# **Backend Code Test**

Thank you for taking the time to complete this code task. We appreciate you taking the time, hopefully you'll find it interesting too. There is no time limit, but it shouldn't take you longer than a couple of hours.

We are more interested in how you approach the problem, your design considerations, and the best practices you follow.

### **Instructions**

A working spring boot app is available here, that exposes a single end point to "GET" an employee by user id which it loads from a in memory database (HSQL)

You can run it via command line: 'mvn spring-boot:run -pl employee' or within an IDE just run com.example.employee.SpringBootTomcatApplication

When the app starts it will pop up the HSQL database manager and you should see an employee table.

Initially there is a single endpoint implemented that returns an employee from the database for example:

http://127.0.0.1:8080/1.0/employee/001003 <-- returns a valid employee http://127.0.0.1:8080/1.0/employee/000001 <-- returns an error response

#### Task 1

Design, implement and test a REST end point to list all the employees

#### Task 2

Design, implement and test a REST endpoint to update an employee resource

#### Task 3

Design, implement and test a REST endpoint to allow a search based on:

- firstname and/or lastname
- with an optional option to vary the return order based on case

You can also use any libraries that you want to help you.

## **Deliverables**

Project containing source code for your solution.

Any instructions to run your app including tests, and how we can know the solution works.

A short description of what you have implemented including:

- any design assumptions you have made
- how you would improve your solution if you were to spend more time on it

Please check-in your code to a GitHub repository, add a detailed readme file and provide details and access