**WEEK – 4**

**Microservices with Spring Boot 3 and Spring Cloud**

**1)Creating Microservices for account and loan**

**Question:** In this hands on exercises, we will create two microservices for a bank. One microservice for handing accounts and one for handling loans. Each microservice will be a specific independent Spring RESTful Webservice maven project having it's own pom.xml. The only difference is that, instead of having both account and loan as a single application, it is split into two different applications. These webservices will be a simple service without any backend connectivity.

**Code: (For Account)**

**AccountController.java:**

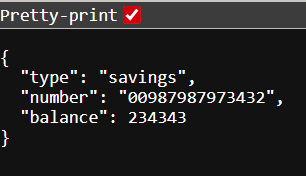
package com.cognizant.account.controller;  
import org.springframework.web.bind.annotation.\*;  
  
import java.util.Map;  
  
@RestController  
@RequestMapping("/accounts")  
public class AccountController {  
 @GetMapping("/{number}")  
 public Map<String, Object> getAccount(@PathVariable String number) {  
 return Map.*of*(  
 "number", number,  
 "type", "savings",  
 "balance", 234343  
 );  
 }  
}

**AccountApplication.java:**

package com.cognizant.account;

import org.springframework.boot.SpringApplication;  
import org.springframework.boot.autoconfigure.SpringBootApplication;@SpringBootApplication  
public class AccountApplication {  
 public static void main(String[] args) {  
 SpringApplication.*run*(AccountApplication.class, args);  
 }  
}

**Output:**

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**Code:(For loan)**

**LoanController.java:**

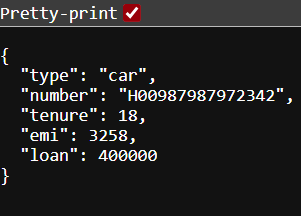
package com.cognizant.loan.controller;  
import org.springframework.web.bind.annotation.\*;  
import java.util.Map;  
  
@RestController  
@RequestMapping("/loans")  
public class LoanController {  
 @GetMapping("/{number}")  
 public Map<String, Object> getLoan(@PathVariable String number) {  
 return Map.*of*(  
 "number", number,  
 "type", "car",  
 "loan", 400000,  
 "emi", 3258,  
 "tenure", 18 );

}}

**LoanApplication.java:**

package com.cognizant.loan;  
  
import org.springframework.boot.SpringApplication;  
import org.springframework.boot.autoconfigure.SpringBootApplication;  
  
@SpringBootApplication  
public class LoanApplication {  
 public static void main(String[] args) {  
 SpringApplication.*run*(LoanApplication.class, args);  
 }  
}

**OUTPUT:**

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