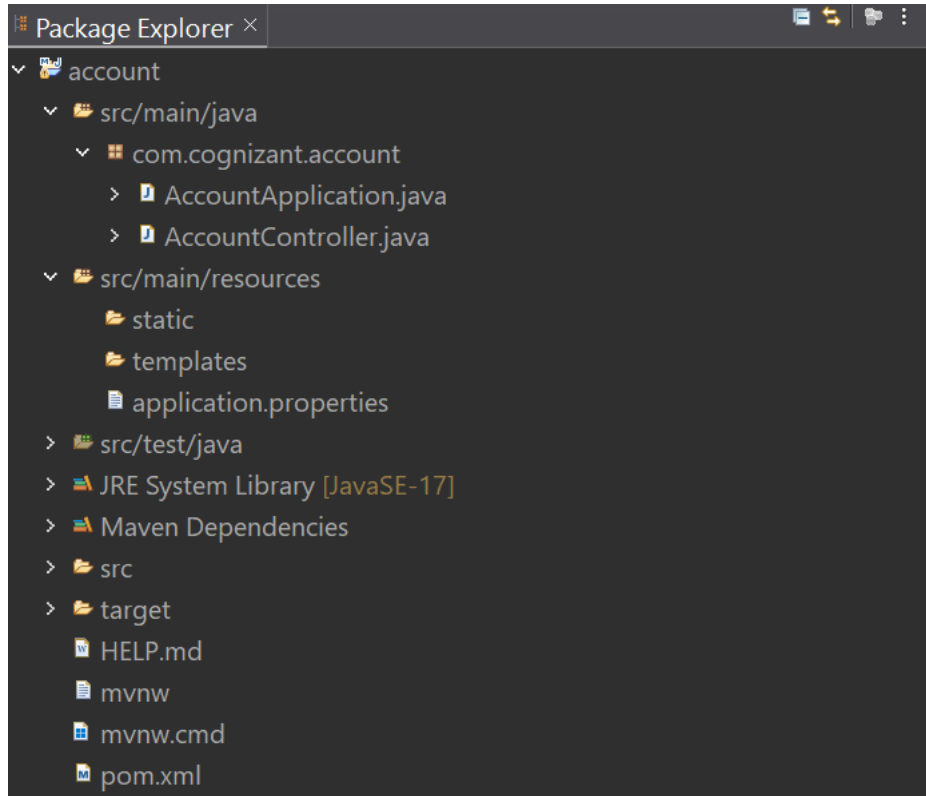
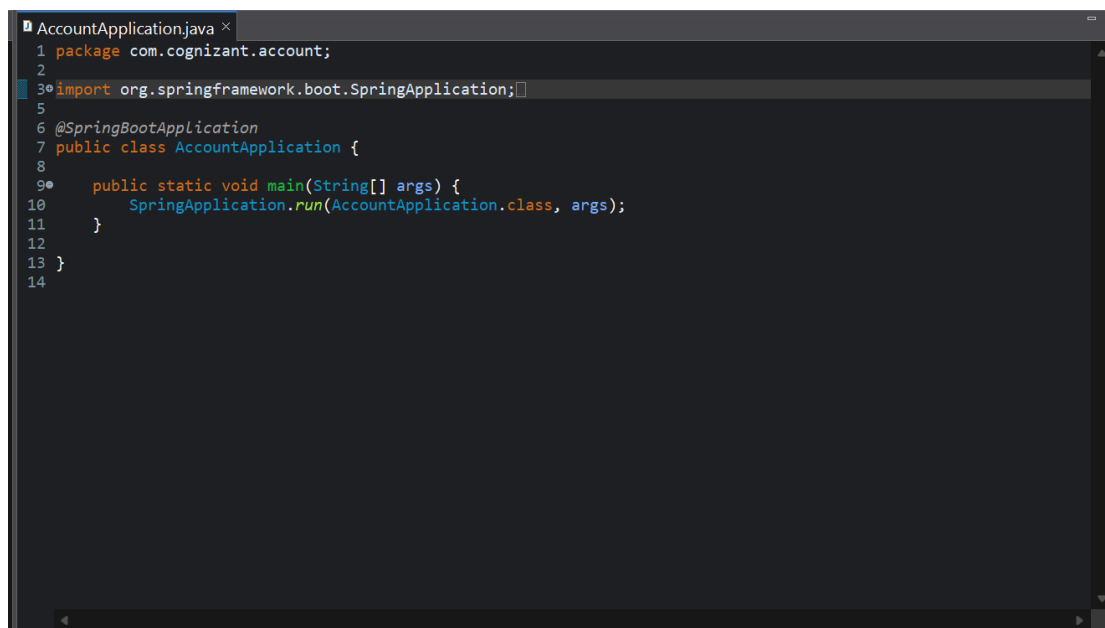


