CRYPTO BROKER

CryptoBroker Take-Home Challenge

Please do not work longer than a few hours on this assignment. Do not hesitate to write us and ask any questions if you have doubts about the assignment. If you don't manage to complete the challenge, please write a ***short*** *text in your response email on what you would want to do to finish the challenge. Make it easy for us to understand your code.* **Keep your code simple and clean. It's important that the code *runs* without any modification. Provide the commands needed to run it.**

In CryptoBroker, we develop a web trading platform for cryptocurrencies, using a microservices architecture. Most of our functionality is based on Java and reactive RESTful interfaces. Your goal in this challenge is to build a **simple** RESTful API for managing BTC trading requests. There will be no authentication in this application. The API should manage requests for **just buying** assets (BTC).

We provide attached an endpoint that produces the BTC/USD price on each request. You can execute it by running:

python exchange.py

Take a look to the README for more information. The Endpoint will be located at http://127.0.0.1:5000/btc-price

We ask you to implement the following endpoints:

- ***createAccount(name, usd_balance)****:* Creates an account on the application with 0 BTC.
- ***fetchAccountDetails(account_id)****:* Fetches account details.
- ***createLimitOrder(account_id, price_limit, amount)****:* Creates a limit order, waiting to be executed when the price limit is reached.
- ***fetchOrderDetails(order_id)****:* Fetches order details and status.

The limit orders created should execute (be marked as processed) as soon as the market price (given by exchange.py) is lower than the price limit set in the order and the account details should reflect the new USD balance and BTC balance.

In order to evaluate the result we will take into account the following aspects:

Architecture & Resilience
Design decisions & Code quality
Modularization

Good luck!

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