**Exercise - Creating Microservices for account and loan**

**Microservices**

**Folder – Account**

**AccountController.java**

package com.cognizant.account;

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

@RestController

@RequestMapping("/accounts")

public class AccountController {

    @GetMapping("/{number}")

    public Account getAccount(@PathVariable String number) {

        return new Account(number, "savings", 234343);

    }

    record Account(String number, String type, double balance) {}

}

**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);

  }

}

**pom.xml**

<?xml version="1.0" encoding="UTF-8"?>

<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">

  <modelVersion>4.0.0</modelVersion>

  <parent>

    <groupId>org.springframework.boot</groupId>

    <artifactId>spring-boot-starter-parent</artifactId>

    <version>3.5.4</version>

    <relativePath/>

  </parent>

  <groupId>com.cognizant</groupId>

  <artifactId>account</artifactId>

  <version>0.0.1-SNAPSHOT</version>

  <name>account</name>

  <description>Demo project for Spring Boot</description>

  <url/>

  <licenses>

    <license/>

  </licenses>

  <developers>

    <developer/>

  </developers>

  <scm>

    <connection/>

    <developerConnection/>

    <tag/>

    <url/>

  </scm>

  <properties>

    <java.version>17</java.version>

  </properties>

  <dependencies>

    <dependency>

      <groupId>org.springframework.boot</groupId>

      <artifactId>spring-boot-starter-web</artifactId>

    </dependency>

    <dependency>

      <groupId>org.springframework.boot</groupId>

      <artifactId>spring-boot-devtools</artifactId>

      <scope>runtime</scope>

      <optional>true</optional>

    </dependency>

    <dependency>

      <groupId>org.springframework.boot</groupId>

      <artifactId>spring-boot-starter-test</artifactId>

      <scope>test</scope>

    </dependency>

  </dependencies>

  <build>

    <plugins>

      <plugin>

        <groupId>org.springframework.boot</groupId>

        <artifactId>spring-boot-maven-plugin</artifactId>

      </plugin>

    </plugins>

  </build>

</project>

**Folder - Loan**

**LoanController.java**

package com.cognizant.loan;

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

@RestController

@RequestMapping("/loans")

public class LoanController {

    @GetMapping("/{number}")

    public Loan getLoan(@PathVariable String number) {

        return new Loan(number, "car", 400000, 3258, 18);

    }

    record Loan(String number, String type, double loan, double emi, int tenure) {}

}

**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);

  }

}

**pom.xml**

<?xml version="1.0" encoding="UTF-8"?>

<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">

  <modelVersion>4.0.0</modelVersion>

  <parent>

    <groupId>org.springframework.boot</groupId>

    <artifactId>spring-boot-starter-parent</artifactId>

    <version>3.5.4</version>

    <relativePath/>

  </parent>

  <groupId>com.cognizant</groupId>

  <artifactId>loan</artifactId>

  <version>0.0.1-SNAPSHOT</version>

  <name>loan</name>

  <description>Demo project for Spring Boot</description>

  <url/>

  <licenses>

    <license/>

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  <developers>

    <developer/>

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  <scm>

    <connection/>

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  <properties>

    <java.version>17</java.version>

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  <dependencies>

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    </dependency>

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      <groupId>org.springframework.boot</groupId>

