

Date : 03-Jun-21

Spring Boot 9AM

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*) In case of Error Filter executed, MS# is not got executed, then these is no

response. if Response is null we can not modify it.

*) Check null condition before doing POST_FILTER Data modification.

*) Use Order for Your custom error filter as -1, else

'SendErrorFilter'

Githu link:

<https://github.com/javabyraghu/SpringCloudApiGatewayZuul>

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Circuit Breaker

Fallback method: If actual MS# is throwing any exception, then it is redirected

to one dummyService method() which gives output to user.

=> Such Dummy method is called as Fallback Method.

Circuit Breaker : If MS# is throwing exceptions in continiuous manner (default 20)

then stop executing actual method for request for a period of time(5 sec),

goto dummy method directly, also provide notifiations on DashBoard to

support team.

*) We should provide values for max excepton count and breaktime.

CLOSED CIRCUIT : When a request made to MS#, if it is sent to actual method

then it is called as CLOSED CIRCUIT

OPEN CIRCUIT : When a request made to MS#, if it is sent to fallback method

then it is called as OPEN CIRCUIT.

*) Note:

> When we starts MS# then CIRCUIT STATUS is CLOSED.

> If 20 continiuous request got falied then CIRCUIT STATUS is OPEN for 5 sec.

> Meanwhile if any request comes (before 5 sec) directly send to fallback method.

> After 5 sec if any request comes then try to execute actual Logic, still failed OPEN, else success CLOSED.

*) Circuit Breaker is implemented using Spring Cloud Netflix Hystrix.

==(code)=====

1. Eureka Server

2. Payment MS#

Name : SpringCloudPaymentHystrix

Dep : Web, Eureka Discover Client, Hystrix

> At main class :

@EnableEurekaClient

@EnableHystrix

> properties file

server.port=9690

spring.application.name=PAYMENT-SERVICE

eureka.client.service-url.defaultZone=http://localhost:8761/eureka

3. RestController

package in.nareshit.raghu.rest;

import java.util.Random;

import org.springframework.web.bind.annotation.GetMapping;

import org.springframework.web.bind.annotation.RequestMapping;

import org.springframework.web.bind.annotation.RestController;

import com.netflix.hystrix.contrib.javanica.annotation.HystrixCommand;

@RestController

@RequestMapping("/payment")

public class PaymentRestController {

@GetMapping("/pay")

@HystrixCommand(fallbackMethod = "doPaymentFallback")

public String doPayment() {

System.out.println("FROM ACTUAL METHOD");

if(new Random().nextInt(99)<100) {

throw new RuntimeException("FROM DUMMY

EXCEPTION!");

}

return "SUCCESS!!";

}

public String doPaymentFallback() {

System.out.println("FROM FALLBACK METHOD");

return "FAILED! TRY AFTER SOME TIME!!";

}

}

-----Execution order-----

1. Start Eureka Server

2. Start MS# application make request using URL

http://localhost:9690/payment/pay