## **Foundations of Coding Lab2**

With the basic fundamentals of python at your disposal, you are now capable of completing a wide range of tasks. In this project, everything will be tested, including:

- Basic syntax
- Good documentation for functions and variables
- Variables
- Data types
- Typecasting
- Lists
- If statements
- while loops

You will be given a scenario, and you are to complete it to the best of your ability. This project is open ended intentionally, so submit it when you feel like it is finished. Remember, there is possible extra credit for those that go above and beyond the rubric. This assignment is worth 30 points.

## Scenario:

In an alternate universe, First Financial Credit Union not only entrusts teenagers to run an entire branch of their bank, but also maintain the entire banking system. Unfortunately, the student activities office has stolen our banking system and deleted it. Your boss found out you know basic python, and conveniently we are in a universe where GUIs do not exist yet. He wants you to recreate a basic banking system that includes these features:

- Two ordered lists: one that has all of the bank accounts listed by name, and another that stores the balance of all of the accounts.
- Depositing and withdrawing money into an individual account
- Transfer money between two accounts
- List all of the accounts and their balances
- The ability to add or remove accounts
- The ability to do multiple actions on one a single run of the program (the program does not exit after one action)
- **BONUS:** If you can figure out how to read and write to a file storing all of the account details
- BONUS: If you write individual functions for all of the actions for better readability

## Rubric

To get full credit, you must have the following:

- A header comment
- A comment for every function you create
- A comment for every variable and list you create
- A lab report detailing your objective and how you accomplished each task.
- A functioning program that correctly runs ALL of the functionalities listed in the scenario.