ECOLE MAROCAINE DES SCIENCES DE L'INGENIEUR
Membre de HONORIS UNITED UNIVERSITIES

Micro services project JEE Spring boot & Flutter

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5IIR EMSI Centre G2

INTRODUCTION

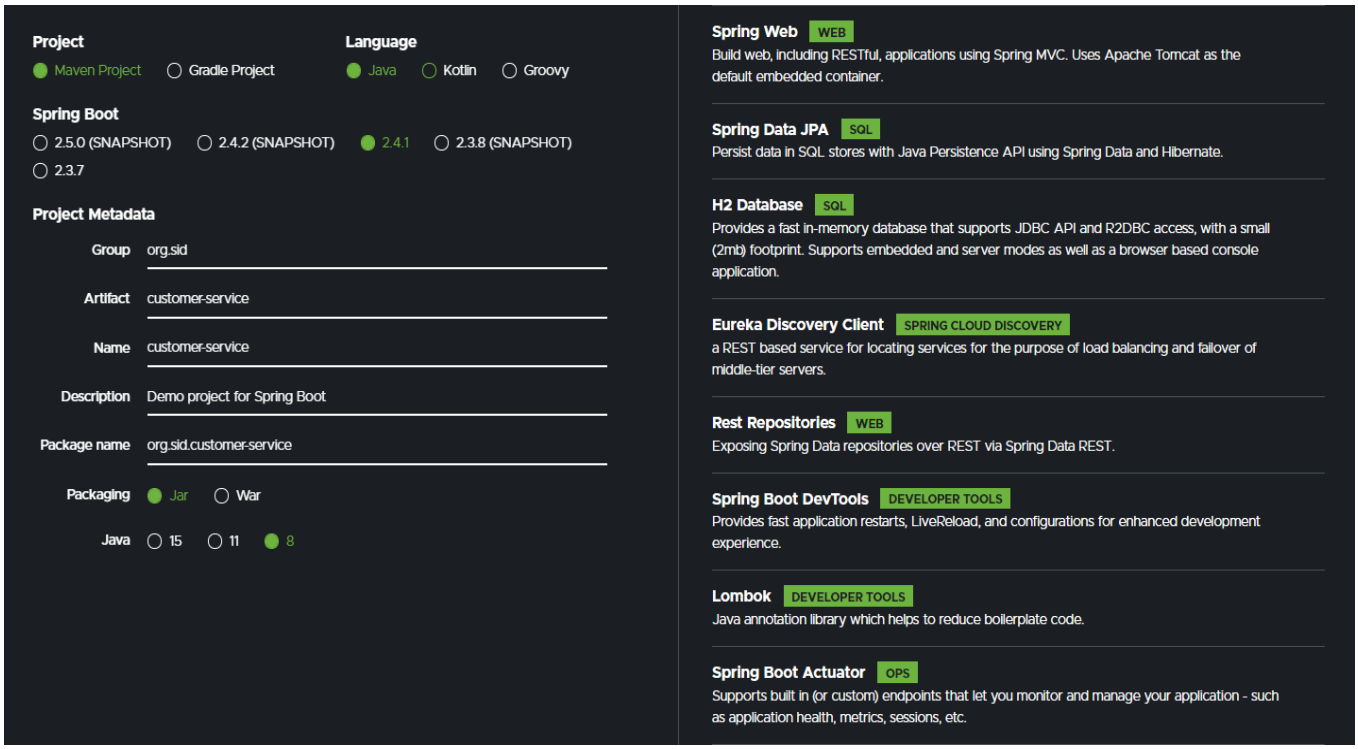
Dans ce projet on a souhaité de créer une application web permettant la communication entre les micro-services avec la notion de JWT, Ceci a permis de rentrer dans le détail de plusieurs concepts et d'améliorer et de comprendre des autres.

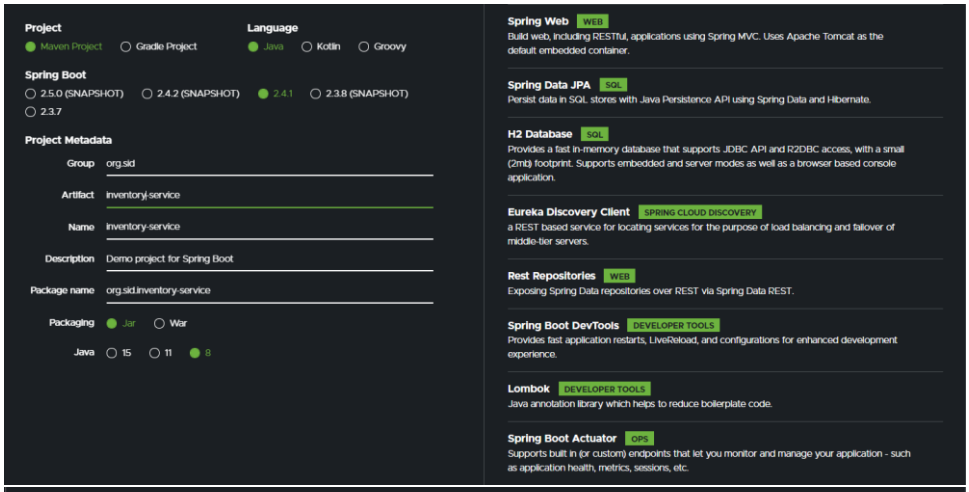
Le but de ce projet consiste en l'élaboration d'une application micro services web permettant la gestion des produits.

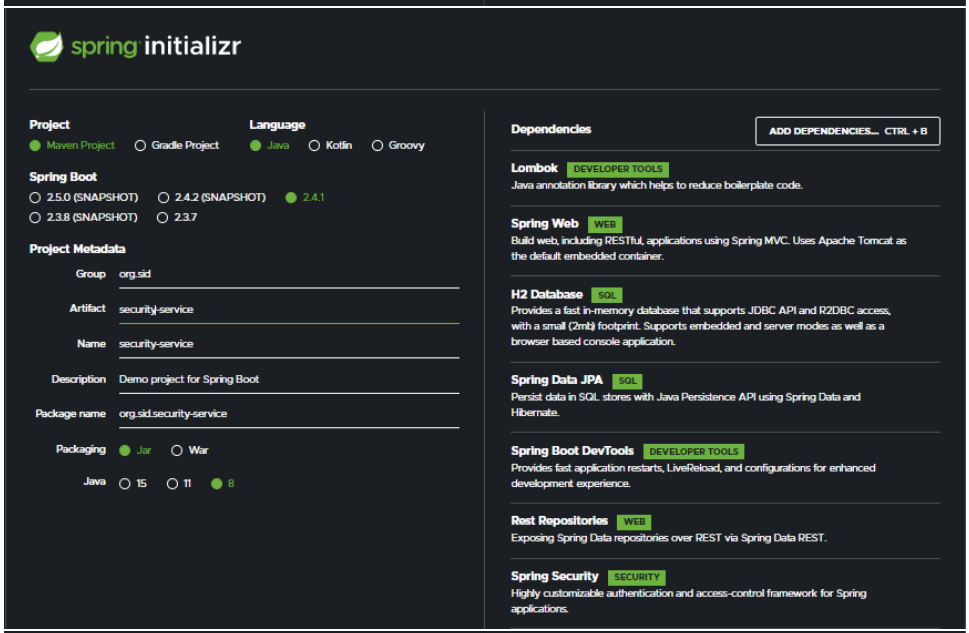
L'application a été modélisée tel que nous l'avons comprise et compte tenu des moyens matériels et temporels dont nous disposions. Mots clé : Spring, Spring Data, JPA, Hibernate, Spring CLOUD, Eureka, Spring Security et Json Web Token.

