

## Case Study – Backend Engineer Team Watson

It is great that you are taking time for idealo. We are looking forward to getting to know you even better.

As a next step, we would like to ask you to complete the following task. This will give you the opportunity to contribute your ideas and give us an insight into your approach.

## Requirements/Scope:

- You have 4 days to send back your results.
- The amount of time invested in the case study should not exceed 2 hours.
- Complete as many tasks as you can within the time limit mentioned.
- We prefer a well-executed partial solution over a huddled full solution. Describe missing pieces in a README.
- Please work on the task without the help of other people, as this will be the benchmark for your work at idealo.

## Task

Please implement 2-3 out of the following features as a REST API for a simple product inventory management system (without frontend) either as Spring Boot or as a serverless AWS Lambda app. The API caller should be able to:

- create a new product
- find a product by name
- list products by brand
- list products with low quantities (e.g., lower than a stock of 5).
- buy a product

A product has the following attributes: Name, Brand, Price, Quantity.

Please describe/visualize in a README (if you have time also implement) ...

- ... publishing API events to a data stream (e.g., Kafka, SNS, or similar).
- ... how you would secure your API considering both authentication and authorization.
- ... observability measures (logs & metrics)
- ... the infrastructure needed to run your solution appropriately on AWS.

Feel free to contact us, we are happy to help.

Thank you and best of luck!