Project Description for Macedonian Stock Exchange Data Retrieval

This project automates the process of retrieving, processing, and storing historical stock data from the Macedonian Stock Exchange (MSE) using the Pipe and Filter architecture. The application focuses on collecting data for all MSE-listed issuers over the last ten years. It uses Python to automate the data gathering, transformation, and storage process efficiently.

The workflow consists of three main filters:

1. **Filter 1:** Retrieves a list of all issuer codes from the MSE website, filtering out invalid entries.
2. **Filter 2:** Checks the last available data for each issuer in a local CSV file to determine if new data is required.
3. **Filter 3:** Fetches missing stock data for each issuer, concurrently retrieving historical data year by year, and appends it to the existing dataset.

The application uses `requests` for HTTP requests, `BeautifulSoup` for HTML parsing, and `pandas` for handling and storing data in CSV files. Concurrency is achieved using `ThreadPoolExecutor` to optimize data retrieval speed.

By automating the entire process, this project ensures that the stock market data is up-to-date, well-organized, and ready for analysis, while following a modular and maintainable architecture.