L'ARCHITECTURE GENERALE

C'est l'architecteur sur laquelle on va enchainer la création de notre projet qui se compose de 5 micro-services :




Project
Maven Project
Gradle Project
Language
Java
Kotlin
Groovy
Spring Boot
2.5.0 (SNAPSHOT)
2.4.2 (SNAPSHOT)
2.4.1
2.3.8 (SNAPSHOT)
2.3.7
Project Metadata
Group org.sid
Artifact inventory-service
Name inventory-service
Description Demo project for Spring Boot
Package name org.sid.inventory-service
Packaging Jar War
Java 15 11 8
Spring Web WEB
Build web, including RESTful, applications using Spring MVC. Uses Apache Tomcat as the default embedded container.
Spring Data JPA SQL
Persist data in SQL stores with Java Persistence API using Spring Data and Hibernate.
H2 Database SQL
Provides a fast in-memory database that supports JDBC API and R2DBC access, with a small (2mb) footprint. Supports embedded and server modes as well as a browser based console application.
Eureka Discovery Client SPRING CLOUD DISCOVERY
a REST based service for locating services for the purpose of load balancing and failover of middle-tier servers.
Rest Repositories WEB
Exposing Spring Data repositories over REST via Spring Data REST.
Spring Boot DevTools DEVELOPER TOOLS
Provides fast application restarts, LiveReload, and configurations for enhanced development experience.
Lombok DEVELOPER TOOLS
Java annotation library which helps to reduce boilerplate code.
Spring Boot Actuator OPS
Supports built in (or custom) endpoints that let you monitor and manage your application - such as application health, metrics, sessions, etc.


spring initializr
Project
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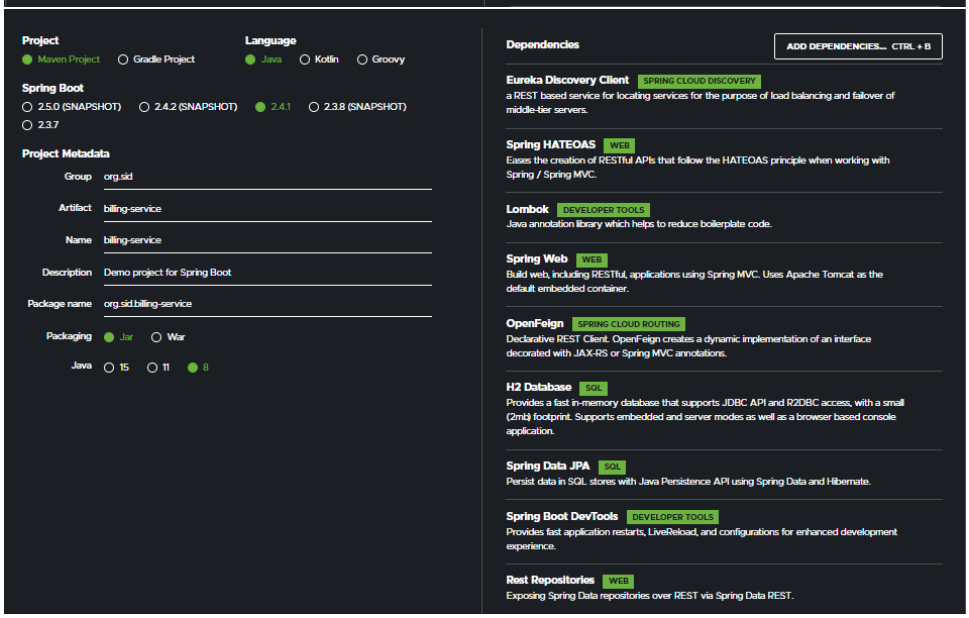
2.5.0 (SNAPSHOT)
2.4.2 (SNAPSHOT)
2.4.1
2.3.8 (SNAPSHOT)
2.3.7
Project Metadata
Group org.sid
Artifact security-service
Name security-service
Description Demo project for Spring Boot
Package name org.sid.security-service
Packaging Jar War
Java 15 11 8
Dependencies
ADD DEPENDENCIES... CTRL + B
Lombok DEVELOPER TOOLS
Java annotation library which helps to reduce boilerplate code.
Spring Web WEB
Build web, including RESTful, applications using Spring MVC. Uses Apache Tomcat as the default embedded container.
H2 Database SQL
Provides a fast in-memory database that supports JDBC API and R2DBC access, with a small (2mb) footprint. Supports embedded and server modes as well as a browser based console application.
Spring Data JPA SQL
Persist data in SQL stores with Java Persistence API using Spring Data and Hibernate.
Spring Boot DevTools DEVELOPER TOOLS
Provides fast application restarts, LiveReload, and configurations for enhanced development experience.
Rest Repositories WEB
Exposing Spring Data repositories over REST via Spring Data REST.
Spring Security SECURITY
Highly customizable authentication and access-control framework for Spring applications.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Spring Boot
2.5.0 (SNAPSHOT)
2.4.2 (SNAPSHOT)
2.4.1
2.3.8 (SNAPSHOT)
2.3.7
Project Metadata
Group org.sid
Artifact billing-service
Name billing-service
Description Demo project for Spring Boot
Package name org.sid.billing-service
Packaging Jar War
Java 15 11 8
Dependencies
ADD DEPENDENCIES... CTRL + B
Eureka Discovery Client SPRING CLOUD DISCOVERY
a REST based service for locating services for the purpose of load balancing and failover of middle-tier servers.
Spring HATEOAS WEB
Eases the creation of RESTful APIs that follow the HATEOAS principle when working with Spring / Spring MVC.
Lombok DEVELOPER TOOLS
Java annotation library which helps to reduce boilerplate code.
Spring Web WEB
Build web, including RESTful, applications using Spring MVC. Uses Apache Tomcat as the default embedded container.
OpenFeign SPRING CLOUD ROUTING
Declarative REST Client. OpenFeign creates a dynamic implementation of an interface decorated with JAX-RS or Spring MVC annotations.
H2 Database SQL
Provides a fast in-memory database that supports JDBC API and R2DBC access, with a small (2mb) footprint. Supports embedded and server modes as well as a browser based console application.
Spring Data JPA SQL
Persist data in SQL stores with Java Persistence API using Spring Data and Hibernate.
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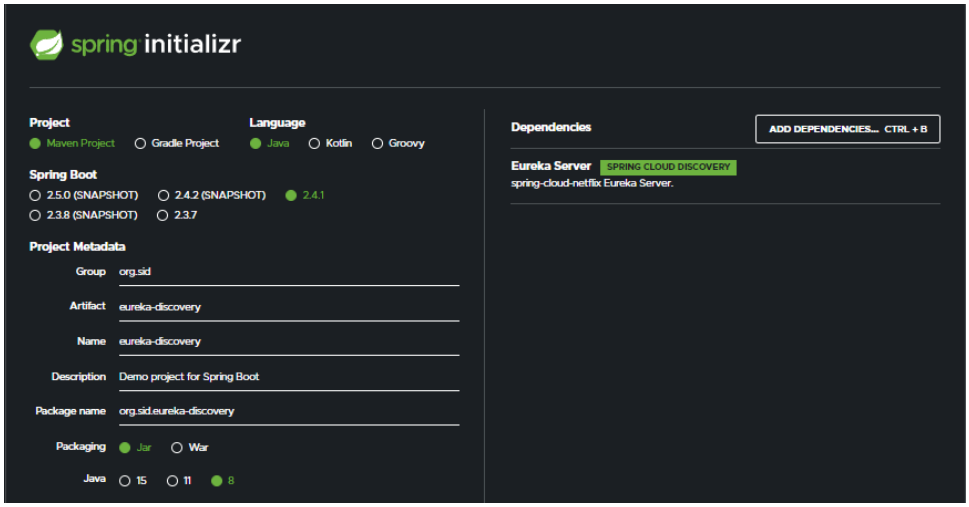
Provides fast application restarts, LiveReload, and configurations for enhanced development experience.
Rest Repositories WEB
Exposing Spring Data repositories over REST via Spring Data REST.


