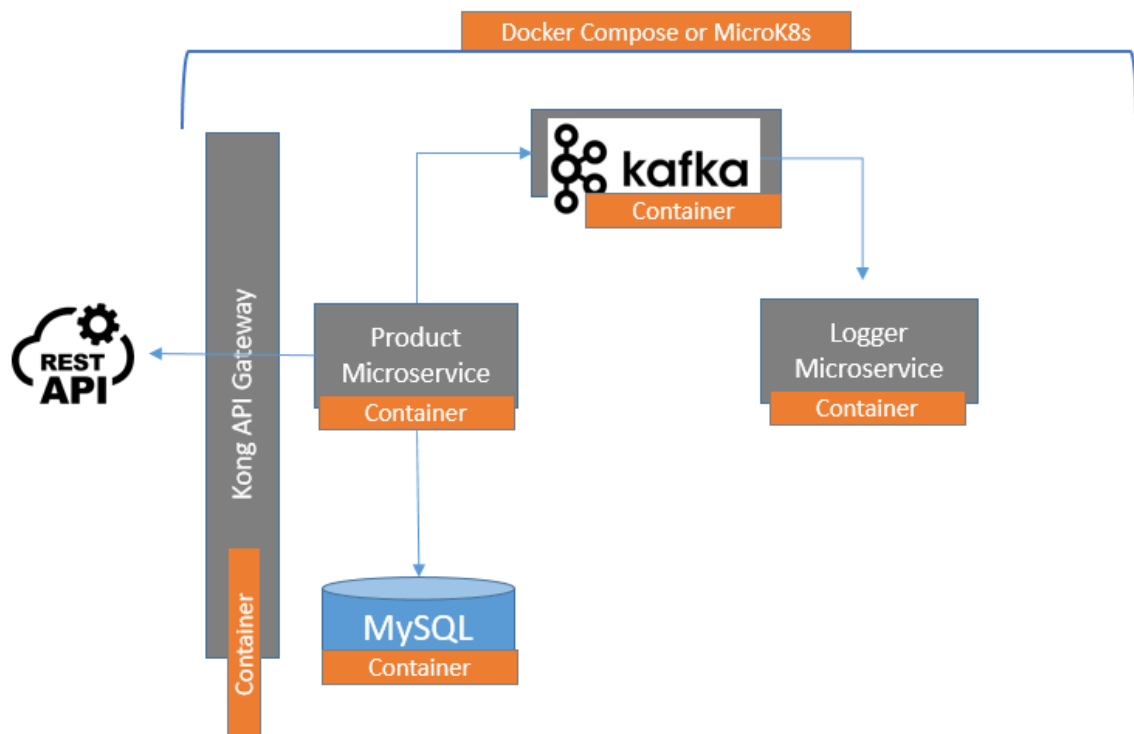


Activity

Build two microservices using spring boot including java 8 / 11 features which communicates via message broker exposing rest endpoints

Architecture



Product Microservice:

- Spring boot Microservice exposing rest endpoints for Products (listing & addition of products) & booking of Products
- Accepts orders.
- Broadcast all the activities to Kafka for next Microservice to log

Activity Logger:

- Spring boot Microservice to process all the activity log
- which listens for events and stores in nosql dB

Requirement

- Product Microservice should expose POST, GET and PUT / PATCH API's
- API's request validations should be performed and valid error/exception should be returned
- Microservices should have a proper exception and error handling across
- Microservices should include health check framework/ dependency
- Leverage swagger for API doc
- Product Microservice should leverage JPA / Hibernate as ORM along with repositories
- Microservice should follow the below structure

- Controller
 - SampleController
 - DTO
 - RequestDTO
 - ResponseDTO
- Service
 - SampleService
- ServiceImpl
 - SampleImpService
- DTO
 - SampleDTO
- Repository
 - SampleRepository
- Entity
- Exceptions

- Utils
- Additions folders / substructures can be assumed
- Necessary tables can be assumed
- Use necessary implementation for logging and security (APO, Interceptors, Service mesh)
- Application should be Dockerized
- Both the Microservice, Kafka, DB, and API Gateway should be running on Docker and can be on same network using Docker Compose or deployed in MicroK8s
- Coding standards and Microservice best practice to be followed

Deliverables

- Technical / Design document (design pattern and other considerations made)
- Github link (source code along with docker composer or K8 yaml files)

Note :

- **API Gateway is optional (can run on a container for context-based routing)**
- **Install SonarLint Extension to your IDE**