Final Project Summary

I created a code for basic finance management. A user is able to follow the prompts to create expenses and incomes with customizable parameters. The code uses the user data to display the finances in categorized and organized files. The code is helpful for me to create overlook expectations of what income I need to earn, yearly, to cover my various yearly expenses. I created the code, keeping in mind what would be helpful to me if I were the user. I used CS 172 concepts in great measure. I used classes with inheritance relationships, vectors, inheritance and polymorphism, dynamic memory, pointers, file IO, string members, etc. Polymorphism proves a very useful principle in coding. Having dipped my feet into it through this project, I see the vast potential that it provides. I certainly see how this code could be continually improved to work as a more highly useful financial tool. Class relationships and member functions built the logical foundation of this code, while vectors and streams made up its support beams. These concepts were intrinsic to each section of thought in my code.

I was surprised by how smooth and useful the topics we learned in this class work together to build intuitive code. I feel equipped to create more complex things, having learned the concepts of CS 172.

If I were to create a version two of this project, I would do a few things differently. I would make a system of currency, such as USD, such that finances are reported as dollars and cents, as opposed to decimal numbers. Additionally, I would take advantage of the powerful backbone I built to implement many features, such as financial calculations, conversions, and suggestions which utilize the infrastructure which is already in place. A function which would suggest how many hours I should work in order to meet my financial needs would only need to access vectors and call get functions before doing math. A function which reports what my most profitable video project was may use file reading or object access through my vectors. Certainly, I explored and had a great opportunity to use the concepts of this class during this project.