spring initializr
Project
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Spring Boot
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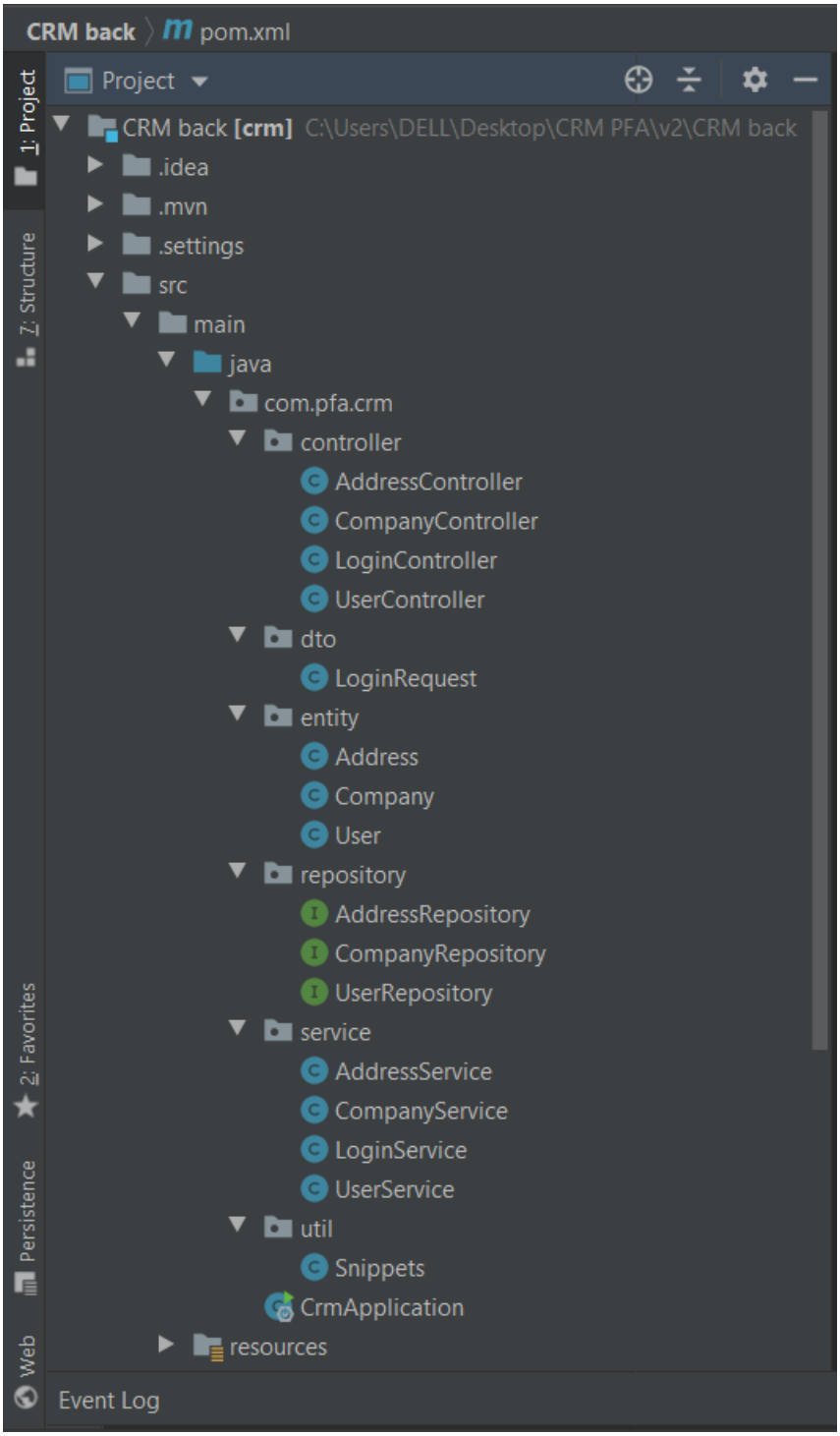
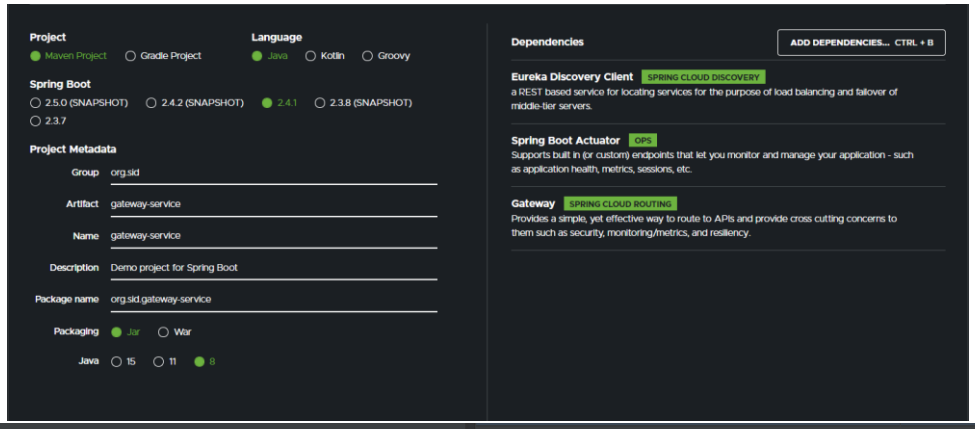
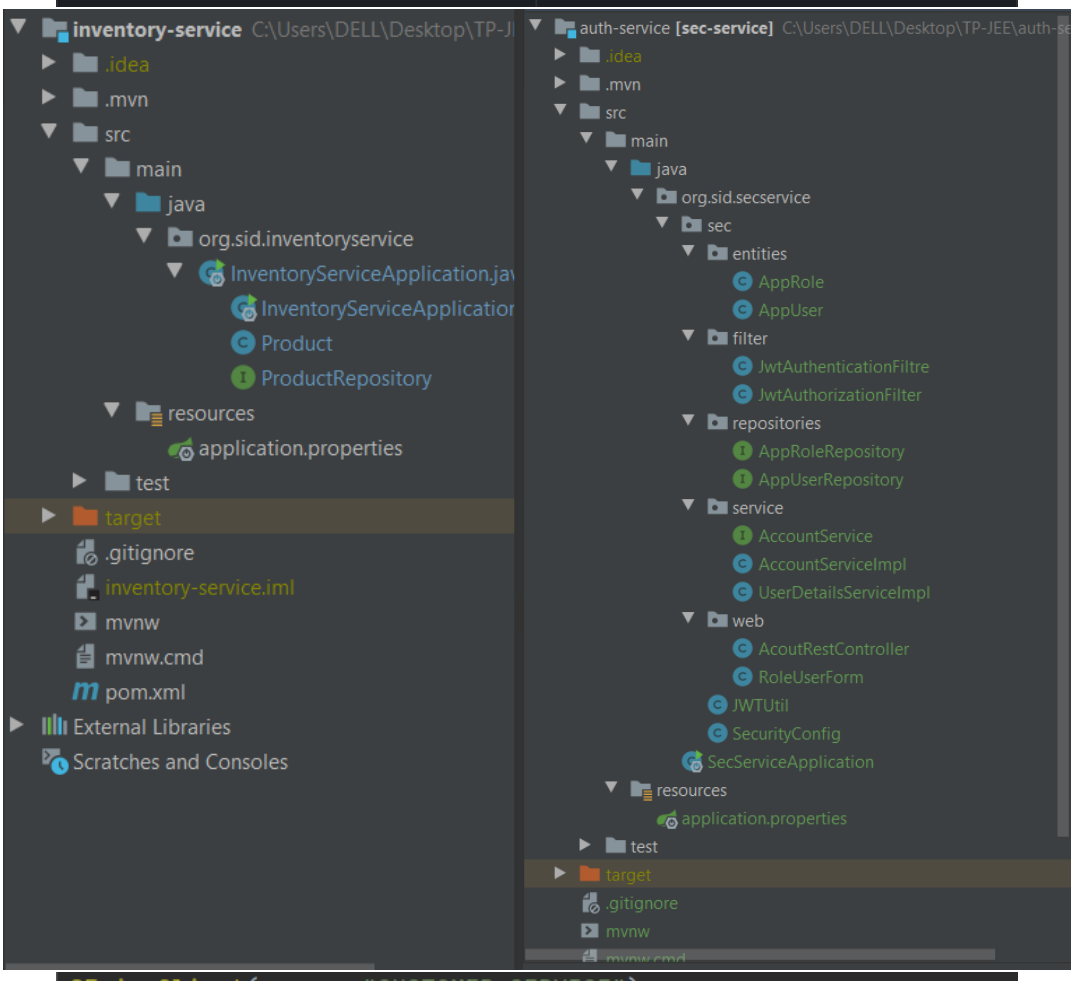
2.4.2 (SNAPSHOT)
2.4.1
2.3.8 (SNAPSHOT)
2.3.7
Project Metadata
Group org.sid
Artifact eureka-discovery
Name eureka-discovery
Description Demo project for Spring Boot
Package name org.sid.eureka-discovery
Packaging Jar War
Java 15 11 8
Dependencies
ADD DEPENDENCIES... CTRL + B
Eureka Server SPRING CLOUD DISCOVERY
spring-cloud-netflix Eureka Server.


