

CASH CODING EXERCISE V4

Guidelines

Use your preferred object-oriented or functional language. Build a simple bank by writing code with tests that meets the requirements along with a README. We expect you to spend between 2 to 4 hours on this exercise. If you're spending longer than that you are probably over-engineering the solution. We review these anonymously to reduce bias; please **don't put your name in the code or host it in a public place**.

Requirements:

- Deposit, withdraw and maintain a balance for multiple customers
- Return a customer's balance and the bank's total balance
- Prevent customers from withdrawing more money than they have in their account

An example test scenario

When Alice deposits \$30 and withdraws \$20

Then Alice's balance will be \$10 and the bank's balance will be \$10

And Alice will be prevented from withdrawing \$11 to prevent her balance going negative

What we're looking for:

- Modeling of the bank domain and how it's translated into code
- Consideration of edge cases
- Tests that document the behaviour of the code
- Demonstrated knowledge of the language and tools
- Code that is **simple, concise, and idiomatic**; think HelloWorld rather than [Enterprise HelloWorld](#)
- A README that provides instructions and communicates your assumptions, design decisions and trade-offs

What we're not looking for:

You don't need any way to interact with your code other than through tests. To help you focus on what we're interested in, don't spend time on:

- Code not needed to implement the requirements
- Command line tool
- User interface
- Http Server or Client
- Persistence
- Multithreaded concurrency