

# The Banker

A quick recap of what is the Banker:

We participate in thousands of auctions every second. In order to achieve this, multiple instances of services act simultaneously.

Each of these instances need to know if the campaign they are about to bid for has money.

The Banker's job is to handle the money.

The Banker should be able to keep a balance per campaign, tell the service participating in the auction if the campaign he's looking to bid for has enough money to participate in an auction, and reduce money in case a bid happens.

Remember - you won't always win the auction, meaning the money wasn't spent.

The banker should run distributed, respond within a few milliseconds and handle a very large volume of requests.

Your job is to write the Banker API, under the following guidelines:

- 1) Choose any programming language that you feel comfortable with, the language itself doesn't have to be aimed for performance, but your code should be.
- 2) The program should be able to run as a distributed micro-service
- 3) Use a local redis (try and use the correct redis elements - don't go too crazy the correct types are simple)
- 4) Remember - redis can't handle querying for every request, how do you deal with it?
- 5) Ignore extreme cases not discussed in the interview (i.e: how do we handle multiple currencies)
- 6) The program should also include API tests
- 7) The code itself needs to be compiled (if needed) - basically able to run with a few commands (include all operation instructions in a README file)
- 8) Post it on your personal Github \ Bitbucket \ any other platform, try and split your commits into rational portions

This exercise shouldn't take you more than 3 hours, you shouldn't continue if it took longer - manage your time accordingly, and prioritize - if you need to give up on certain features, do so.

If you have any questions feel free to e-mail me:

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Good luck!