      <artifactId>spring-boot-devtools</artifactId>

      <scope>runtime</scope>

      <optional>true</optional>

    </dependency>

    <dependency>

      <groupId>org.springframework.boot</groupId>

      <artifactId>spring-boot-starter-test</artifactId>

      <scope>test</scope>

    </dependency>

  </dependencies>

  <build>

    <plugins>

      <plugin>

        <groupId>org.springframework.boot</groupId>

        <artifactId>spring-boot-maven-plugin</artifactId>

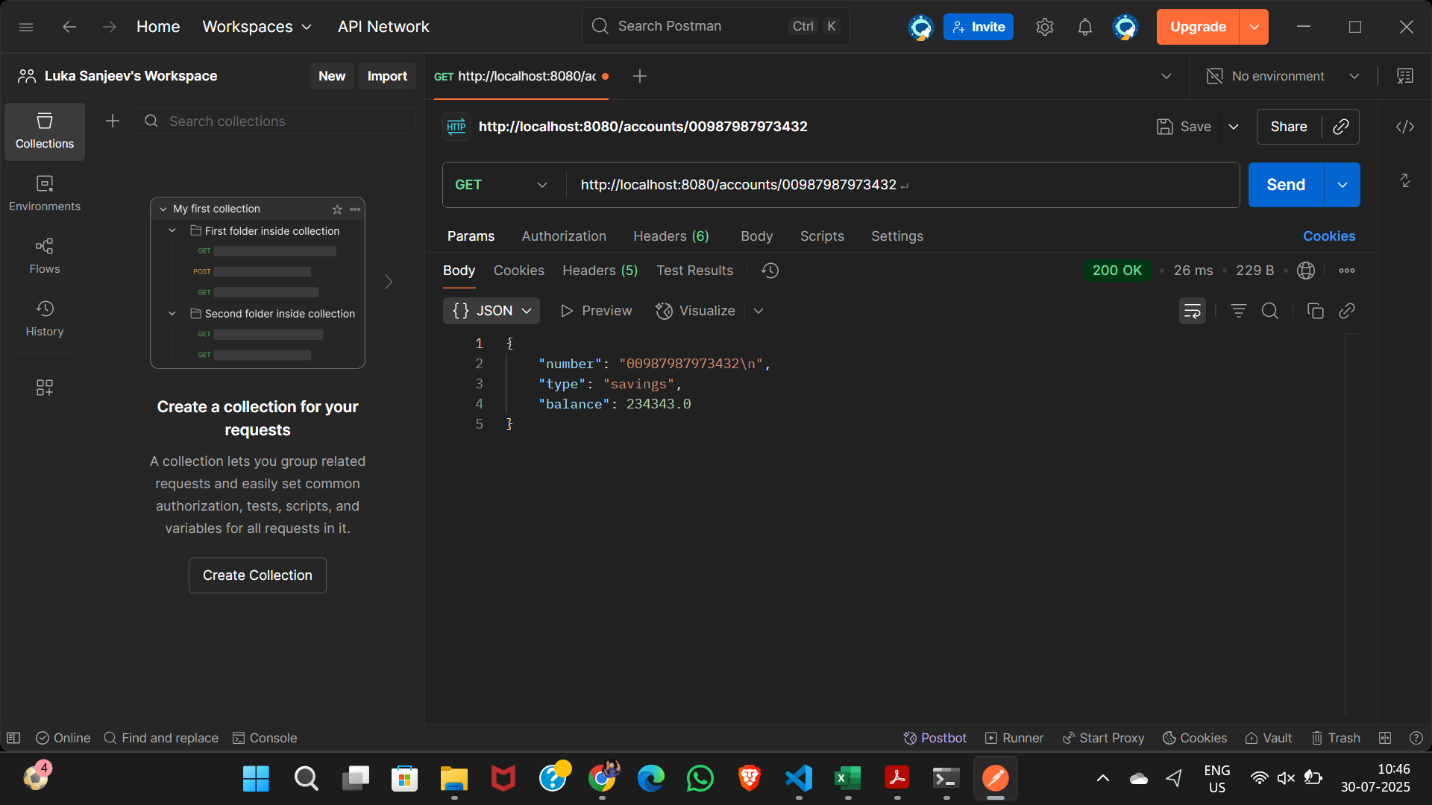
      </plugin>

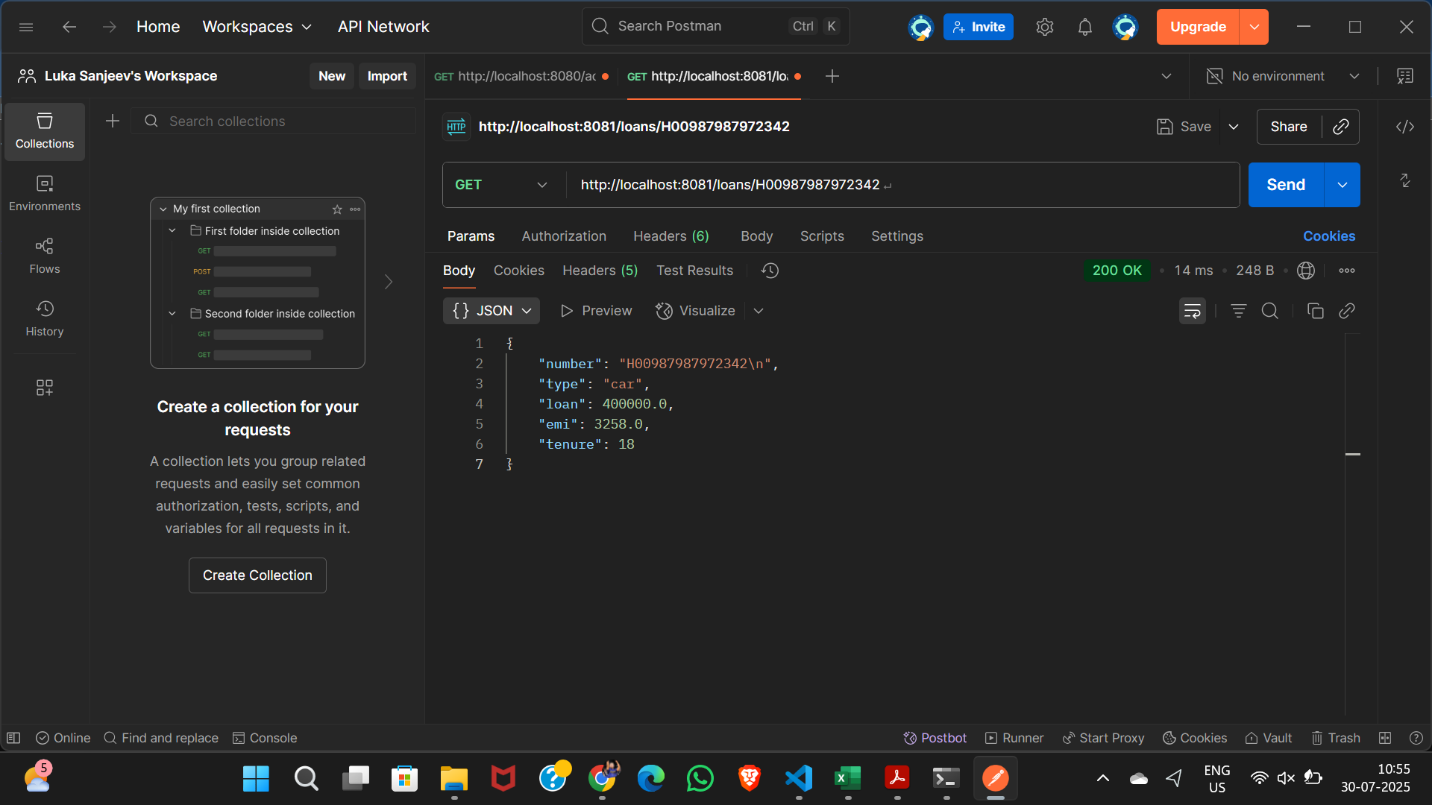
    </plugins>

  </build>

</project>

**Output:**

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