

Microservices with Spring Boot – Account and Loan

1. Software Requirements

Ensure the following software is installed:

- Spring Tool Suite (STS) or Eclipse IDE for Enterprise Java Developers
- Java 17
- Maven 3.6 or higher
- Browser (for accessing Spring Initializr)

2. Folder Setup

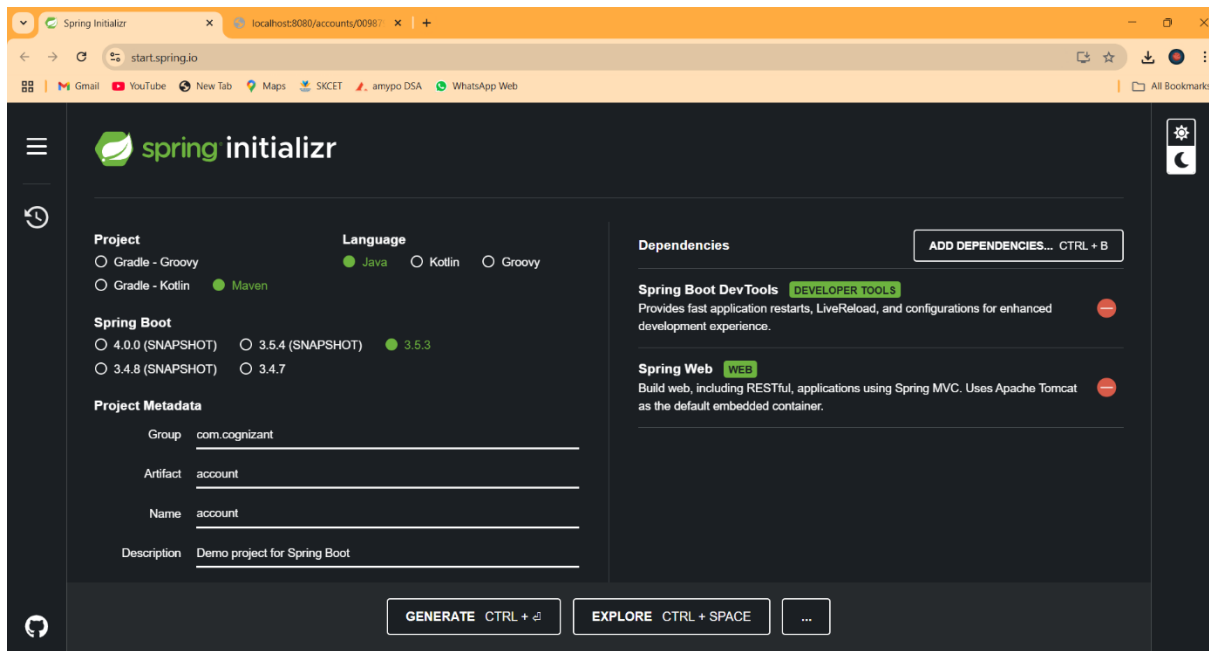
1. Go to D:\
2. Create folder with your employee ID
D:\12345
3. Inside that, create:

D:\12345\microservices

3. Create account Microservice Using Spring Initializr

1. Open: <https://start.spring.io>
2. Fill in:
 - **Group:** com.cognizant
 - **Artifact:** account
3. Select dependencies:
 - Spring Web
 - Spring Boot DevTools
4. Click **Generate**, download the ZIP
5. Extract the account folder into:

D:\12345\microservices



4. Import account Project into STS

1. Open STS → File > Import > Maven > Existing Maven Projects
2. Browse to:

D:\12345\microservices\account

3. Click **Finish**

5. Add Controller for Account

Create a class:

com.cognizant.account.controller.AccountController

@RestController

@RequestMapping("/accounts")

public class AccountController {

@GetMapping("/{number}")

