Exam 1 Review

The exam has 7 questions over the following content. It will be given in the testing center at JCCC over several days.

1. How is an STL vector implemented behind the scenes?
   See: http://www.cplusplus.com/reference/vector/vector/

2. How is an STL list implemented behind the scenes?
   See: http://www.cplusplus.com/reference/list/list/

3. Make sure you can write the class declarations for Singly Linked List and Doubly Linked List Nodes.

4. What is a Circularly Linked List?

5. What does a pointer point to when not initialized? What should it be initialized to in order to avoid undefined behavior in your program?

6. How do you delete a dynamic variable? How do you delete a dynamic array?

7. Make sure to be able to find $O(n)$ values for basic functions.

8. Make sure you know how to implement functionality from a DoublyLinkedList, including:

   - PushFront
   - PushBack
   - PopFront
   - PopBack
   - GetAtIndex

   You will have to implement 3 of them on paper for the exam.