

Documentation

For this project, it was tough at first to get the way the nodes would interact. But with a bunch of if and else loops, and a while loop I was able to figure it out. There are several different methods that show up in my program, all of which are used. When the program is compiled without the makefile there are warnings but it still compiles and works correctly. With the makefile I just made it so it would omit any warnings. I also included my practice driver that is called testdriver. The node set up is actually in the header file, and I just did this for simplicity. The program will run correctly and doesn't add any extra memory (The memory is the same through each brk). In the main program, mymalloc it runs correctly, and there are loops and methods that make it easier. For the malloc part there is a run through to look for the space that makes most sense to allocate the memory and it does this using buddy allocation. And for the free part there is a series of if-else loops to check how the memory will be freed. There may be a few things that don't really do anything but that just was my process as I was coming up with this. I drew out a diagram and it actually helped a lot. Also worked up an algorithm from a TA that is used in the calculateBuddy method this gets me the address of the buddy. I didn't include the given driver file because it did not say so in the project description but it works for it.