Birkle IT Java Assessment Task

Introduction

Congratulations!

You have passed your first interview with Birkle IT Estonia OU as a Full Stack Developer.

Now, to understand your practical skills better, we ask you to do a simple task.

Everything you need to know about the task is here. But if you still have some questions, please feel free to send an email to us.

The task should generally take few hours to complete.

Knowledge

This task is to determine your backend, frontend or fullstack skills.

- For backend position, you are required to do the backend part of this task and the frontend part is optional.
- For frontend position, you are required to do the frontend part of this task and the backend part is optional.
- For fullstack position, you are required to do both frontend and backend parts.

With this task, knowledge of the following subjects are used and assessed:

- Java 8/Spring (for backend and fullstack)
- Angular (for frontend and fullstack)

Task Summary

Please create a simple application about **Vehicle Management Portal**.

See backend and frontend section for more details and requirements.

You should be providing us:

- Full **source code** of your app
- A **Readme file** explaining how to run your application

Backend

You should write an API service for Vehicle data with the following details.

Requirements:

- It should be written with **Spring Framework** (native Spring or Spring Boot)

- It should use **Maven** or **Gradle** for package management
- It should have **REST API** endpoints to provide all **CRUD** operations
- It should have a **SOAP server** for importing **CSV** or **XML** files (your choice)
- It should use **Hibernate** and have a database of your choice
- It should have **unit tests**
- No authentication needed
- **It should be working**

You can get extra points if your application does everything in minimum requirements and also:

- Write **Service Integration Tests**
- Provide **API documentation** like Swagger
- Has **Docker** or Docker Compose
- Use **git** and do micro-commits
- Use .gitignore file

Frontend

You should write a frontend application to manage Vehicle data with the following details.

Requirements:

- It should be written with **Angular Framework**
- It should have screens to **List, Create, Edit, Update and Delete**vehicles
- For fullstack position: it should use your backend application's **REST API** for data
- For frontend position: feel free to store/get data from anywhere you like (Including LocalStorage).
- It should have **unit tests**
- **It should be working**

You can get extra points if your application does everything in minimum requirements and also:

- Has E2E tests
- Has Docker or Docker Compose
- Use git and do micro-commits
- Use .gitignore file
- Use any linting
- Use a recent version of Angular like 8.x

Data model

You can use following fields for your data. Feel free to add/remove fields of your choice.

- Brand (String or enum)
- Model (String)
- Vehicle Type (String or enum)
- Plate Country (String, ISO 3166-1)
- Plate Number (String)

- VIN number (String, Unique) (See https://en.wikipedia.org/wiki/Vehicle_identification_number for more details)
- Creation date (date or timestamp)
- Manifactured Country (String, ISO 3166-1)

Extra information

- No authentication is required
- See Data Model for the model
- You can use https://mockaroo.com/ to initial or sample for your database and to test CSV/XML import