WEEK 5

Microservices with Spring Boot 3 and Spring Cloud

Creating Microservices for account and loan

Account Microservice

```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);
    }
}
```
```java
package com.cognizant.account.controller;

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

import java.util.Map;
import java.util.LinkedHashMap;

@RestController
@RequestMapping("/accounts")
public class AccountController {

    @GetMapping("/{accountNumber}")
```

```java
    public Map<String, Object> fetchAccountInfo(@PathVariable("accountNumber") String
accountNumber) {

        Map<String, Object> accountDetails = new LinkedHashMap<>();

        accountDetails.put("number", accountNumber);

        accountDetails.put("type", "savings");

        accountDetails.put("balance", 234343);

        return accountDetails;

    }

}
```

Loan Microservice

```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);

    }

}
package com.cognizant.loan.controller;


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


import java.util.Map;

import java.util.LinkedHashMap;
```

```java
@RestController
@RequestMapping("/loans")
public class LoanController {

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

Output

Account Microservice Output

```
{
 "number": "00987987973432",
 "type": "savings",
 "balance": 234343
}
```

Loan Microservice Output

```
{
 "number": "H00987987972342",
 "type": "car",
 "loan": 400000,
 "emi": 3258,
```

```
  "tenure": 18
}
```