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CS 202

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Project 10 Documentation

Purpose:

The purpose of this project was to implement template based stacks with node based stacks and array based stacks. The project was not very difficult but the new concept of templates increased the length of the project. This project made me realize that C++ has many features and templates can increase the power of ones code. With templates, you can design code that works with many different kinds of data types rather than coding for every possible situation.

Challenges:

One challenge I had was working with the friend function for the operator overload <<. The class had to be declared before this could be implemented. With templates, there is a lot of peculiar syntax that I was not familiar with prior. One thing that I do not like is that template <class ?> had to be implemented above the implementation of a class declaration. Also if you want to use a templated class within another, it comes with more syntax,

Design:

I designed this project the same way I do all of my projects. I read over the guidelines thoroughly then I just think about how the structure should be before I even start coding. I then move on to writing pseudocode and wring small annotations of what should be happening in each individual part. I run the code heavily after I get a good chunk of it done. It is easier to find errors when you are working bit by bit. If I worked on the whole project, then compiled, that would be a recipe for disaster.