Lab 7. Feign and Registry

Part 1: Feign

Write 2 services:

1. A StockService that returns how many products we have in stock given a certain productNumber. The number that is returned can be hard coded. This service runs on port 8900.
2. A ProductService that returns a Product given a certain productNumber. The Product contains the fields: productNumber, name, number on stock
   The number on stock is retrieved from the StockService. This service runs on port 8901.

Use Feign so that the ProductService can call the StockService.

The ProductService needs the Feign dependency:

```
<dependency>
	<groupId>org.springframework.cloud</groupId>
	<artifactId>spring-cloud-starter-openfeign</artifactId>
</dependency>
```

Part 2

For this exercise you can use the provided EurekaServer. First run the EurekaServer and check the dashboard if it works

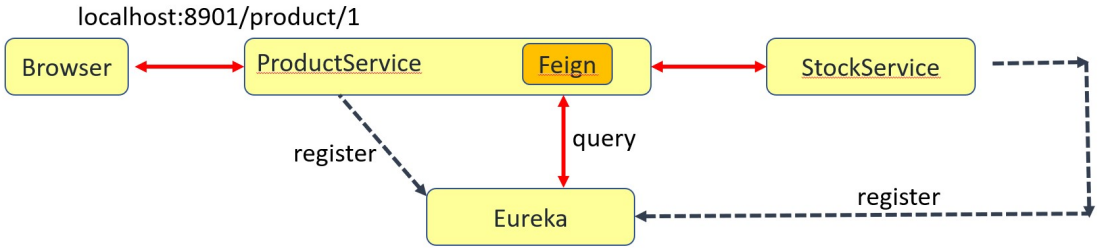
Now add the necessary dependency to both 2 StockService projects and the ProductService project

```
<dependency>
  <groupId>org.springframework.cloud</groupId>
  <artifactId>spring-cloud-starter-netflix-eureka-client</artifactId>
</dependency>
```

Then configure these applications so that they use the registry.

Then run the first StockService and see in the Eureka dashboard if it is registered.
Then run the ProductService and see in the Eureka dashboard if it is registered.

Then if you call the ProductService, it should call to the StockService using the registry.



Part 3

A problem with a registry is that it is a single point of failure. Describe how you would solve this single point of failure problem?

Part 4

A problem with services is that a service can be down. If the StockService is down, the ProductService cannot work properly. Describe how you would solve this problem?

What to hand in?

1. A zip file containing all services for part 2
2. A PDF for part 3 and 4
1. Write a readme.txt file with the following content:
   a) Status of the lab. Describe here if you finished all parts of the lab or not. If you did not finish the lab, describe which parts are finished, and which parts not. Describe clearly why some parts are not finished.
   b) Write the following statement and sign with your name:

I hereby declare that this submission is my own original work and to the best of my knowledge it contains no materials previously published or written by another person. I am aware that submitting solutions that are not my own work will result in an NC of the course.

I am aware that I am not allowed to share solutions with other students.

I am aware that if I submit only parts of this lab that points will be subtracted.

I am aware that if my lab submission does not contain this readme.txt file that I do not get points for this lab.

[your name as signature]