public Map<String, Object> getAccountDetails(@PathVariable String number) {

Map<String, Object> response = new HashMap<>();

```

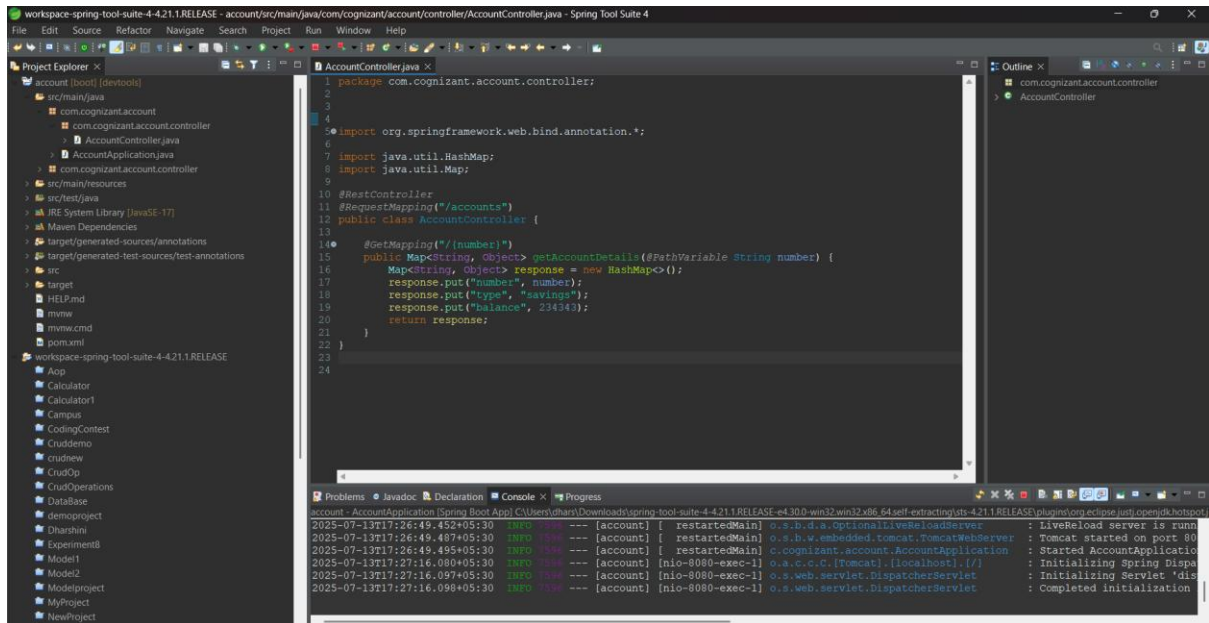
        response.put("number", number);

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

        response.put("balance", 234343);

        return response;
    }
}

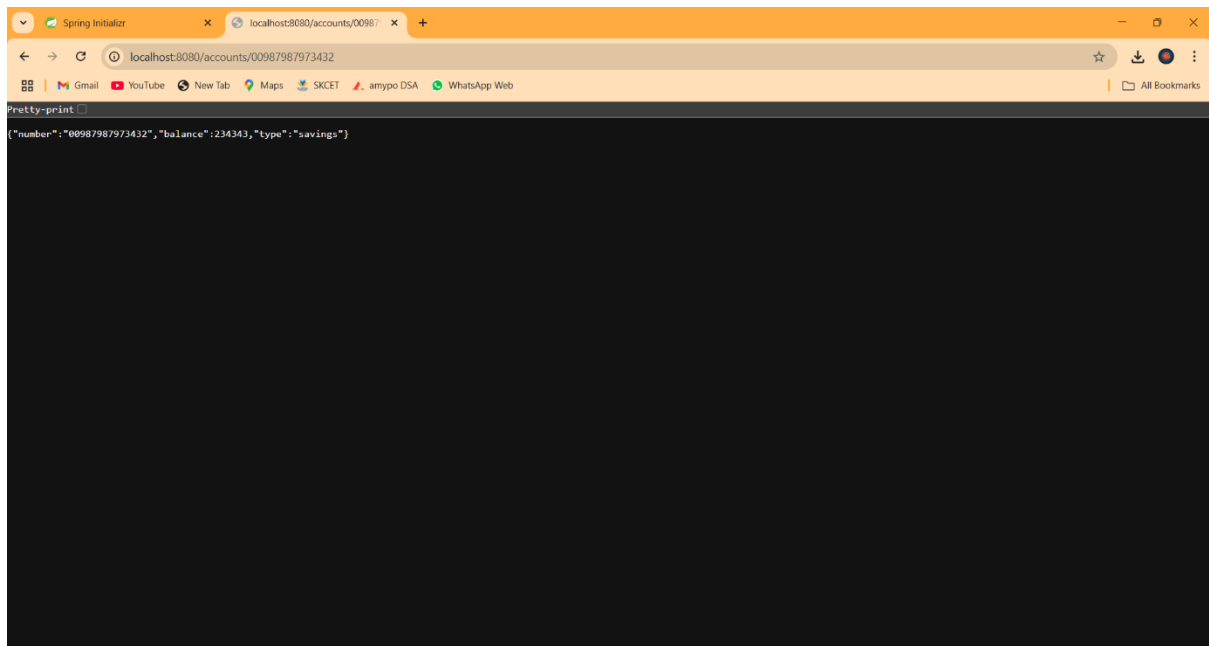
```



