Bipin Kumar

Shael.dhn88@gmail.com

Feign

Feign Setup

Feign and how to use feign to create declarative Rest API.

In cargoRoutingServiceImpl class we have implemented hystrix while calling rest API. In that code we are only using code to call the rest API. Suppose if we added the DB related code there, and if failed due to some reason then in that case also fallback logic will be called but we want to call the fallback in case of Rest API failure.

Using Feign we can achieve this.

1. Add below dependency.

<dependency>

<groupId>org.springframework.cloud</groupId>

<artifactId>spring-cloud-starter-openfeign</artifactId>

</dependency>

1. Add @EnableFeignClients in main class.
2. Change CargoRoutingService interface as below.

@FeignClient(name = "routing-service",fallback = CargoRoutingServiceFallback.**class**)

**public** **interface** CargoRoutingService {

@GetMapping(path = "/cargorouting/optimalRoute")

**public** TransitPath findOptimalRoute(

@RequestParam("origin") String originUnLocode,

@RequestParam("destination") String destinationUnLocode,

@RequestParam("deadline") String deadline);

// public TransitPath findOptimalRoute(String originUnLocode, String destinationUnLocode, String deadline) ;

}

If we use @FeignClient annotation on interface it will automatically generate proxy implementation of it.

Now in ExternalCargoRoutingService.class we have injected this service using autowired which will autowired proxy class generated by feign.

We have written the interface same as we write in controller class it will automatically map those values.

Now When rest call fails it will automatically call fallback logic and for that we have configured CargoRoutigServiceFallback.class which will also implement same interface and method. So that in case of failure it will call the fallback logic.

In hystrix we have read about command key and thread key here it automatically configured with then name we have provide in the interface.

Now open application.yml file and add below property. Here false is default property.

feign:

hystrix:

enabled: false

Now when we start eureka server and cargo-booking service and open swagger-ui and perform registration of cargo and then routing you will see different error and in logs you can see fallback logic is not called it is because of above property set to fasle. Now make it true and restart all the server and check. You can see fallback logic is called in logs. Similarly we can configured for other Http methods.