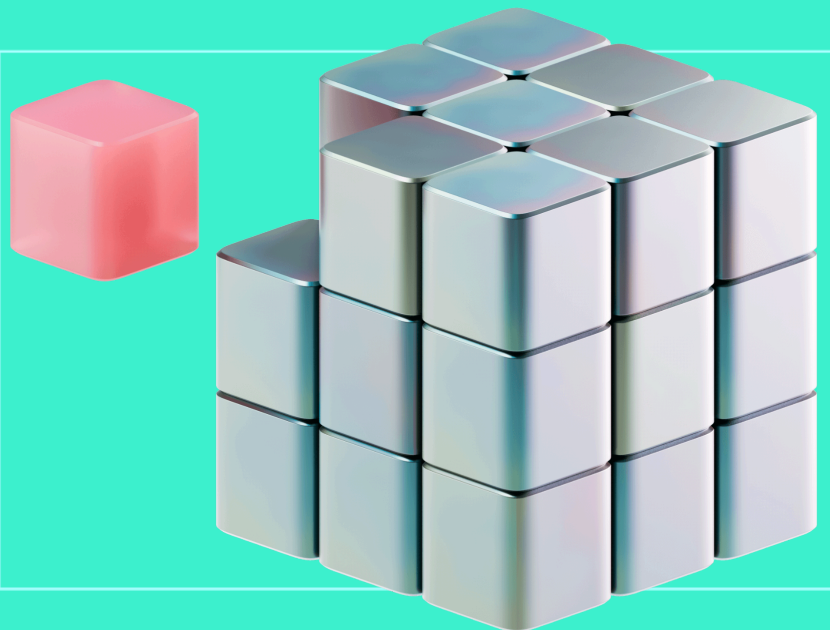# HACKEN

Test Task
Middle Strong Java Engineer

We Make

Web3 A Safer Place

This booklet contains instructions for the test task, one of a part of our selection process for a Java Engineer vacancy at Hacken. It will help us to evaluate the key competencies, professional knowledge and skills for this position.

Below, you will find the organizational code and instructions to guide you through the process of completing and submitting the assignment.

We expect that completing the task will take you no more than **3-4 hours**, so we expect your results during the next **2-3 working days.**

Task Description

The goal of this task is to understand if you are familiar with REST services, REST frameworks, any database, simple data processing and searching. Also if you are able to do a simple processing of real time onchain data.

- Ensure the service can be started and run locally.
- Include instructions on how to start the service and any necessary configurations.
- Push your code to any version control platform such as Bitbucket, GitHub, or GitLab and provide the repository link for review.

Requirements

1. **Service that will be able to**
- Connect to EVM node and get real time transactions
    - *Public node examples (choose any or use yours):*
        - https://portal.grove.city/
        - https://app.infura.io/

- *EVM Chains examples (choose any or use yours):*
    - Ethereum
    - Arbitrum
    - BSC
    - Optimism
    - Polygon
    - zksync
  - Service should be able to stop, wait for some time, start and continue importing transactions without any transaction range lost.

- Store transaction data to DB
  - Getting new, realtime transactions from node and save transaction data to DB
  - Design the service to work efficiently, for a long time, with real onchain data. For example ethereum can produce ~1 million transactions daily, so it will be 30kk records in DB monthly and 360kk yearley. Your service should be able to work efficiently with this data.

  2. **REST service that will be able to:**
- Search through stores transactions data
    - HTTP endpoint to search in transactions data
    - *Optional:* full text search support

- **Optional*:**
    - Api doc
    - Healthcheck
    - Metrics

Good luck, and we look forward to reviewing your submission!

If you have any questions, feel free to reach out to me via Telegram or email:

Sofiia Syniuta

I'm here to help 🙂