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CS202.1101

Project X

The purpose of this program is to demonstrate the use of smart pointers within C++ and how they can be used to keep count of objects across the entire program. Papachristos mentioned how their functionality was implemented into auto pointers but it was fundamentally flawed and should not be used.

Designing this program took some time to think conceptually, and I had to figure out what a smart pointer really was. I also had to interpret what the assignment was asking for with each method. Once that was determined, I could begin to create the program.

The most difficult part of completing this project was understanding the concept. Once that hurdle was surpassed, my next problem was an issue with the m\_refcount pointers for each object. Some were producing normal numbers (2, 1, 0) while some others produced the maximum value for a variable of type unsigned long long.

Design was to meet the standard outlined in the assignment. Errors with the values may have had something to due with bad allocations, and even if more comprehensive error checking was introduced, it still would not solve the root of the problem. Even switching up how the m\_ptr member was checked did not help the issue. Given more time, I feel I could have diagnosed the issue but I was unable to.