EQUADIS – Senior Developer RJP

The assessment is to create a "Customer and Bank Account" system solution.

The system should allow the creation of customers and accounts as well as track all transactions.

A customer is represented by their ID and a name.

An account can be associated with a customer and is created with an initial amount.

An account cannot hold a negative amount.

Design and develop an Enterprise level solution and build the system using Java 11+ platform using spring framework.

You can use a relational database to persist your data. Some simple DDD patterns are expected to separate the main layers of your system should it be needed.

Choice of implementation for interoperability between apps is up to you should it be needed.

Expected

- The main way to interact with the system will be through API endpoints:
  - An API to create a customer.
  - An API to create an account with an initial balance.
  - APIs to deposit and withdraw certain amounts.
  - APIs to query transactions of an account.
- The expected deliverable is the source code published on a publicly available Git Server (Github, Gitlab, Bitbucket…) and instructions on how to execute and test it in the readme.md file.

Bonus

- Containerize your app(s) and infrastructure. When delivering your solution, all apps and external dependencies should be working in Docker.
- Create the needed scripts/pipelines to fully automate the CI/CD flow.

Note

This is an RJP, so feel free to

- Design the software, implement Customers, Accounts and Transactions to the best of your abilities. There are no limits of how you can design and implement. Just make sure to deliver the expected points.

    (For example, when it comes to transactions, it can be its own microservice, or a simple entity being saved after each account update, or can be substituted by Accounts implementing event sourcing…)

- Show your knowledge with design and technology wherever you can. Whether it be in Design Patters on any level, Unit and Integration Testing, API design and documentation etc.