Y17-18 Capstone Proposal

Proposal

I will create an application that will help with code submissions and grading. I will also use this opportunity to learn more about the GTK GUI toolkit, Google OAuth, and Python Flask web framework.

Details

This application will be written using the following technologies: A GTK/Webkit front end and a

Python flask back end. The front end will be the user interface for the application and the back end will be the "brains" that include performing authentication, file upload, archive creation and emailing.

Components and Time line

- Google OAuth: research/prototype different ways to do Google OAuth (2 days)
- File upload (1 day)
- Zip Archive data (1 day)
- email (2 days)
- testing (1 day)

Outcome

After the completion of this project, the application should be able to authenticate using Pinkerton credentials, upload files for submission, creating a zip archive, and email the zip to the instructor

The app will be developed and testing on Linux with hope to be ported to windows

Future Work

Create an auto grading system that will download the emailed zip, run the tests and email results back to student