CRM back
pom.xml
Project
1: Project
Z: Structure
2: Favorites
Persistence
Web
CRM back [crm] C:\Users\DELL\Desktop\CRM PFA\v2\CRM back
.idea
.mvn
.settings
src
main
java
com.pfa.crm
controller
AddressController
CompanyController
LoginController
UserController
dto
LoginRequest
entity
Address
Company
User
repository
AddressRepository
CompanyRepository
UserRepository
service
AddressService
CompanyService
LoginService
UserService
util
Snippets
CrmApplication
resources
Event Log



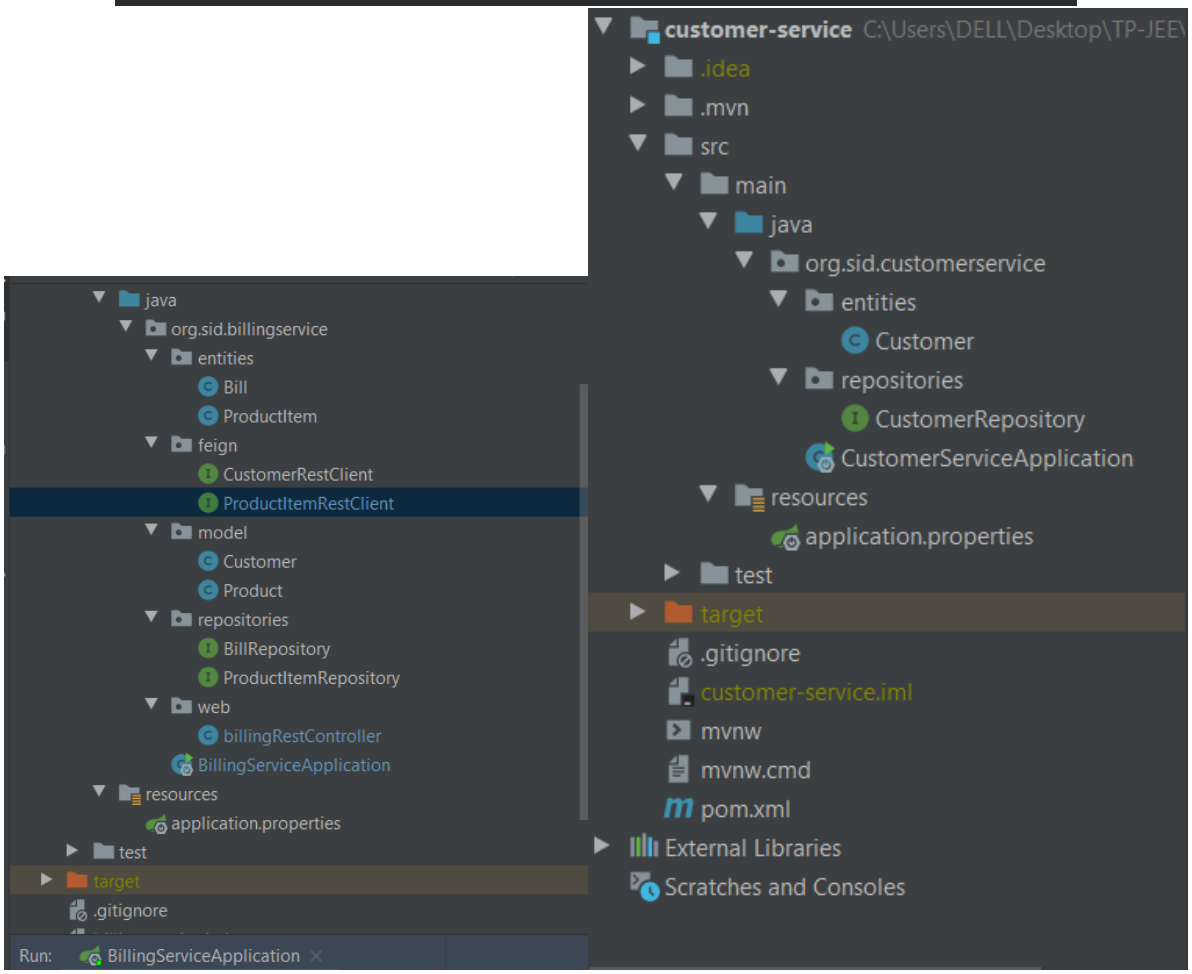


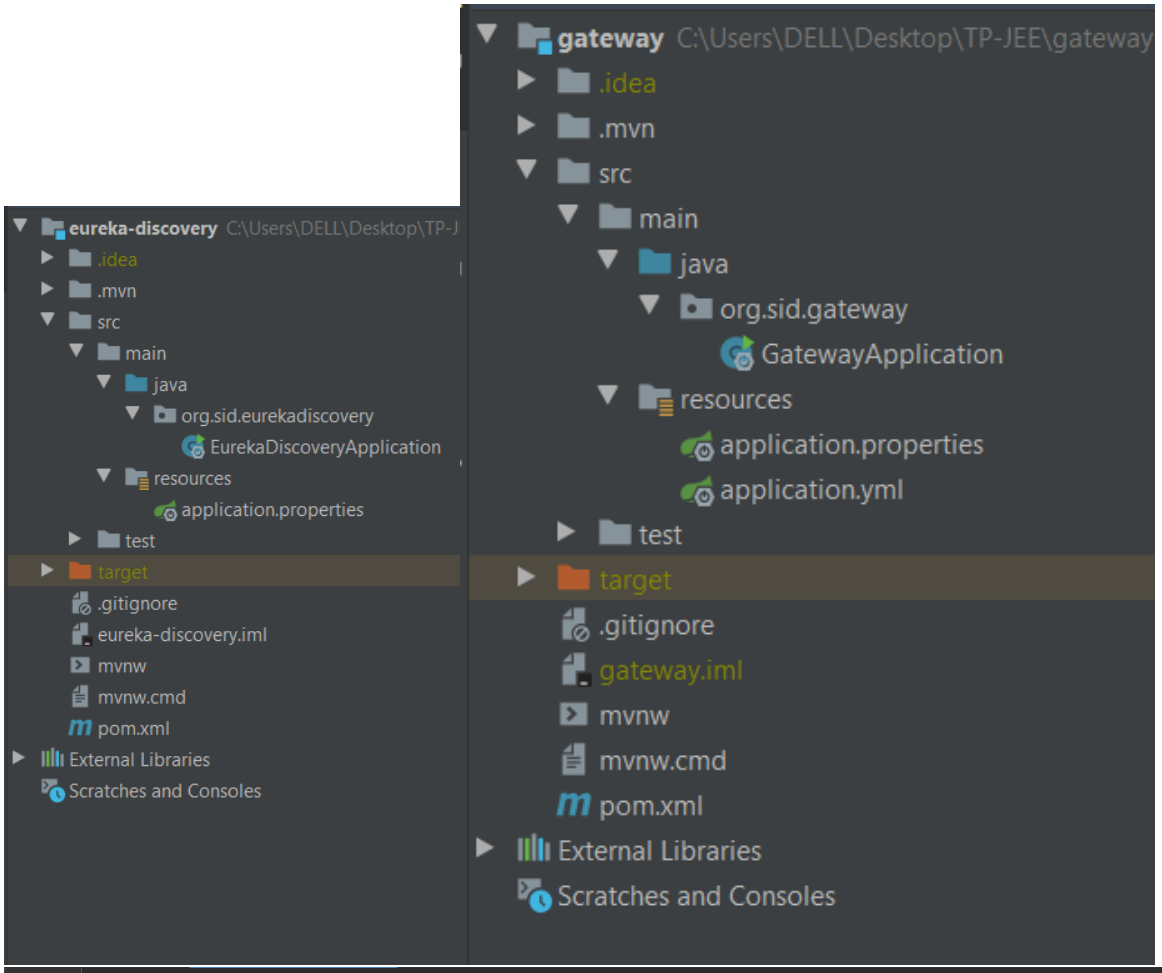

```java
@FeignClient(name = "CUSTOMER-SERVICE")
public interface CustomerRestClient {
    @GetMapping(path="/customers/{id}")
    Customer getCustomerById(@PathVariable(name="id") Long id);
}
```

```
#management.endpoints.web.exposure.include=*"
server.port=8081
spring.application.name=customer-service
spring.datasource.url=jdbc:h2:mem:customer-db
spring.cloud.discovery.enabled=true
```

```
@FeignClient(name = "PRODUCTS-SERVICE")

public interface ProductItemRestClient {
    @GetMapping(path = "/products")
    PagedModel<Product>pageProducts();
    @GetMapping(path = "/products/{id}")
    Product getProductById(@PathVariable Long id);
}
```

```
server.port=8033
spring.application.name=products-service
spring.datasource.url=jdbc:h2:mem:products-db
spring.cloud.discovery.enabled=true
#management.endpoints.web.exposure.include=*
```






```java
package com.pfa.crm.controller;

import ...

@CrossOrigin
@RestController
@RequestMapping("/api/companies")
public class CompanyController {

    @Autowired
    private CompanyService companyService;

    // COMPANIES

    // getCompanies
    @GetMapping("")
    public List<Company> getCompanies() { return this.companyService.getCompanies(); }

    // getCompanyById
    @GetMapping("/{companyId}")
    public Optional<Company> getCompanyById(@PathVariable Long companyId) {
        return this.companyService.getCompanyById(companyId);
    }

    // searchCompaniesByReferenceOrName
    @GetMapping("/search")
