

Week-5

Microservices with Spring Boot 3 and Spring Cloud Hands-On Exercise

Microservices with API gateway

Account Microservice

Code:

AccountController.java

```
package com.cognizant.account.controller;

import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.RestController;
import java.util.HashMap;
import java.util.Map;

@RestController
public class AccountController {

    @GetMapping("/accounts/{number}")
    public Map<String, Object> getAccount(@PathVariable String number) {
        Map<String, Object> account = new HashMap<>();
        account.put("number", number);
        account.put("type", "savings");
        account.put("balance", 234343);
        return account;
    }
}
```

AccountApplication.java

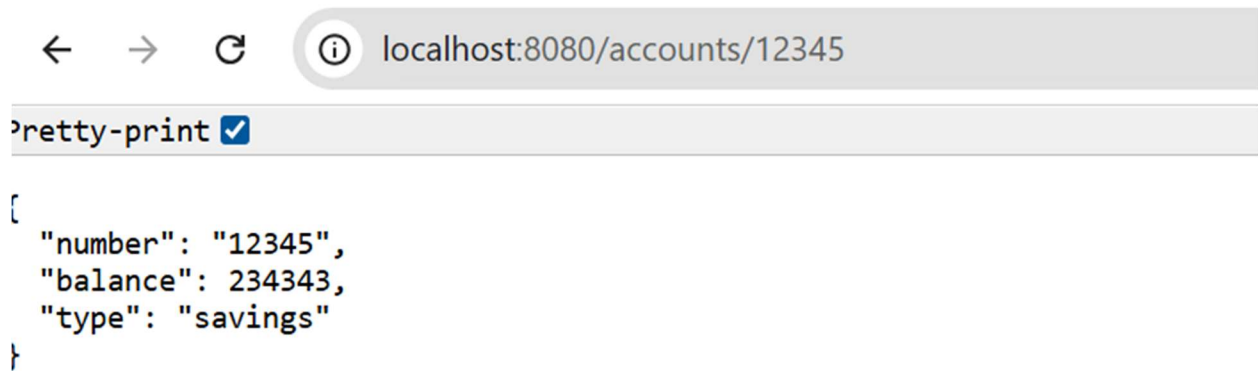
```
package com.cognizant.account;

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:



Loan Microservice

Code:

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);  
    }  
  
}
```

LoanController.java

```
package com.cognizant.loan.controller;

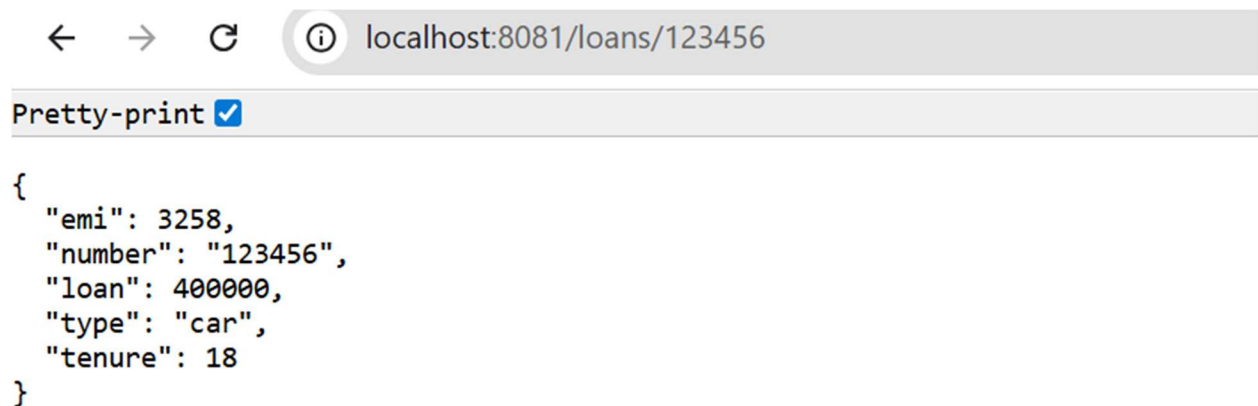
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.RestController;

import java.util.HashMap;
import java.util.Map;

@RestController
public class LoanController {

    @GetMapping("/loans/{number}")
    public Map<String, Object> getLoan(@PathVariable String number) {
        Map<String, Object> loan = new HashMap<>();
        loan.put("number", number);
        loan.put("type", "car");
        loan.put("loan", 400000);
        loan.put("emi", 3258);
        loan.put("tenure", 18);
        return loan;
    }
}
```

Output:



```
{
  "emi": 3258,
  "number": "123456",
  "loan": 400000,
  "type": "car",
  "tenure": 18
}
```