

Toman Senior Backend Interview Task

We want you to implement a simplified wallet service with a strange twist. People should be able to deposit into their wallet, and schedule a withdrawal from their wallet. All withdrawal requests must include a timestamp in the future at which the withdrawal will take effect. For each withdrawal transaction, you need to send a request to a third party service (e.g. a bank) to deposit that amount to the wallet owner's account.

In the attachments you will find the code for the third party service as well as a basic scaffolding for your service written in Django. You need to complete the todos in a way that the service would work normally. Feel free to change the rest of the code as you wish or if you feel extra awesome you can even switch to a framework of your choice.

Some notes to consider while implementing:

- You are allowed to add as many models and dependencies as you find necessary.
- You don't need to worry about authentication and authorization of users.
- Wallets must have a non-negative balance all the time.
- If there are not sufficient funds at the time specified by the user, the transaction should be marked as failed and not take effect.
- There might be concurrent transactions on the same wallet.
- The third party service may sometimes be unable to process your request and returns a non-successful result. You should mark those transactions as failed as well, and return the amount to the wallet if necessary.
- You are allowed to make reasonable assumptions when needed.

Good luck, have fun!