    public List<Company> searchCompaniesByReferenceOrName(@RequestParam String term) {
        return this.companyService.searchCompaniesByReferenceOrName(term);
    }
```

```java
    // createCompany
    @PostMapping("/userid/{userId}")
    public Company createCompany(@PathVariable Long userId, @RequestBody Company company) {
        return this.companyService.createCompany(userId, company);
    }

    // updateCompany
    @PatchMapping("")
    public Company updateCompany(@RequestBody Company company) { return this.companyService.updateCompany(company); }

    // deleteCompany
    @DeleteMapping("/{companyId}")
    public void deleteCompany(@PathVariable Long companyId) { this.companyService.deleteCompany(companyId); }

    // USERS COMPANIES

    // getUsersByCompanyId
    @GetMapping("{companyId}/users")
    public Set<User> getUsersByCompanyId(@PathVariable Long companyId) {
        return this.companyService.getUsersByCompanyId(companyId);
    }

    // addUserToCompany
    @PostMapping("{companyId}/users/{userId}")
    public User addUserToCompany(@PathVariable Long companyId, @PathVariable Long userId) {
        return this.companyService.addUserToCompany(companyId, userId);
    }
```

```java
@CrossOrigin
@RestController
@RequestMapping("/api/users")
public class UserController {

    @Autowired
    private UserService userService;

    // USERS

    // getUsers
    @GetMapping("")
    public List<User> getUsers() { return this.userService.getUsers(); }

    // getUserById
    @GetMapping("/{userId}")
    public Optional<User> getUserById(@PathVariable Long userId) { return this.userService.getUserById(userId); }

    // searchUsersByName
    @GetMapping("/search")
    public List<User> searchUsersbyName(@RequestParam String term) { return this.userService.searchUsersByName(term); }

    // createUser
    @PostMapping("")
    public User createUser(@RequestBody User user) { return this.userService.createUser(user); }

    // updateUser
    @PatchMapping("")
    public User updateUser(@RequestBody User user) { return this.userService.updateUser(user); }

