Uphold Bot

Assessment Challenge

Use the Uphold API to create a bot that is able to move money between BTC and USD. It is not necessary to actually perform the transactions, just to log the intent to do so.

You must set up a database for the bot, and initialize it with a buy transaction of 1 BTC at the current market price. Based on this initial data point, your algorithm must then decide when you should sell or buy your assets. You can assume that you have an unlimited USD balance and focus only on the profit of the transactions.

All code should be delivered on a private repository — you may use GitHub, Bitbucket or GitLab for this purpose. Once you're finished, please provide access to the emails in the Contacts section below and include a link to the project's repository.

Our API documentation is available [here](#).

Requirements

You can use any [npm](#) package you see fit to solve this problem.

- *Database Engine:* Postgres
- *Language:* ECMAScript 2018
- *Node.js:* > v10

Phase 1 (mandatory)

- You must create a *README.md* file in your project root explaining how we can run the bot. Make sure to include all the necessary set up and execution instructions, and avoid implicit prerequisites.
- You must connect to Uphold's public [ticker](#) and retrieve the BTC-USD rate every 5 seconds. Each time you retrieve a new rate, the algorithm must decide to move the money if the profit of doing so is above 5%.
- You must log each algorithm decision. For example:
    - *"Profit of 1%. No action performed"*.
    - *"Profit of 5.5%. Moving 1 BTC to USD"*.

Phase 2 (optional)

- Create a test suite for your code, for example using Jest or Mocha.
- Besides logging the intention of moving money to the console, you should persist it in the database (examine our API and decide which data you should persist to be able to execute the transaction) so that you can continue to analyze the market and make decisions based on your cumulative transaction history.

Contacts

Feel free to reach out to us with any questions!

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