Spring Boot Microservices Project: Account & Loan Services

# 1. Project Overview

This project consists of two microservices built using Spring Boot: an Account Service and a Loan Service. Each service is independently deployable and follows REST architecture. Maven is used for dependency management and build automation.

# 2. Technology Stack

- Java 17

- Spring Boot

- Maven

- RESTful APIs

# 3. Project Structure

The project consists of the following directory layout:

/account  
 └── src/main/java/com/cognizant/account/  
 ├── AccountApplication.java  
 └── controller/AccountController.java  
  
/loan  
 └── src/main/java/com/cognizant/loan/  
 ├── LoanApplication.java  
 └── controller/LoanController.java

# 4. Account Service

Main file: AccountApplication.java

Controller: AccountController.java

This service provides endpoints related to account details.

## AccountController.java (snippet):

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", 589647  
 );  
 }  
}

# 5. Loan Service

Main file: LoanApplication.java

Controller: LoanController.java

This service provides endpoints related to loan details.

## LoanController.java (snippet):

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  
 );  
 }  
}

# 6. Sample Outputs (Expected)

When these services are run and accessed via browser or Postman, typical outputs may include:

GET /account:  
Response: {"message": "Welcome to the Account Service!"}  
  
GET /loan:  
Response: {"message": "Welcome to the Loan Service!"}