6. Run and Test account Service

1. Right-click `AccountApplication.java` → Run As > Spring Boot App
2. Visit in browser:

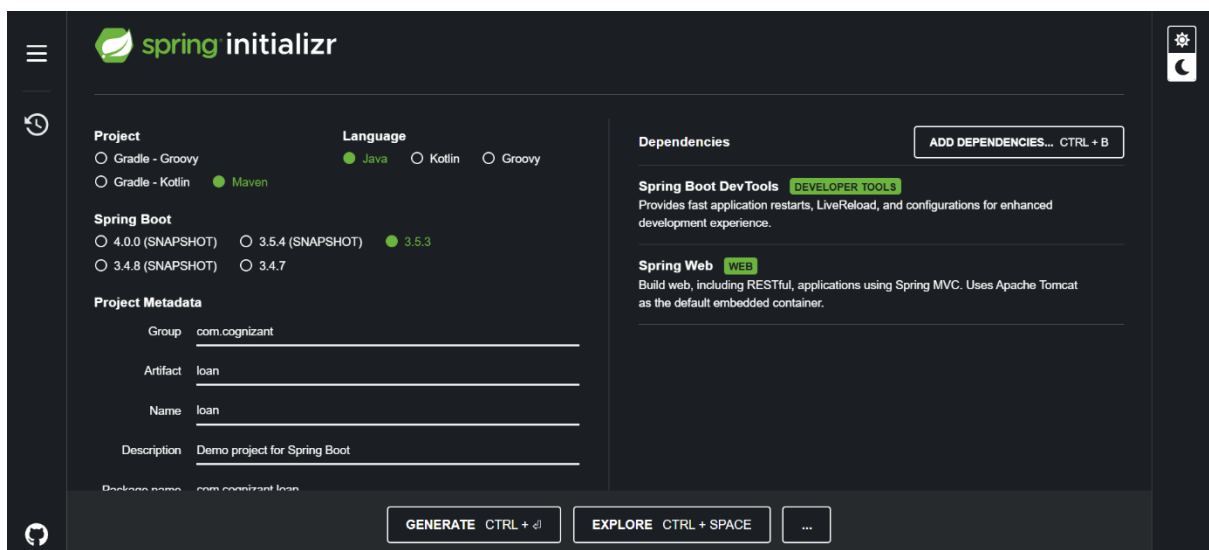
<http://localhost:8080/accounts/00987987973432>



7. Create loan Microservice Using Spring Initializr

Repeat steps like for account, but:

- **Artifact:** loan
- **Package Name:** com.cognizant.loan
- Add same dependencies:
 - Spring Web
 - Spring Boot DevTools



8. Import loan Project into STS

1. Go to File > Import > Maven > Existing Maven Projects
2. Select:

D:\12345\microservices\loan

3. Click **Finish**

9. Add Controller for Loan

Create a class:

com.cognizant.loan.controller.LoanController

@RestController

@RequestMapping("/loans")

public class LoanController {

 @GetMapping("/{number}")

 public Map<String, Object> getLoanDetails(@PathVariable String number) {

 Map<String, Object> response = new HashMap<>();

 response.put("number", number);

 response.put("type", "car");

 response.put("loan", 400000);