# Microservices for account and loan

## Account Microservice structure



## Codes:



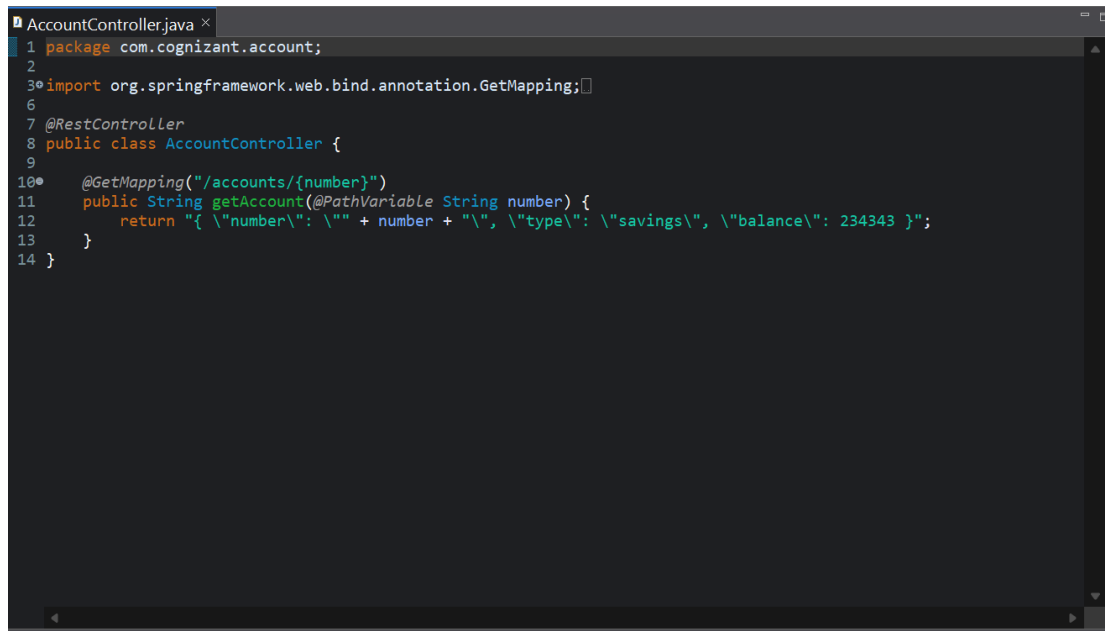
## Pom.xml

```
<?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>2.5.5</version> <relativePath/> </parent>
  <groupId>com.cognizant</groupId>
  <artifactId>eureka-discovery-server</artifactId>
  <version>0.0.1-SNAPSHOT</version>
  <name>eureka-discovery-server</name>
  <description>Eureka Discovery Server for Microservices</description>
  <properties>
    <java.version>17</java.version>
    <spring-cloud.version>2020.0.4</spring-cloud.version> </properties>
  <dependencies>
    <dependency>
      <groupId>org.springframework.cloud</groupId>
      <artifactId>spring-cloud-starter-netflix-eureka-server</artifactId>
    </dependency>

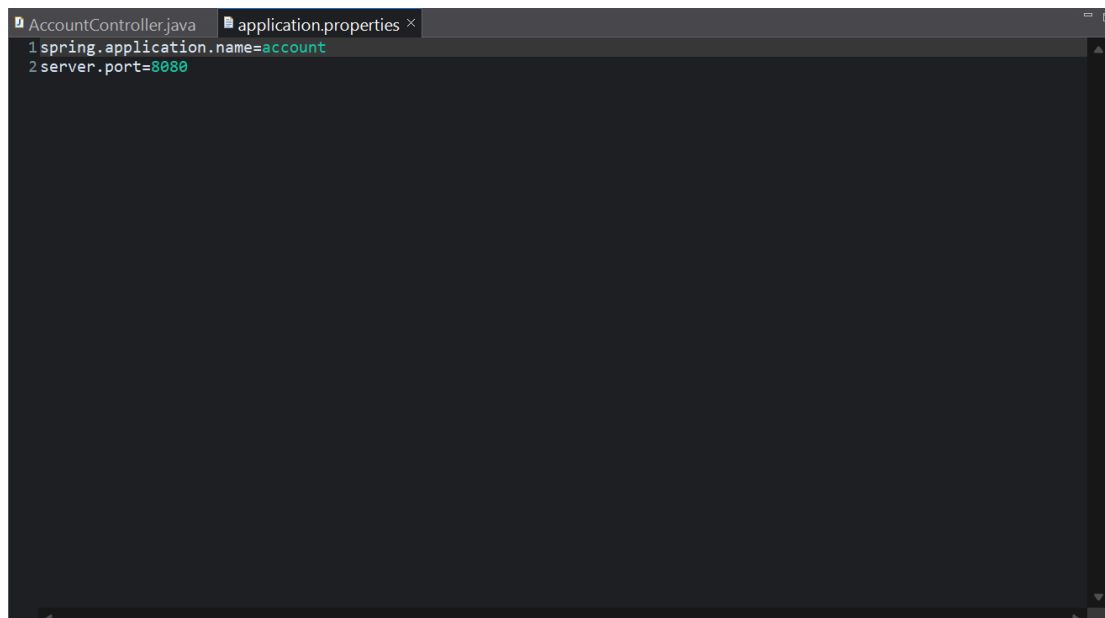
    <dependency>
      <groupId>org.springframework.boot</groupId>
      <artifactId>spring-boot-starter-web</artifactId>
    </dependency>
    <dependency>
      <groupId>org.springframework.boot</groupId>
      <artifactId>spring-boot-starter-test</artifactId>
      <scope>test</scope>
    </dependency>
    <dependency>
      <groupId>org.springframework.boot</groupId>
      <artifactId>spring-boot-devtools</artifactId>
      <scope>runtime</scope>
      <optional>true</optional>
    </dependency>
  </dependencies>

  <dependencyManagement>
    <dependencies>
      <dependency>
        <groupId>org.springframework.cloud</groupId>
        <artifactId>spring-cloud-dependencies</artifactId>
        <version>${spring-cloud.version}</version>
        <type>pom</type>
        <scope>import</scope>
      </dependency>
    </dependencies>
  </dependencyManagement>
```

```
<build>
  <plugins>
    <plugin>
      <groupId>org.springframework.boot</groupId>
      <artifactId>spring-boot-maven-plugin</artifactId>
    </plugin>
  </plugins>
</build>
</project>
```

