1. High Level Architecture:

Discovery service

Price service

Product catalogue service

* Business Microservices: product catalogue service and price service
* Non-functional requirement components: Discovery service
* As per requirement, an in-memory db should be used. But in this implementation, only the service instance is being used.

1. Assumptions and risks:
2. For prototyping purpose in-memory db can be used. But because the developer is unfamiliar with in-memory databases, all information is being stored in-memory in each service.
3. Due to above point, only one instance of a service can be run at a time.
4. Double is being used for prices. In product, BIgDecimal should be used.
5. In real microservice architecture, something like a Feign client should be used for inter service communication, that will connect to the called service via service discovery component.

But for this app, I’m making direct http call via hardcoded url.