```

```java
    // updateUserAddress
    @PatchMapping("/{userId}/updateaddress")
    public User updateUserAddress(@PathVariable Long userId, @RequestBody Address address) {
        return this.userService.updateUserAddress(userId, address);
    }



}
```

```java
    // deleteUser
    @DeleteMapping("/{userId}")
    public void deleteUser(@PathVariable Long userId) { this.userService.deleteUser(userId); }

    // USERS COMPANIES

    // getCompaniesByUserId
    @GetMapping("/{userId}/companies")
    public Set<Company> getCompaniesByUserId(@PathVariable Long userId) {
        return this.userService.getCompaniesByUserId(userId);
    }

    // addCompanyToUser
    @PostMapping("{userId}/companies/{companyId}")
    public Company addCompanyToUser(@PathVariable Long userId, @PathVariable Long companyId){
        return this.userService.addCompanyToUser(userId, companyId);
    }

    // removeCompanyFromUser
    @DeleteMapping("/{userId}/companies/{companyId}")
    public Company removeCompanyFromUser(@PathVariable Long userId, @PathVariable Long companyId) {
        return this.userService.removeCompanyFromUser(userId, companyId);
    }

    // ADDRESSES

    // createUserAddress
    @PostMapping("/{userId}/createaddress")
    public User createUserAddress(@PathVariable Long userId, @RequestBody Address address) {
        return this.userService.createUserAddress(userId, address);
    }
```

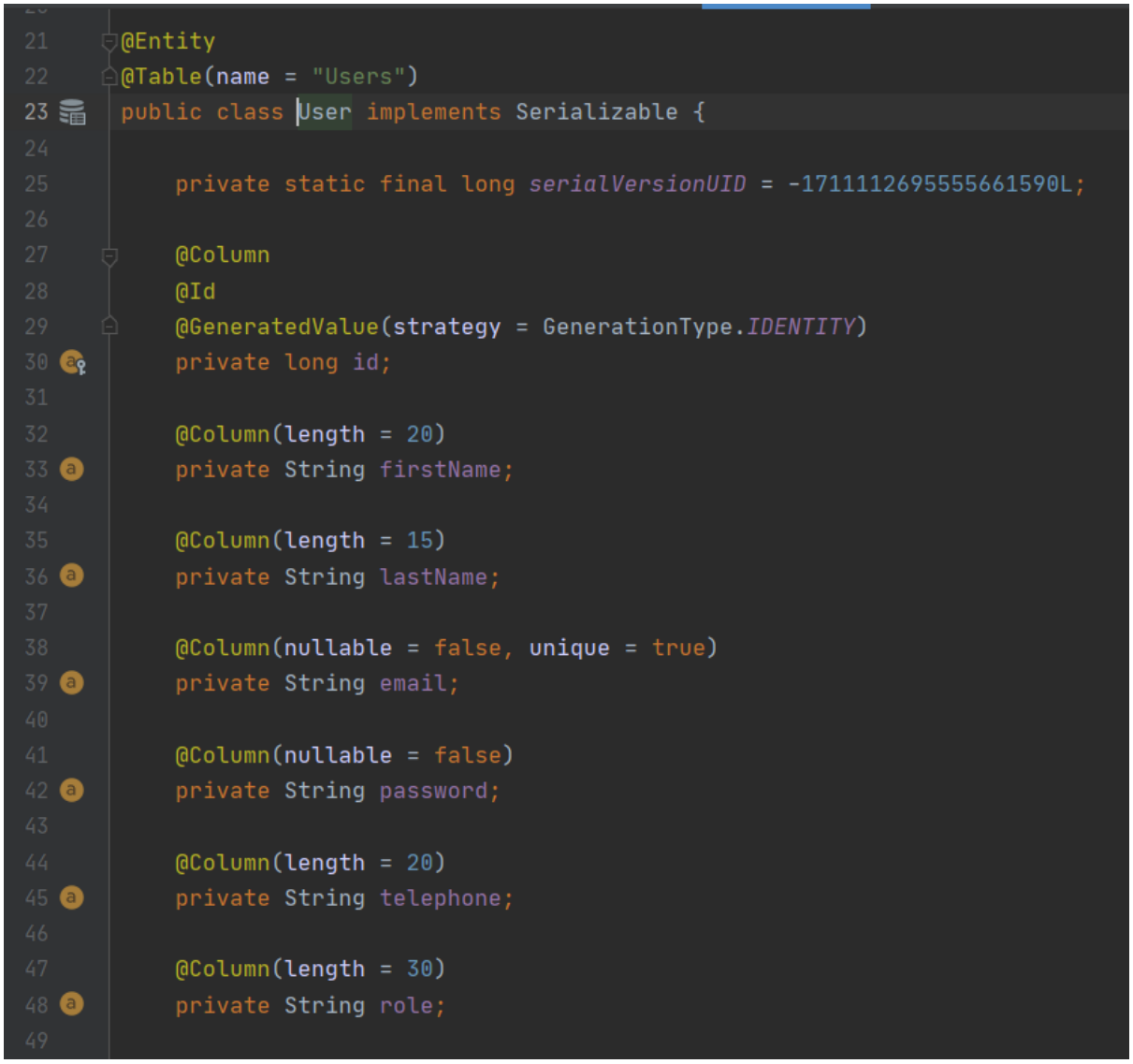
```java
package com.pfa.crm.controller;

import ...

@CrossOrigin
@RestController
@RequestMapping("/api/login")
public class LoginController {

    @Autowired
    private LoginService loginService;

    @PostMapping("")
    public Optional<User> findByEmailAndPassword(@RequestBody LoginRequest loginRequest) {
        return this.loginService.findByEmailAndPassword(loginRequest);
    }

}
```

```java
package com.pfa.crm.entity;

import ...



@Entity
@Table(name = "Addresses")
public class Address implements Serializable {

    private static final long serialVersionUID = -5508310782410021980L;

    @Column
    @Id @GeneratedValue(strategy = GenerationType.IDENTITY)
    private long id;

    @Column(length = 5)
    private int streetNumber;

    @Column(length = 30)
    private String streetName;

    @Column(length = 20)
    private String city;

    @Column(length = 10)
    private String postcode;

    @Column(length = 20)
    private String region;
```

```java
@Entity
@Table(name = "Companies")
public class Company implements Serializable {

    private static final long serialVersionUID = -7491177392

    @Column
    @Id @GeneratedValue(strategy = GenerationType.IDENTITY)
    private long id;

    @Column(length = 10)
    private String reference;

    @Column(length = 30)
    private String name;

    @Column(length = 30)
    private String owner;

    @Column(length = 20)
    private String telephone;

    @Column(length = 50)
    private String website;

    @Column(length = 30)
    private String contactName;

    @Column(length = 20)
    private String contactTelephone;
```

```
51
52      @Column(nullable = false, unique = true)
53      private String contactEmail;
54
55      @Column
56      private Date callLast;
57
58      @Column
59      private Date visitLast;
60
61      @Column(length = 555)
62      private String messages;
63
64      @Column(length = 30)
65      private String discount;
66
67      @Column(length = 50)
68      private float salesExp;
69
70      @Column(length = 20)
71      private float sales3m;
72
73      @Column(length = 20)
74      private float salesTotal;
75
76      @OneToOne(cascade = CascadeType.ALL)
77      private Address address;
78
```

```
78
79      @ManyToMany(mappedBy = "companies")
80      @JsonIgnore
81      Set<User> users = new HashSet<>();
82
83      public Company() {}
84
85      @PreRemove
86      public void removeUsers() {
87          this.users.forEach((user) -> {
88              user.removeCompany(this);
89          });
90      }
91
92      public void addUser(User user) {
93          if (!this.users.contains(user)) {
94              this.users.add(user);
95          }
96      }
97
98      public void removeUser(User user) {
99          if (!this.users.contains(user)) {
100             this.users.remove(user);
101         }
102     }
```



```java
@Entity
@Table(name = "Users")
public class User implements Serializable {

    private static final long serialVersionUID = -1711112695555661590L;

    @Column
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private long id;

    @Column(length = 20)
    private String firstName;

    @Column(length = 15)
    private String lastName;

    @Column(nullable = false, unique = true)
    private String email;

    @Column(nullable = false)
    private String password;

    @Column(length = 20)
    private String telephone;

    @Column(length = 30)
    private String role;

