GLOBOMART

# ARCHITECTURE

SERVICE DISCOVERY

PRICING SERVICE

MONITORING

PRODUCT CATALOG SERVICE

LOAD BALANCER / API GATEWAY

EMBEDDDED DB

EMBEDDDED DB

# DESIGN CONSIDERATIONS

1. All requests to the business services will be routed through a LOAD BALANCER or API GATEWAY
2. The load balancer / api gateway contacts a SERVICE DISCOVERY module to know about the available business services
3. The DISCOVERY SERVICE will maintain all the available business service instances
4. The business services – PRODUCT CATALOG SERVICE and PRICING SERVICE are separate micro services which have an embedded in memory database
5. All the available business services will be monitored by a MONITORING SERVICE

# TECHNICAL CONSIDERATIONS

1. Java 1.8 used for developing services
2. Maven 3.1.0 is used as build tool
3. The micro services has been designed using Spring Boot 1.3.5
4. IDE used is eclipse 4.6.1
5. Embedded in memory DB is H2 DB
6. Embedded tomcat is used as application server

# BUSINESS SERVICES

## PRODUCT CATALOG SERVICE

1. GET /productCatalogueService/products – gives the list of all products
2. GET /productCatalogueService/search – gives the list of products for matching name
3. GET /productCatalogueService/searchByType – gives the list of products for matching
4. POST /productCatalogueService/products – saves the given product
5. DELETE /productCatalogueService/products/{id} – delete the given product

## PRICING SERVICE

1. GET /pricingService/products/price/get

# RUNNING THE APPLICATION

1. Go to ProductCatalogService folder and run spring-boot:run. Tomcat will start on port 8003
2. Go to PricingService folder and run spring-boot:run. Tomcat will start on port 8005

Use a REST client like POSTMAN to invoke the services:

<http://localhost:8003/productCatalogService/products>

<http://localhost:8005/pricingService/products/price/get>

# REFERENCES

<https://spring.io/blog/2015/07/14/microservices-with-spring>

<http://docs.spring.io/spring-boot/docs/1.5.3.RELEASE/reference/htmlsingle/#using-boot-starter>