

Lab 7. Spring integration

Exercise 1

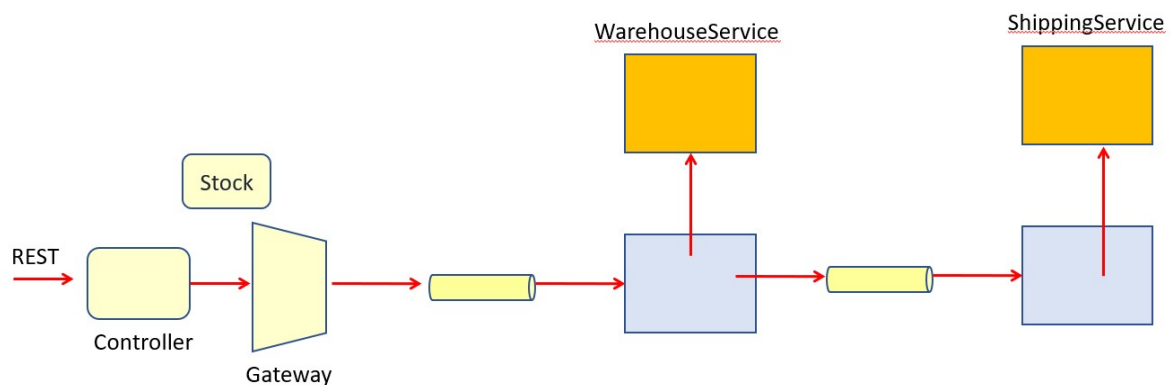
Given is the project **SpringIntegration**.

Start the project, and call the URL <http://localhost:8090/greeting/Frank>

This should give the following output:



- a. Now modify the application so that the controller sends an Order class (with attributes ordernumber, and amount) into spring integration. The warehouseservice and the shippingservice both receive the order and print this in the console.



- b. Now modify the application such that we have 2 shipping services
 - a. A next day shipping service that ships all orders of more than 175 dollars
 - b. A normal shipping service that ships all orders below 175 dollars

Exercise 2

Your boss asks you to implement a Service Oriented Architecture with the following requirements:

- We receive Orders through a REST interface.
- Every order is verified by some specific business rules for orders.
- After the Order is verified, we need to check if everything is in stock.
- If we verified the stock, we need to process the payment for the order.
- If the payment went well, then we need to ship the order.
- We need a central monitoring system that monitors every step of the process given above.

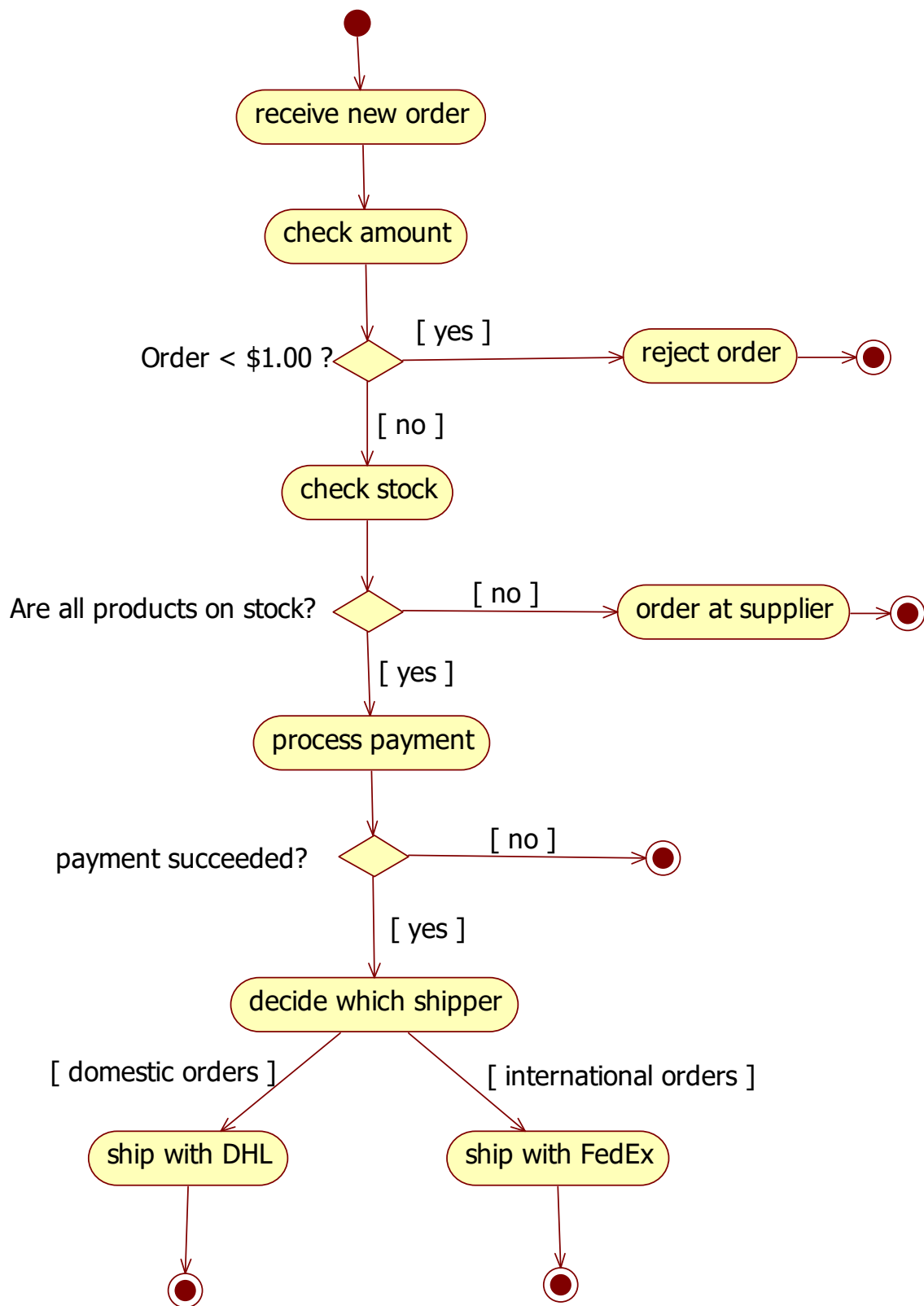
Architectural requirements:

- It should be easy to add new functionality with minimal impact on the other parts of the system
- Because this will eventually be a very large system, we need to be able to work with different agile scrum teams on this application.

To make it possible to write this application as a lab exercise, we apply the following restrictions:

- All remote communication uses REST
 - All rest calls are implemented in a Java class. (do not use an adapter)
- We don't use a database
- All service logic is written in the controller (no service, domain, DAO,... classes)
- The central monitoring system uses System.out.println(...) to show every step of the process.

The business process for this application is defined as follows:



This diagram shows the scope of our system. When the process stops, your application should also stop handling this specific order.