

Technical assessment - Development

NB! Send the solution as a zip-file by the evening before the interview

Create a web application using Spring boot as back-end and Vue.js front-end (React.js or Angular is also permitted)

<https://spring.io/guides/gs/spring-boot/>

Using gradle as buildtool is preferred but not required

Your methodology and process is as important as the actual solution, be prepared to explain your thought process in the interview

The price structures are as follows:

- The rare product "Penguin-ears" is 20 units per carton. A carton is 175,-
- The product "Horseshoe" is 5 units per carton, a carton is 825,-
- If you purchase single units, the price is acquired using the carton price multiplied by an increase of 30% (1.3). (to compensate for manual labor)
- If you purchase 3 cartons or more, you will receive a 10% discount off the carton price

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- You are to create a price engine and a small calculation feature
- The calculation will determine the price of two products for a store
- The price engine is to optimize the price, meaning if you order 25 units and you have 20 units per carton, the price will be set at 1 carton and 5 single units
- One GUI is to list the prices in a table, listing the actual prices for a product from 1-50 units
- Another GUI is to present a simple calculator which lets the user choose product and quantity of either single units or cartons (Like a shopping cart in a web store)
- The price is to be calculated server side (not in Javascript)
- The service is to be created using test-driven-development (JUnit or Spock)
- Use a database (e.g. PostgreSQL) to store the initial prices and products, (in the event of time shortage, this can be omitted in favor of hard coding/simple file)
- The calculation logic is to be developed in Java

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Bring a computer and prepare to demonstrate the application, the frameworks being used (why and how) and how you chose to structure the code.

Tips:

- You will need a trial for the Ultimate Edition of IntelliJ
- We accept running the application from the IDE or the command line
- In the event of time shortage, prioritize a full vertical implementation (business logic, view logic and the front end implementation) and tests for the business logic. Storage implementation can be simplified in favor of these goals.