object-oriented, where you have to account for all of the classes, and make everything work together with methods rather than letting the program work in a procedural way.