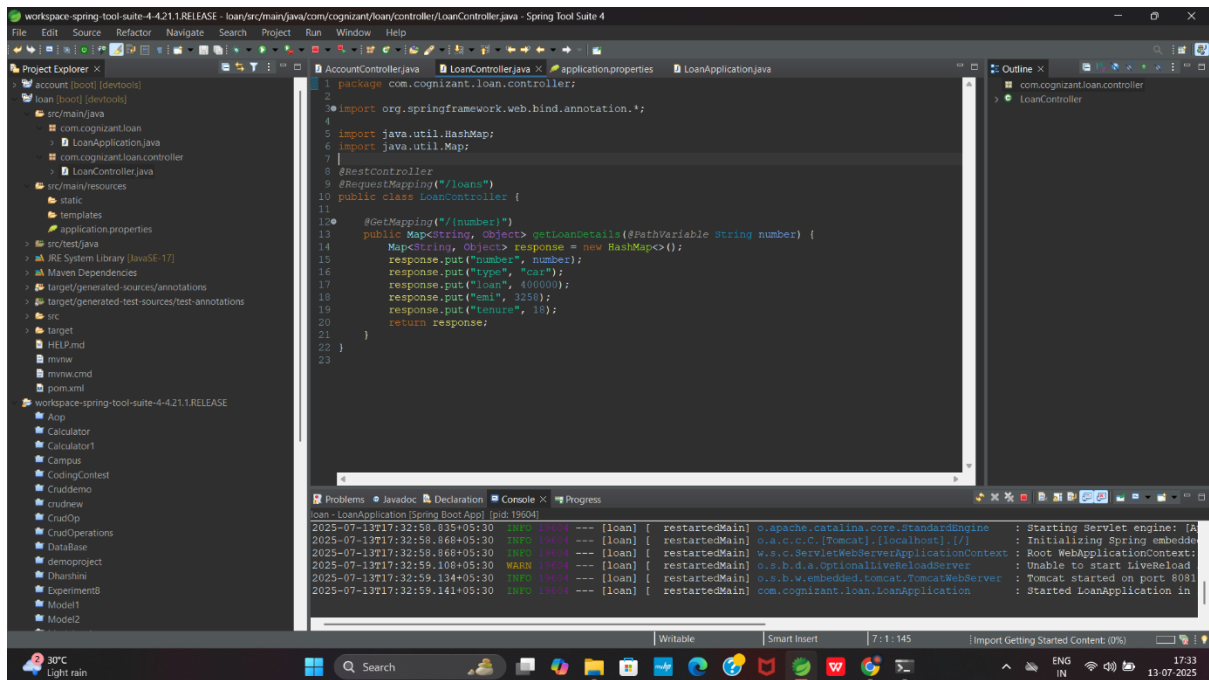
 response.put("emi", 3258);

 response.put("tenure", 18);

 return response;

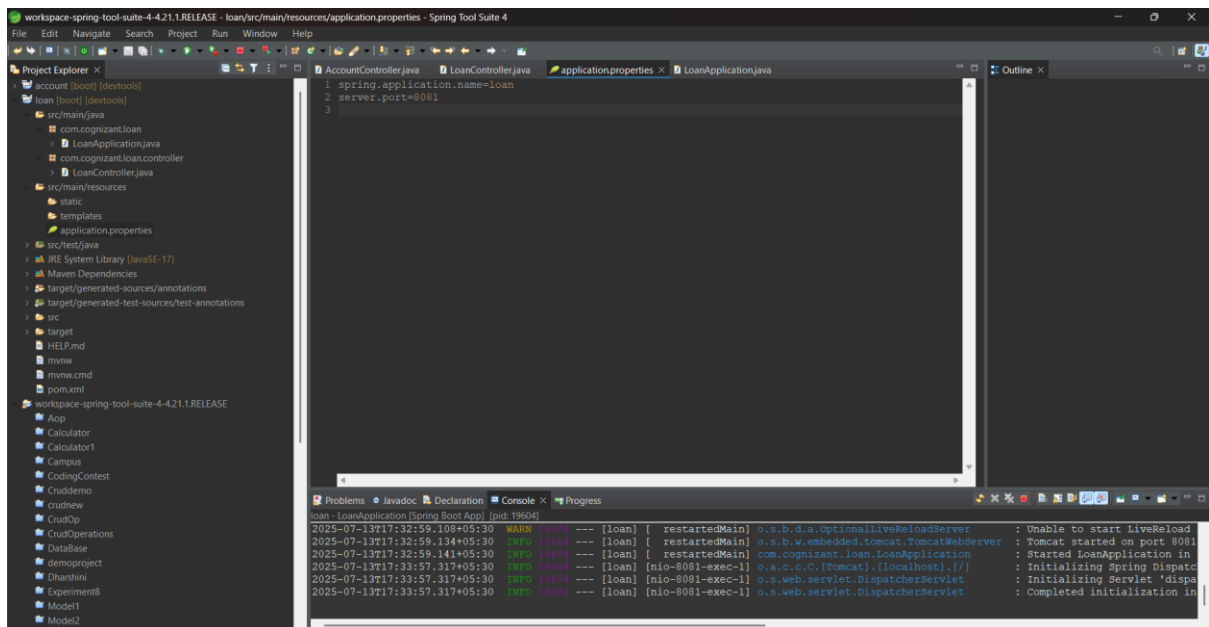
 }

}



10. Change Port for loan Microservice

1. Open: `src/main/resources/application.properties`
2. Add:
`server.port=8081`



11. Run and Test loan Service

1. Right-click LoanApplication.java → Run As > Spring Boot App
2. Visit in browser:

<http://localhost:8081/loans/H00987987972342>

