

Criterion E, Part I - Evaluation

Success Criteria:

- I. Program ability to load a .csv file to a main() function.
- II. Program ability to read through/process a stock historical data .csv file and create an ArrayList.
- III. Program ability to read and calculate the average in a given period of data of the current selected company (i.e. last month or last year)
- IV. The StockAnalyzer's proficiency in reading and determining the lowest trade day in a given period of data of the current selected company (i.e. last month or last year)
- V. Program ability to read and determine the highest trade day in a given period of data of the current selected company (i.e. last month or last year)
- VI. Program ability to switch between the selected companies by the user.
- VII. Program ability to switch between each completed analysis option in the menu simply by the user clicking the "enter/return" keyboard.
- VIII. Program ability to "clear" the screen between every interaction and menu selection, for clarity and intuitiveness.

Meeting Success Criteria (shown below)

- I. The program successfully loads and returns a success statement with the selection of each of the five companies in the main() function.
- II. The program successfully reads through the .csv files to create a new ArrayList, and this is confirmed by the fact that it can return the new ArrayList for user-requested amount in option "4", "display data".
- III. The program successfully returns the calculated average for each of the five companies for both the last month of trade days or last year of trade days, and in the correct formatting: \$00.00.
- IV. The program successfully returns the lowest trade day for each of the five companies for both the last month of trade days or last year of trade days, and in the correct formatting: \$00.00.

- V. The program successfully returns the highest trade day for each of the five companies for both the last month of trade days or last year of trade days, and in the correct formatting: \$00.00.
- VI. The program successfully switches and returns a success statement with each change of company by the user in option 1.
- VII. The program gives the user the option to return to the main menu by pressing “return/enter” with every since option once selected and calculated in the menu.
- VIII. The command line interface is cleared for every single interaction between the user and the menu options, allowing for a seamless and clear understanding of what’s being presented on the screen.

Criterion E, Part II - Future Ideas

Reference to Client Feedback (appendix, final consultation):

The client was overall satisfied with the fulfillment of each of the success criteria, but also made some helpful suggestions for future iterations and expansions of the solution product. For example, utilizing more of the long term data since the .csv files have up to five years of trade day data.

Student Recommendations for Future Expansion/Development

1. I would definitely expand the range of periods that the program solution can analyze, because the .csv files for each of the companies already hold five years worth of data. This at minimum is a straight forward addition to the program, and the client clearly wants to also see an exponential growth/decay value based on that long term, large data set. Having such a measurement would help provide a better understanding of how the company has been doing over the course of years, rather than months which is a more volatile figure.
2. In more complex expansions of the program, I would include more complex calculation methods that pertain even more closely to the investment side of the stock market, such as the price-to-earnings ratio, which more accurately tells the user/investor the overall health of the company being analyzed.

3. One final, more obvious development for the product would be introducing a constantly updating data set for each of the five companies, via use of an API or some other program. This is clearly an important future factor, because the markets are never consistent in the short term, and can switch directions in minutes.