

## **Uphold Bot**

### **Assessment Challenge**

Use the Uphold API to create a bot that is able to alert you about price oscillations on a given currency pair.

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.

NOTE: If you have the time and want to deliver a better bot you can tackle both optional and bonus items (you don't have to complete the optional phase to pick a bonus item).

#### Requirements

You can use any npm package you see fit to solve this problem.

• Language: ECMAScript 2020

• Node.js: > v14

## 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 public <u>ticker</u> and retrieve the BTC-USD rate every 5 seconds. Each time you retrieve a new rate, the bot must compare it with the first one and decide if it should alert of an oscillation. For the purpose of this exercise we want to be alerted if the price changes 0.01 percent in either direction (price goes up or down).



# Phase 2 (optional)

- Handle multiple currency pairs at the same time.
- Accept all the parameters (currency pairs, fetch interval, price oscillation percentage, etc.) as arguments.
- Create a test suite for your code (e.g. jest or mocha).

## Phase 3 (bonus)

- Dockerize your application.
- Create a database to store all the alerts generated (e.g. Postgres).
  - Persist all the information that you consider relevant (e.g. timestamps, rate, bot configuration at the time of the alert, etc.)

#### **Contacts**

Feel free to reach out to us with any questions!

João Fonseca - joao.fonseca@uphold.com