Investing and Coding

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Tech and Design
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Topic

The topic of my project is to learn about coding and investing and combine the two in one project that uses coding to help me invest that can be implemented as a standalone system.

Learning Goals

My learning goals are to:
- Have a deep understanding of coding
- Be able to understand the stock market
- Be able to make smart decisions in the stock market
- Learn to model and 3d print using Fusion 360
- Have sufficient knowledge of coding and investing to analyze companies and stocks using code

FIGURE 1: Logos of companies and things I use to learn

Learning Process: Materials, Subject Matter, Course Content

My journey to achieve my goals includes learning:
- Python through Microsoft and Codecademy
- Java in CSA at Kent
- Fusion 360 with Mr. Smith in the impact studio
- Investing through an online course
- How to invest through years of experience using my personal portfolio
- Building an investment thesis independent study
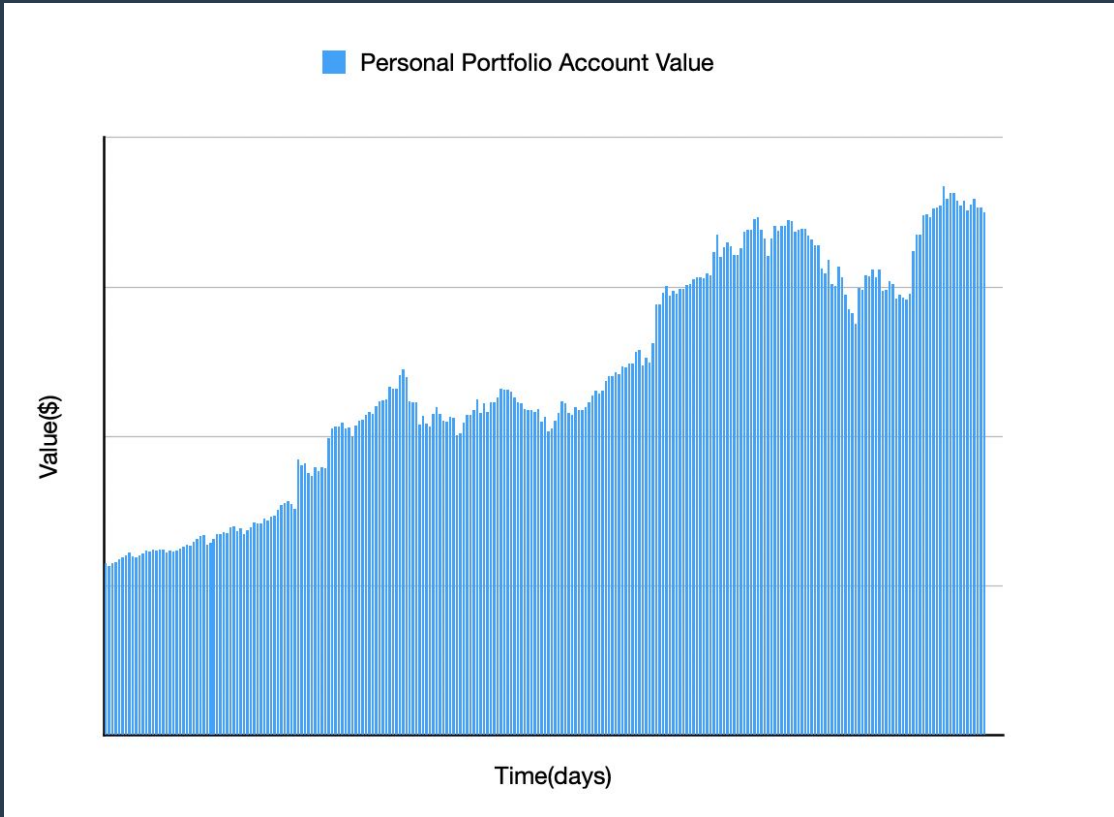- Introduction to capital markets independent study

FIGURE 2: Chart of my personal portfolio

Prototyping: Materials, Tools and Process

To get ready for my final project I have created a plan for the project and done smaller projects to get me ready for the final project.

The plan for my project:
I plan to make a program to analyze companies and their stocks to tell me if they are good investments or not, and detect patterns in the stocks. Then I would like to model and 3d print a housing for a computer and screen that would run my code and display information the code returns.

Practice Projects:
Python:
- Alarm Clock(with sound)
- Stock picker(with visualization)
    - The code randomly determines the growth or decrease in a fictitious companies stock that you name and give an initial value to for an amount of days you pick
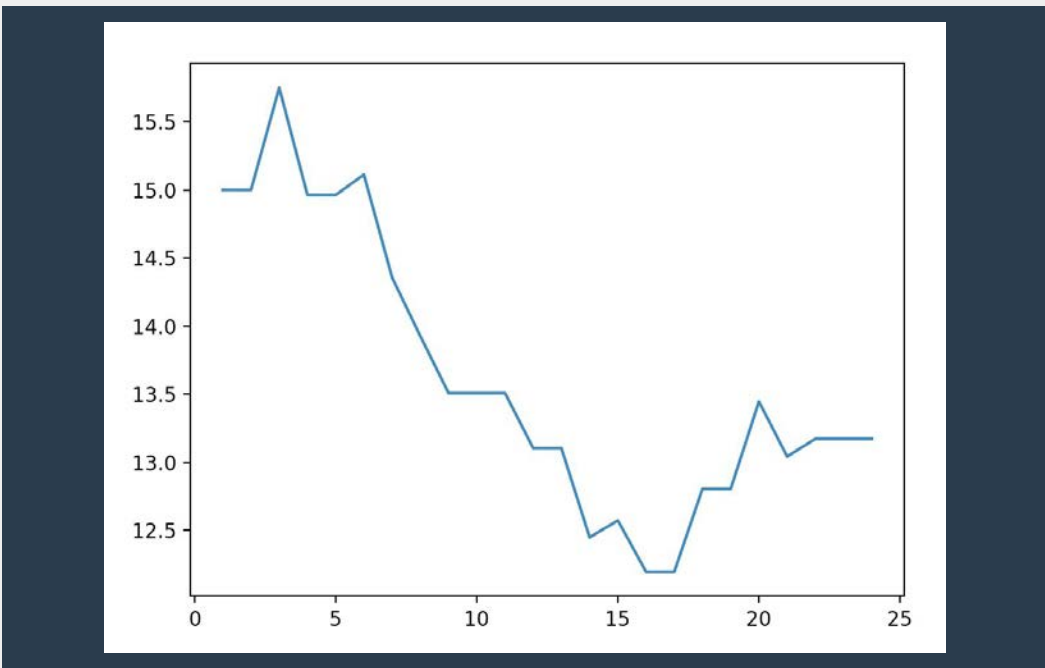   - The code then visualizes the changes in the stock.

FIGURE 3: Picture of python stock visualization

3D Printing:
- Tennis string holder
- Toy catamaran
- Pen refill size converter
- Model Toolbox

FIGURE 4: Model tool cabinet created with Fusion 360

Results/Next Steps

I plan to continue advancing my learning in java next year through the class advanced topic in computer science. We will be learning how to learn on our own in the world of coding. With more knowledge of java and more practice with investing I will be able to start my project soon.