BETVICTOR

Interview Task - Java Developer

Introduction

The purpose of this exercise is to assess your ability in the following areas:

- java
- Push technologies
- Design Patterns
- Testing

Description

We want to build a service that will provide us with all the necessary tools to be able to flag to a Business Operator when a customer, playing a game, stake more than £*X* in a given *Y*s time window.

Once we accumulate for the same account more than 100 pounds, in 1h, we want a message to be published and stored.

Examples use cases:
Given X = 100 and Y = 60 min
Incoming message 1 : {accountId:123, stake:40} – 00:00 – Do nothing
Incoming message 2 : {accountId:456, stake:90} – 00:10 – Do nothing
Incoming message 3 : {accountId:123, stake:40} – 00:25 – Do nothing
Incoming message 4 : {accountId:789, stake:110} – 00:25 – Alert, publish a message and store
Incoming message 5 : {accountId:123, stake:10} – 00:30 – Do nothing
Incoming message 6 : {accountId:123, stake:40} – 00:45 – Alert, publish a message and store
Incoming message 7 : {accountId: 456, stake:50} – 01:01 – Alert, publish a message and store

Instructions

Create the backend endpoints that will facilitate the generation and evaluation of players' stakes – providing a way to interact with them (ex. Swagger).

Hitting the threshold will trigger a notification stating the cumulated amount and player ID.

All notifications should be persisted in a persistence layer (sql or nosql).

Notes:

1. Try to design the application as it was a critical production service
    a. It should be easily deployable
    b. It should have enough test coverage
2. The exercise will be evaluated not against the correct functionality of it but mainly based on:
    a. Design patterns used
    b. Test strategies used (apart from unit testing consider adding one integration automated test or propose a manual test flow)
3. Usage of libraries and frameworks is highly encouraged

Deliverables

1. The source code
2. Documentation on how to deploy and run it
3. Please respond within one week

Thank you