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CS202

Prog4 New Syntax

All things considered, Java and C++ share a lot of common syntax. The transition was fairly easy, but only because I had been practicing object-oriented ideas for the duration of this term. Concepts such as the chaining of function calls was something that came more naturally to me than perhaps someone more used to working with structs, etc. The biggest obstacle was probably learning how to work in an environment without the \* and &. It seemed strange to be moving all these things around by value, but in the end I think it made the task less confusing overall.

With everything in the entire program being in a class, I was aggressively thrown into the world of helper functions. I have written many in the past, but I feel that with Java the number of helpers needed was drastically increased. In a way, though, I feel this helped me write in a more pragmatic, object-oriented way, and helped me to pay attention to how much data I was exposing and exactly where. More than I have observed in the past, I found myself moving tasks to class functions to help “clean up” my client-side interface (which was rather small to begin with for this portion of the project)

For the data structure itself, much of the syntax was familiar. Since I had been practicing with having node classes all term, this transition required little adjustment. The same setters and getters were required (for the node class only), and even the structure of the functions was largely the same. The major difference was the absence of dereferencing and passing by reference. All this really affected was how data was passed and retained between different functions.

Not having any delete keyword or destructors was an interesting exercise in mental gymnastics, but eventually made enough sense to get by. I wrote what may be considered a sort of destructor to simply zero out a node; a decision I’m still not certain of. Moreover, I called the function delete(), which may violate some unwritten rule about transitioning between C++ and Java, but I suppose I can cite ignorance on that one.

I had a small amount of prior experience with Java before this project, but not enough to get by alone, so lecture slides were extremely helpful in aiding the experience. I may even venture to say I enjoyed writing in Java more than C++. Only time will tell.