A screenshot of an IDE window titled 'AccountController.java'. The code is as follows:

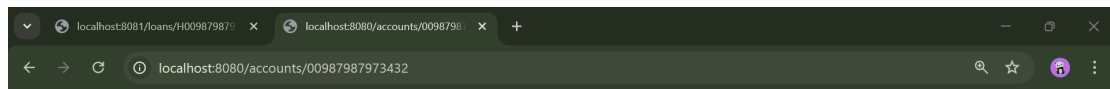
```
1 package com.cognizant.account;
2
3 import org.springframework.web.bind.annotation.GetMapping;
4
5
6
7 @RestController
8 public class AccountController {
9
10     @GetMapping("/accounts/{number}")
11     public String getAccount(@PathVariable String number) {
12         return "{ \"number\": \"" + number + "\", \"type\": \"savings\", \"balance\": 234343 }";
13     }
14 }
```

A screenshot of an IDE window titled 'application.properties'. The code is as follows:

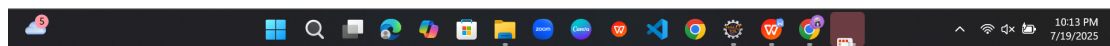
```
1 spring.application.name=account
2 server.port=8080
```

Output :

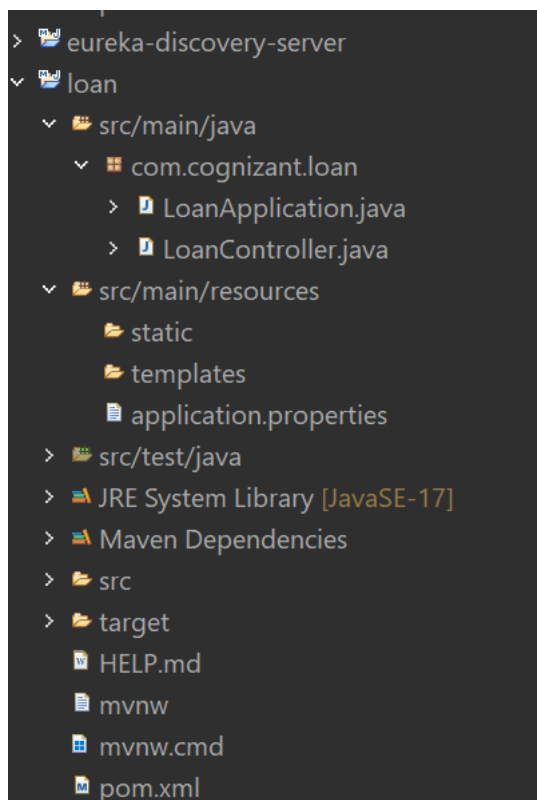
<http://localhost:8080/accounts/00987987973432>



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



## Loan Microservice structure



```
LoanApplication.java ×
1 package com.cognizant.loan;
2
3 import org.springframework.boot.SpringApplication;
4
5
6 @SpringBootApplication
7 public class LoanApplication {
8
9     public static void main(String[] args) {
10         SpringApplication.run(LoanApplication.class, args);
11     }
12 }
13
14
```

```
LoanApplication.java LoanController.java ×
1 package com.cognizant.loan;
2
3 import org.springframework.web.bind.annotation.GetMapping;
4
5
6 @RestController
7 public class LoanController {
8
9
10     @GetMapping("/loans/{number}")
11     public String getLoan(@PathVariable String number) {
12         return "{ \"number\": \"" + number + "\", \"type\": \"car\", \"loan\": 400000, \"emi\": 3258, \"tenure\": 18 }";
13     }
14 }
```

```
LoanApplication.java LoanController.java application.properties ×
1 spring.application.name=loan
2 server.port=8081
```

## 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>3.2.5</version>
        <relativePath/> <!-- lookup parent from repository -->
    </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/>
</licenses>
<developers>
  <developer/>
</developers>
<scm>
  <connection/>
  <developerConnection/>
  <tag/>
  <url/>
</scm>
<properties>
  <java.version>17</java.version>
</properties>
<dependencies>
  <dependency>
    <groupId>org.springframework.cloud</groupId>
    <artifactId>spring-cloud-starter-netflix-eureka-client</artifactId>
  </dependency>

  <dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-web</artifactId>
  </dependency>

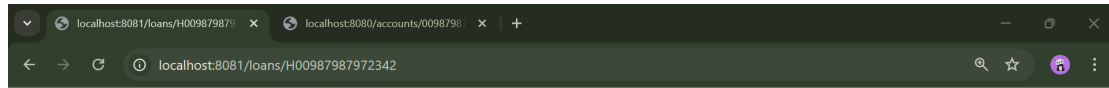
  <dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-devtools</artifactId>
    <scope>runtime</scope>
    <optional>true</optional>
  </dependency>
  <dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-test</artifactId>
    <scope>test</scope>
  </dependency>
</dependencies>
<dependencyManagement>
<dependencies>
  <dependency>
    <groupId>org.springframework.cloud</groupId>
    <artifactId>spring-cloud-dependencies</artifactId>
    <version>2023.0.1</version>
    <type>pom</type>
    <scope>import</scope>
  </dependency>
</dependencies>
</dependencyManagement>

  <build>
    <plugins>
      <plugin>
        <groupId>org.springframework.boot</groupId>

```

```
        <artifactId>spring-boot-maven-plugin</artifactId>
      </plugin>
    </plugins>
  </build>
</project>
```

## Output :



```
{ "number": "H00987987972342", "type": "car", "loan": 400000,
  "emi": 3258, "tenure": 18 }
```

