

:::: Scope of Work Document

Scope of Work (SOW) - Is an agreement between an employee/contractor and employer outlining services work to be completed by the employee. SOW's are used commonly in technology jobs and contract work.

Please submit your Scope of Work Document by **Jul 2** detailing the project you plan to complete. (Make a copy and answer the questions below about your Application. You will submit with your Final Project PowerPoint/Slideshow)

Deliverables:

Describe your application in detail. What does it do? How does it work?

BlackRock Stock Analyzer

This is a C++ application that reads historical stock data for BlackRock (BLK) from a .csv file and performs simple financial analysis. It helps simulate how financial analysts track and interpret stock performance over time.

The program parses data such as daily closing prices and calculates:

1. Average closing price
2. Daily percentage changes
3. 5-day and 10-day moving averages
4. Highest and lowest closing prices over the dataset

It uses standard C++ libraries and the .csv file is downloaded from Yahoo Finance and stored locally as input.

Milestones:

Core Features(min 3)

1. **CSV Parser:** Read and parse historical BLK stock price data from a .CSV file.
2. **Price Analysis:** Calculate and display average, maximum, and minimum closing prices.
3. **Moving Average Calculator:** Compute and output 5-day and 10-day moving averages.

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Special Features - How do you want it to work in the future after you have more time to develop the idea and your programming skills?

1. **Live Data Fetching:** Use APIs like Finnhub or Alpha Vantage with libcurl to automatically update prices.
2. **Graphing:** Add ASCII-based trend graphs or integrate with external libraries to visualize data.
3. **Portfolio Mode:** Allow users to input multiple tickers and simulate managing a portfolio.

Timeline: FINAL PROJECT & PRESENTATION: Jul 2, 2025.