```

```java

    @OneToOne(cascade = CascadeType.ALL)
    private Address address;

    @ManyToMany(fetch = FetchType.LAZY)
    @JsonIgnore
    Set<Company> companies = new HashSet<>();

    public User() {

    }

    @PreRemove
    public void removeCompanies() {
        this.companies.forEach((company) -> {
            company.removeUser(this);
        });
    }

    public void addCompany(Company company) {
        if (!this.companies.contains(company)) {
            this.companies.add(company);
        }
    }

    public void removeCompany(Company company) {
        if (this.companies.contains(company)) {
            this.companies.remove(company);
        }
    }
```

DTO : DTO, which stands for Data Transfer Object, is a design pattern conceived to reduce the number of calls when working with remote interfaces

```java
package com.pfa.crm.dto;

public class LoginRequest {

    private String email;
    private String password;

    public LoginRequest() {}

    public String getEmail() { return email; }
    public void setEmail(String email) { this.email = email; }
    public String getPassword() { return password; }
    public void setPassword(String password) { this.password = password; }

}
```

```java
package com.pfa.crm.controller;

import ...

@RestController
@RequestMapping("/api/addresses")
public class AddressController {

    @Autowired
    private AddressService addressService;

    // ADDRESSES

    // getAddresses
    @GetMapping("")
    public List<Address> getAddresses() { return this.addressService.getAddresses(); }

    // getAddressById
    @GetMapping("/{id}")
    public Optional<Address> getAddressById(@PathVariable Long id) { return this.addressService.getAddressById(id); }

    // createAddress
    @PostMapping("")
    public Address createAddress(@RequestBody Address address) { return this.addressService.createAddress(address); }

    // updateAddress
    @PatchMapping("/{id}")
    public Address updateAddress(@RequestBody Address address) { return this.addressService.updateAddress(address); }

}
```

Repositories for CRM-service :

```java
@Repository
public interface AddressRepository extends JpaRepository<Address, Long> {

}
```

```java
@Repository
public interface CompanyRepository extends JpaRepository<Company, Long>{

    List<Company> findByReferenceIgnoreCaseContainingOrNameIgnoreCaseContaining(String reference, String name);

}
```

```java
@Repository
public interface UserRepository extends JpaRepository<User, Long>{

    Optional<User> findByEmailAndPassword(String email, String password);

    List<User> findByFirstNameIgnoreCaseContainingOrLastNameIgnoreCaseContaining(String firstName, String lastName);
}
```

Services de CRM-service :

Entreprise :

```java
package com.pfa.crm.service;

import ...

@Service
public class CompanyService {

    @Autowired
    private CompanyRepository companyRepository;

    @Autowired
    private UserRepository userRepository;

    // COMPANIES

    // getCompanies
    public List<Company> getCompanies() { return this.companyRepository.findAll(); }

    // getCompanyById
    public Optional<Company> getCompanyById(Long companyId) { return this.companyRepository.findById(companyId); }


```

```java

    // searchCompaniesByReferenceOrName
    public List<Company> searchCompaniesByReferenceOrName(String term) {
        return this.companyRepository.findByReferenceIgnoreCaseContainingOrNameIgnoreCaseContaining(term, term);
    }

    // createCompany
    public Company createCompany(Long userId, Company company) {
        User user = this.userRepository.findById(userId).orElseThrow(() -> new RuntimeException("User not found"));
        Company newCompany = this.companyRepository.save(company);
        user.addCompany(newCompany);
        this.userRepository.save(user);
        return newCompany;
    }

    // updateCompany
    public Company updateCompany(Company company) { return this.companyRepository.save(company); }

    // deleteCompany
    public void deleteCompany(Long companyId) { this.companyRepository.deleteById(companyId); }

