Adding a Circuit Breaker to Microservices

1. Open **demo-eureka-fastpass-console** Application

2. Add a dependency for Hystrix

pom.xml

```xml
<dependency>
            <groupId>org.springframework.cloud</groupId>
            <artifactId>spring-cloud-starter-hystrix</artifactId>
            <version>1.4.5.RELEASE</version>
        </dependency>
```

3. Add annotation for Circuit Breaker

```java
@EnableCircuitBreaker
@EnableEurekaClient
@SpringBootApplication
public class DemoEurekaFastpassConsoleApplication {
```

4. Add a Fallback method for an API call using **@HystircCommand** annotation

FastPassController.java

```java
@HystrixCommand(fallbackMethod =
"getFastPassCustomerDetailsBackup")
    @RequestMapping(path="/customerdetails",
params={"fastpassid"})
    public String getFastPassCustomerDetails(@RequestParam
String fastpassid, Model m) {
```
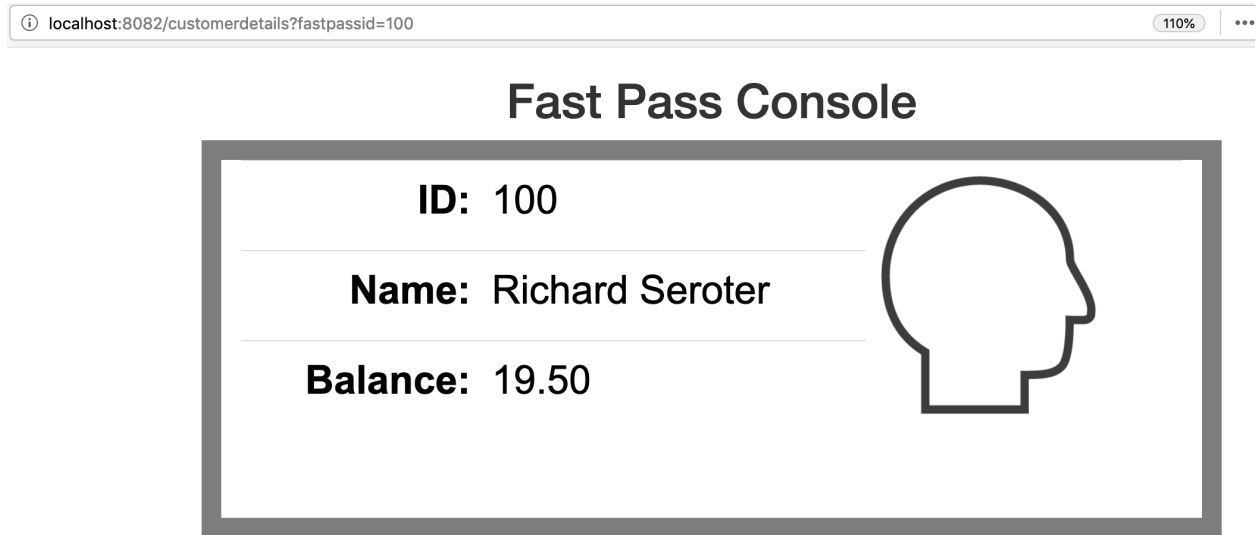
Create a fallback method with the same name

```java
public String getFastPassCustomerDetailsBackup(@RequestParam
String fastPassId, Model m) {

        System.out.println("Fallback operation Called!");

        FastPassCustomer c = new FastPassCustomer();
        c.setFastPassId(fastPassId);
        m.addAttribute("customer", c);

        return "console";
    }
```

5. Start Eureka Server

6. Start fastpass-service
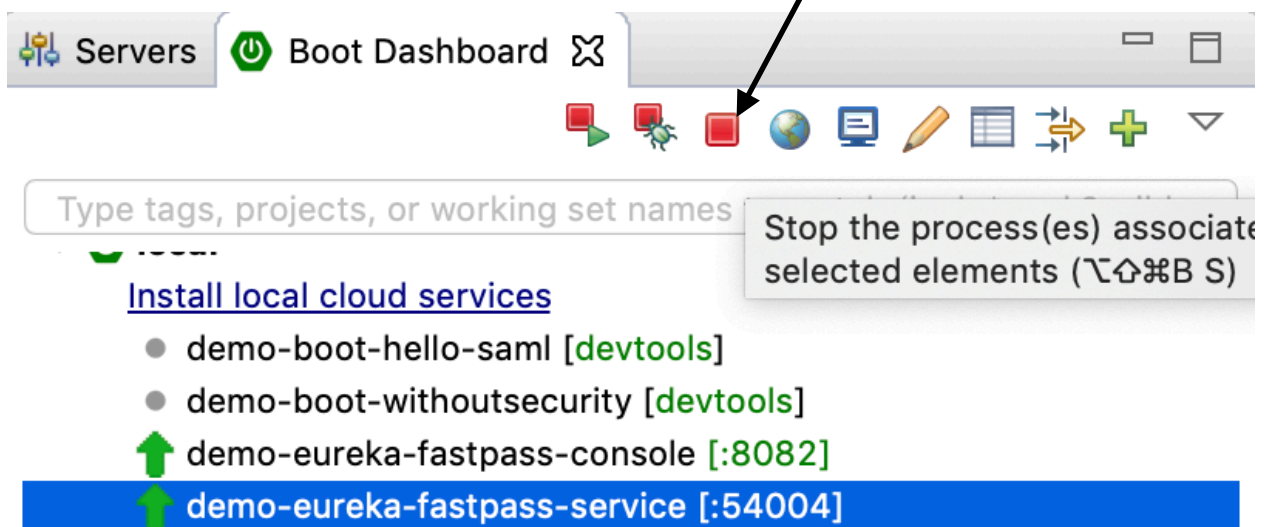
7. Start fastpass-console

8. OUTPUT
Visit *http://localhost:8082/customerdetails?fastpassid=100*

| ⓘ localhost:8082/customerdetails?fastpassid=100 | | 110% | ••• |

Fast Pass Console

ID: 100

Name: Richard Seroter

Balance: 19.50

9. Shutdown fastpass-service

Select **demo-eureka-fastpass-service** and   click STOP

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Stop the process(es) associate
selected elements (⌥⇧⌘B S)

Install local cloud services

- ⚫ demo-boot-hello-saml [devtools]
- ⚫ demo-boot-withoutsecurity [devtools]
- 🔼 demo-eureka-fastpass-console [:8082]
- 🔼 demo-eureka-fastpass-service [:54004]

10. Go back to browser and send a new request
Visit ***http://localhost:8082/customerdetails?fastpassid=101***

localhost:8082/customerdetails?fastpassid=101   110%

Fast Pass Console

ID: 101

Name:

Balance: