

"On my honor, I have neither given nor received unauthorized aid in doing this assignment."

PART I.

Summary of learning experience:

The easiest part of the task is to finish most of the functions for PSL, SDAL and CDAL after the functions have done for SSL.

The most difficult parts of the task: 1. It's my first time to implement linked lists. It's hard to understand the nodes, pointers, etc. 2. After I figured out how to implement a SSL, the most difficult part would be implement the CDAL, especially for the insertion and deletion related functions because every time I need to think about different size of the list.

The assignment's educational objective: I think linked list is the most basic and important ADT for the programming. The assignment is first let us to implement most basic one – SSL, and then do some different kinds of linked list.

How well I think I achieved them: I think I am doing good for the part 1. As a beginner, I spent a lot of time on this project. After finish it, I am familiar with the implementation of classes, pointers, etc.

PART II.

Summary of learning experience:

The easiest part of the task is to add the iterator classes because they are already provided by the professor.

The most difficult parts of the task for me is to test the `const_iterator` because I don't know how to insert items to `const_iterator`. The function `->()` is also different for me to implement because it's also a dereferencing operator.

The assignment's educational objective is to let us know how to implement iterators, and the difference between constant iterator and regular iterator.

How well I think I achieved them: I think I achieved them pretty good. I went to the office hours several times, and the TA's help me to understand `const`, pointer, reference. After that, I was able to implement the functions.

PART III.

Summary of learning experience:

The easiest part of the task is to write the code for testing once I figured out how to use `CATCH`.

The most difficult parts of the task: First, I need to learn how to use `CATCH`, especially the "throw exception" part which took me some time to figure it out. Second, I'm still unable to figure out how to test `" T const& operator[](int i) const"` function.

The assignment's educational objective: learn and practice how to do unit test using `CATCH.h`.

How well I think I achieved them: I think I am doing good, but I'm unable to figure out how to test `" T const& operator[](int i) const"` function.