Software Engineering - Recruitment Quiz

Thank you very much for filling out this quiz to the best of your competencies. The purpose of this quiz is to evaluate your areas of expertise.

If a question is not clear to you or using notations which you are not familiar with, feel free to rephrase the question or lay assumptions which help you in solving the problem.

Good luck and thank you again for your time!

Star Wars Application

The goal of this exercise is to develop a microservice to manage information consumed from a third-party API.

AS A Star Wars fan
I WANT to see the information about PEOPLE, STARSHIPS and PLANETS exposed in an API
SO THAT I can have fun searching Star Wars information via cURL requests obtaining the information from my shell

Acceptance criteria

- The microservice must read data from SWAPI (https://swapi.dev/).
- The microservice should implement and expose endpoints that return the information as follows:
    - Information about the Starships used by a Character, given the character's name.
    - List of inhabitants' names of a given Planet, given the planet's name.
- The response from your endpoints should be in JSON format
- Develop this solution using Java language
- Provide a Dockerfile to be able to deploy the application as a Docker container on port 6969
- Provide README file with clear instructions about how to run the application, from scratch, as a Docker container

Definition of Done

- The application works as defined in the Acceptance criteria.
- Provide source code of the application
- Component tests green

Extra points

The requirements below are not mandatory. The fact of not doing them will not discard you from the hiring process either reduce points. In case you decide to implement these requirements, they must work as expected, otherwise the ones not working will not be considered.

- Use Gradle as the building tool
- Provide the Kubernetes resources to deploy the microservice in a Kubernetes cluster
- Implement the Java microservice using the Micronaut framework (https://micronaut.io/)

We will evaluate

- Follow Software Engineering principles
- Usage of distributed system patterns
- Follow microservice implementation best practices
- Clean code
- Usage of Docker