

Toman Interview Task Definition

Goals

This project aims to assess your technical experience and coding practices.

Process

1. **Read this file thoroughly** to understand the task.
2. **Create a new public GitHub/GitLab repository** and push your code when completed.
3. **Send us the URL** of the repository.
4. We will **review your pull request** to evaluate your expertise.
5. We will **inform you via email** about the results of our evaluation.

Metrics

Our primary focus is to understand how you work, not just the final result. A functional result is important, but the implementation details and code quality are equally crucial. We will be evaluating your code on:

- Code structure, formatting, functionality, and readability
- Adherence to common coding conventions
- Use of useful design patterns
- Overall performance and reliability
- Extensibility

Project

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 can continue the code or **write yours from scratch(feel free to use any other language, framework, technology, etc)**.

- 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.
- Withdraw transactions' amounts and their respective wallet's balance should be validated at the time specified by the user, not at the submission time.
- There will 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 should also consider network failures.
- You are allowed to make reasonable assumptions when needed.

Best Regards.