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4/30/2025

CPSC 334

Final Reflection

I converted my programming language (MyPL) from CPSC 326 Organization of Programming Languages into a Debian package.

Steps to Convert the Project

Converting the project to something that had a CI/CD pipeline was simple. I moved the code into my new github repository. Then I added a makefile to test and build and lint the project.

Steps to Build the Release

I used the technique I learned in homework 3 to create a Debian package that installs MyPL on your computer. The final result allows you to install MyPL to user/local/bin using dpkg.

Specifically, I created an appropriate Debian control file and postinst script. I repurposed my deb-build script to create a tmp directory that allows dpkg to install my code in usr/local. Then I created a symlink between the main mypl.py file and usr/local/bin/mypl so that mypl can be called anywhere on the command line using mypl file.mypl.

Challenges Faced

The main challenge I had in this project was figuring out how to install an executable with a nice name (such as mypl and not mypl.py) in /usr/local/bin without just sticking all the code in there. The rest was easy as it was the same process I had done in earlier homeworks.

How DevOps Can Benefit my Future Projects

The techniques and principles I learned in this DevOps class could help my future projects become more deployable and reliable. They also could help them be more efficiently tested, tested more often, and most likely have less bugs.

How This Class has Influenced My Perspective

This class has introduced some new helpful technologies to me. It helped me understand the advantages of cloud computing and when it has advantages and disadvantages. I used to be anti-docker because why am I downloading most of an operating system just to run an app. This class showed me some of the advantages of docker and I have warmed up to it some especially in the context of development and testing.