

Project 1 Summary

In this project, we learned how to create a Unix-shell in C. Generally, this project taught me how processes work in unix-based operating systems. More specifically, I learned a lot about different functions and system calls that enable a programmer to directly request things from the kernel. This is very useful since we can create new processes, execute programs, open and close files, and much more. This project was a great way to practice my systems programming skills as well. Before making this shell, I was very familiar with C, but not very familiar with a lot of systems-level concepts. It was nice to be able to have a pretty applicable introduction in such a classic example.

The most challenging part of this project for me was learning how background processes were implemented. I also had some trouble parsing text using `getline(3)` - but this was due to not using the correct separator at first. Other than that, it was pretty smooth sailing and the `exec` family of functions were extremely useful.