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CSIS-215

Approach

The first goal for this project is to completely understand what the assignment is asking me in regard to how each file correlates to each other. I will also research ahead of time different types of smart pointers to be able to properly use them and to refresh my memory on templates and inheritance.

Afterwards, I will first work on the ABag.h file and work on the functions one-by-one whilst testing it with the given bagtestmain.cpp file. I also will remember how the stacks are LIFO (last in, first out) and will implement that whenever I am searching through the bag, adding to the bag, or any other functions that deal with the order of the bag’s contents.

Next, I will work on the BDictionary.h file where it seems that most of the functions simply call the functions of ABag.h and modifies what is returned from it. So, I will create a smart pointer here, probably a unique, or scope, pointer since it is deleted once the pointer is out of scope, therefore there is barely any overhead.

Any functions from ABag.h that are unused in BDictionary.h will be tested in bagtestmain.cpp to show that it does work properly.

Afterthoughts/Results:

I was able to implement almost all the functions except the += function. Once I worked out how I think each function should work on paper, it made it a lot easier to transfer the thoughts into code. The most difficult part for me was how to get started using the smart pointers but once I understood how it worked, it went smoothly. Learning how to use all the parts of the debugging feature of Visual Studios helped immensely as well.