Objective

Create a containerized app that returns the average close of a stock ticker for the last 5 trading days. Utilize the free Alpha Vantage API and return the average close of Stock Ticker GOOG for the last 5 trading days as a simple text result.

API Documentation: https://www.alphavantage.co/documentation/ Get API Key: https://www.alphavantage.co/support/#api-key

Requirements

- 1. The container should be based on a Linux distribution of your choice.
- 2. The container should include all the necessary dependencies and libraries to run the script.
- 3. The app should make an API call to the Alpha Vantage API to retrieve stock data for GOOG.
- 4. The app should calculate the average close for the last 5 trading days.
- 5. The app should return the average close as output in a simple text format.
- 6. The app can be written in the language of your choice.
- 7. The container should include a README file that describes how to build and run the container, as well as any other necessary information.

Evaluation Criteria

Your submission will be evaluated based on the following criteria:

- 1. **Functionality** Does your script make an API call to Alpha Vantage and return the average close of Stock Ticker GOOG for the last 5 trading days as a simple text result?
- 2. **Code quality** Is your code well-organized, readable, and maintainable? Are you using appropriate libraries and modules?
- 3. Exception Handling Is your code resilient, how does it handle errors?
- 4. **Containerization** Is your container well-organized and efficient? Are you using best practices for creating container images?
- 5. **Documentation** Is your README file clear and concise? Does it include all the necessary information for building and running the container?

Submission

- 1. Create a new Git repository to hold your container and script.
- 2. Create a README file that describes how to build and run the container.
- 3. Include any necessary dependencies, libraries, or configuration files in the repository.
- 4. Test your container and script to ensure they are functioning as expected.
- 5. Share the link to your Git repository with your recruiter.