

Assignment

Design and implement a REST API that able to execute transaction between 2 bank accounts (simple model defined below), to allow money exchange between them.

After the transaction is executed, the transacted amount X should have been subtracted from source account and added to destination account.

Successful execution of request should response with 200 and include the executed transaction model within response body.

Negative cash balance on bank account is not allowed when executing, and the request should be rejected with response of 400 and a reason text at least.

Your application can hardcode/pre-insert multiple bank accounts with predefined available cash, so no need of extra API for account management.

The bank accounts and transactions should be stored, you may choose what storage solution it might be (DB/file/etc.)

Note:

- Consider structure of REST API url, in case you want to add more APIs for account/transaction management, or make change in future.
- How to test the logic and API according to the requirements?
- This assignment only described simple scenario, can there be more complicated situations for production systems? What are they? How to tackle them?

Models

Below are simplified models for account and transaction, you may choose to use them or design your own models that suit your needs better.

Account model

Property name	Type
id	long
name	String
availableCash	double

Transaction model

Property name	Type
id	long
registeredTime	long (epoch millis)
executedTime	long (epoch millis)
success	boolean
cashAmount	double
sourceAccount	Account
destinationAccount	Account