

Lab E Reflections Document

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Created a node class first which two member variables which are the following:

1. A char
2. A pointer to another charNode

This class also contained simple get and set methods. This includes getting and setting the next pointer, getting and setting the char in the node.

I then created a head and back pointer in the CharStructure class. As per the instructions this is a circular linked structure so whichever node the back pointer was pointing to I ensured it pointed to the head pointer (first node).

I implemented the following functions:

1. add/push
2. pop
3. isEmpty

Judging from my tests I can see the push/add function was working correctly. However I had a big problem when it came to the pop function. I feel it was directly contributed to the isEmpty function.

I tried several different ways to define when the list is empty to no avail. Below are the Boolean if statements I tried to incorporate to no success:

1. `if(headpointer == NULL && backpointer == NULL)`
2. `if(headpointer == NULL || backpointer == NULL)`
3. `if (headpointer == NULL)`
4. `if(backpointer == NULL)`

NONE OF THESE WORKED

As a result I had an infinite loop when choosing option 3 in the program to display the contents of the structure. This was when I popped it never reached the is Empty Boolean statement that checks to see if the list is now empty.