Technical evaluation for
Backend Developer

Instructions

Considering a database created in order to track users's behaviours on our website. Each action from a user would be considered as an event (e.g. user consent for our newsletter, click in buy product, click in ask a demo product, …). We would like to have a small database to register these events.

For interacting with this database, we need an API including the following features:
• Register a new user (CRUD operations)
• Get the list of events generated by a specific user (with the possibility to sort the list and to get events from and to a specific date)

In specific hours we have thousands of events, for this reason you should consider publishing and consuming the events from a queue, e.g., RabbitMQ.
• Your API must publish a message to the queue, and a worker (second java program) must consume and insert this event in the database.

A registered user will contain the following information: ID / NICKNAME / REGISTRATION DATE
An event will contain: ID / EVENT TYPE / EVENT DATETIME

Respectfully to the best practices you know about API development, you will create a RESTful API using Java Spring Boot with the proper endpoints for completing the expectations.
A java program that will consume messages from the queue (always running up).
The database technology choice is up to you.

• We are not expecting a complex application. Therefore use the KISS principle.
• Would be good if you manage to integrate your project with Docker, because we can test it without problems.
• It is not necessary to do the authentication.

Deliverables:
The proposed solution has to be delivered in 2 weeks.
The expected elements are the following:
API source code
API documentation. It should be accessible on /docs
Java worker