Interview

As this task is designed to assess your ability to work independently, it's crucial that you avoid seeking external help. Instead, please refer to internal documentation and resources (e.g., Docker, QuestDB, Grafana, VSCode) to resolve any issues you might encounter during the setup process. Part of this internship will involve troubleshooting and problem-solving, so demonstrating your ability to consult relevant documentation will be an important part of the evaluation.

Step1: Install and Run the Docker Stack on Your Local Machine

As part of the interview process, we would like you to set up and run the Docker stack on your local machine, which will serve as your development environment during the internship. This will help us assess your familiarity with Docker and your ability to work with containerized services, as well as ensure that you are ready to begin development work.

Instructions:

1. **Clone or download** the Docker stack repository https://github.com/quantiota/AI-Agent-Lab/
2. **Install Docker and Docker Compose** on your local machine (if not already installed). Ensure you have the latest versions installed.
3. **Run the Docker stack** using the provided `docker-compose.yml` file.
4. Access the following services locally to ensure everything is working:
   - **localhost:8080** (Code Server for VSCode)
   - **localhost:9000** (QuestDB)
   - **localhost:3000** (Grafana)
5. **Test the AI-Agent Lab**:
   - Run the `data-stream-processing.py` file in the **/notebooks/market-data/Binance/ folder**.
   - Verify that the data stream is being processed and check the data in **QuestDB** (available on **localhost:9000**).
   - Check the **Grafana dashboard** (on **localhost:3000**) to ensure the data is being visualized properly.
6. **Verify that all services** are running and accessible through your browser. The entire setup and testing process should take about **10 minutes** if Docker and Docker Compose are properly installed.

What You Should Submit:

- Confirmation that you've successfully set up the Docker stack and run the AI-Agent Lab.
- 3 Screenshots of the following:
   - **localhost:8080** (Code Server running on VSCode)
   - **localhost:9000** (QuestDB showing the data from the Binance folder)
   - **localhost:3000** (Grafana dashboard visualizing the processed data)

Important Note:

As part of the first step of the interview process, we ask all applicants to complete the Docker stack setup task and provide the required screenshots as described. This step is essential to ensure that you are familiar

with Docker and can set up the development environment required for this internship.

If you are unable to complete this task or run the Docker stack, we kindly ask you to **withdraw your application** to allow us to focus on candidates who are technically prepared for the role.

We appreciate your understanding and encourage you to apply for future opportunities once you have gained more experience in this area.