```

```java

    // USERS

    // getUsersByCompanyId
    public Set<User> getUsersByCompanyId(Long companyId) {
        Company company = this.getCompanyById(companyId).orElseThrow(() -> new RuntimeException("Company not found"));
        return company.getUsers();
    }

    // addUserToCompany
    public User addUserToCompany(Long companyId, Long userId) {
        Company company = this.getCompanyById(companyId).orElseThrow(() -> new RuntimeException("Company not found"));
        User user = this.userRepository.findById(userId).orElseThrow(() -> new RuntimeException("User not found"));
        user.addCompany(company);
        return this.userRepository.save(user);
    }

    // removeUserFromCompany
    public User removeUserFromCompany(Long companyId, Long userId) {
        Company company = this.getCompanyById(companyId).orElseThrow(() -> new RuntimeException("Company not found"));
        User user = this.userRepository.findById(userId).orElseThrow(() -> new RuntimeException("User not found"));
        user.removeCompany(company);
        return this.userRepository.save(user);
    }
```

```java

    // ADDRESSES

    // createCompanyAddress
    public Company createCompanyAddress(Long companyId, Address createCompanyAddress) {
        Company company = this.getCompanyById(companyId).orElseThrow(() -> new RuntimeException("Company not found"));
        company.setAddress(createCompanyAddress);
        return this.updateCompany(company);
    }

    // updateCompanyAddress
    public Company updateCompanyAddress(Long companyId, Address updateCompanyAddress) {
        Company company = this.getCompanyById(companyId).orElseThrow(() -> new RuntimeException("Company not found"));
        company.setAddress(updateCompanyAddress);
        return this.updateCompany(company);
    }

```

Addresse :

```java
package com.pfa.crm.service;

import ...

@Service
public class AddressService {

    @Autowired
    private AddressRepository addressRepository;

    // ADDRESSES

    // getAddresses
    public List<Address> getAddresses() { return this.addressRepository.findAll(); }

    // getAddressById
    public Optional<Address> getAddressById(Long id) { return this.addressRepository.findById(id); }

    // createAddress
    public Address createAddress(Address address) { return this.addressRepository.save(address); }

    // updateAddress
    public Address updateAddress(Address address) { return this.addressRepository.save(address); }
}
```

Login :

```java
package com.pfa.crm.service;

import ...

@Service
public class LoginService {

    @Autowired
    private UserRepository userRepository;

    public Optional<User> findByEmailAndPassword(LoginRequest loginRequest) {
        return this.userRepository.findByEmailAndPassword(loginRequest.getEmail(), loginRequest.getPassword());
    }

}
```

User :

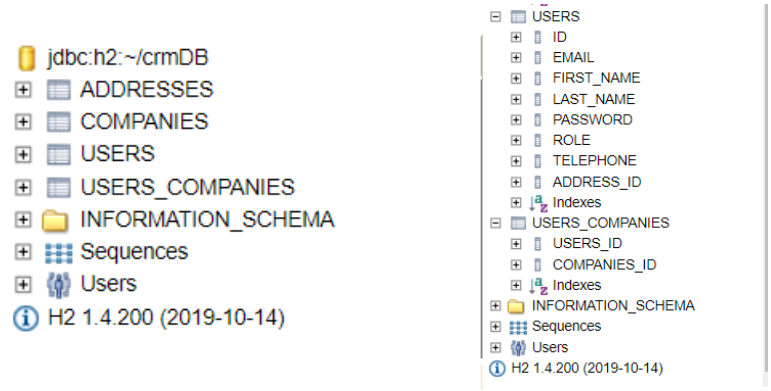
```java
package com.pfa.crm.service;

import ...

@Service
public class UserService {

    @Autowired
    private UserRepository userRepository;
    @Autowired
    private CompanyService companyService;

    // USERS

    // getUsers
    public List<User> getUsers() { return this.userRepository.findAll(); }

    // getUserById
    public Optional<User> getUserById(Long userId) { return this.userRepository.findById(userId); }

    // searchUsersByName
    public List<User> searchUsersByName(String term) {
        return this.userRepository.findByFirstNameIgnoreCaseContainingOrLastNameIgnoreCaseContaining(term, term);
    }
```

```java

    // createUser
    public User createUser(User user) { return this.userRepository.save(user); }

    // updateUser
    public User updateUser(User user) { return this.userRepository.save(user); }

    // deleteUser
    public void deleteUser(Long userId) { this.userRepository.deleteById(userId); }


```

```java
    // COMPANIES
    // getCompaniesByUserId
    public Set<Company> getCompaniesByUserId(Long userId) {
        User user = this.getUserById(userId).orElseThrow(() -> new RuntimeException("User not found"));
        return user.getCompanies();
    }
    // addCompanyToUser
    public Company addCompanyToUser(Long userId, Long companyId) {
        User user = this.getUserById(userId).orElseThrow(() -> new RuntimeException("User not found"));
        Company company = this.companyService.getCompanyById(companyId).orElseThrow(()
                -> new RuntimeException("Company not found"));
        user.addCompany(company);
        this.userRepository.save(user);
        return company;
    }
    // removeCompanyFromUser
    public Company removeCompanyFromUser(Long userId, Long companyId) {
        User user = this.getUserById(userId).orElseThrow(() -> new RuntimeException("User not found"));
        Company company = this.companyService.getCompanyById(companyId).orElseThrow(()
                -> new RuntimeException("Company not found"));
        user.removeCompany(company);
        this.userRepository.save(user);
        return company;
    }
```

```java
    // ADDRESSES

    // createUserAddress
    public User createUserAddress(Long userId, Address createUserAddress) {
        User user = this.getUserById(userId).orElseThrow(() -> new RuntimeException("User not found"));
        user.setAddress(createUserAddress);
        return this.updateUser(user);
    }

    // updateUserAddress
    public User updateUserAddress(Long userId, Address updateUserAddress) {
        User user = this.getUserById(userId).orElseThrow(() -> new RuntimeException("User not found"));
        user.setAddress(updateUserAddress);
        return this.updateUser(user);
    }


}

```

BASE DE DONEE :



jdbc:h2:~/crmDB
- ADDRESSES
  - ID
  - CITY
  - POSTCODE
  - REGION
  - STREET_NAME
  - STREET_NUMBER
  - Indexes
- COMPANIES
  - ID
  - CALL_LAST
  - CONTACT_EMAIL
  - CONTACT_NAME
  - CONTACT_TELEPHONE
  - DISCOUNT
  - MESSAGES
  - NAME
  - OWNER
  - REFERENCE
  - SALES3M
  - SALES_EXP
  - SALES_TOTAL
  - TELEPHONE
  - VISIT_LAST
  - WEBSITE
  - ADDRESS_ID
  - Indexes
- USERS
  - ID
  - EMAIL
  - FIRST_NAME
  - LAST_NAME
  - PASSWORD
  - ROLE
  - TELEPHONE
  - ADDRESS_ID
  - Indexes
- USERS_COMPANIES
  - USERS_ID
  - COMPANIES_ID
  - Indexes

Run | Run Selected | Auto complete | Clear | SQL statement:

Important Commands

		Displays this Help Page
		Shows the Command History
	Ctrl+Enter	Executes the current SQL statement
	Shift+Enter	Executes the SQL statement defined by the text selection
	Ctrl+Space	Auto complete
		Disconnects from the database

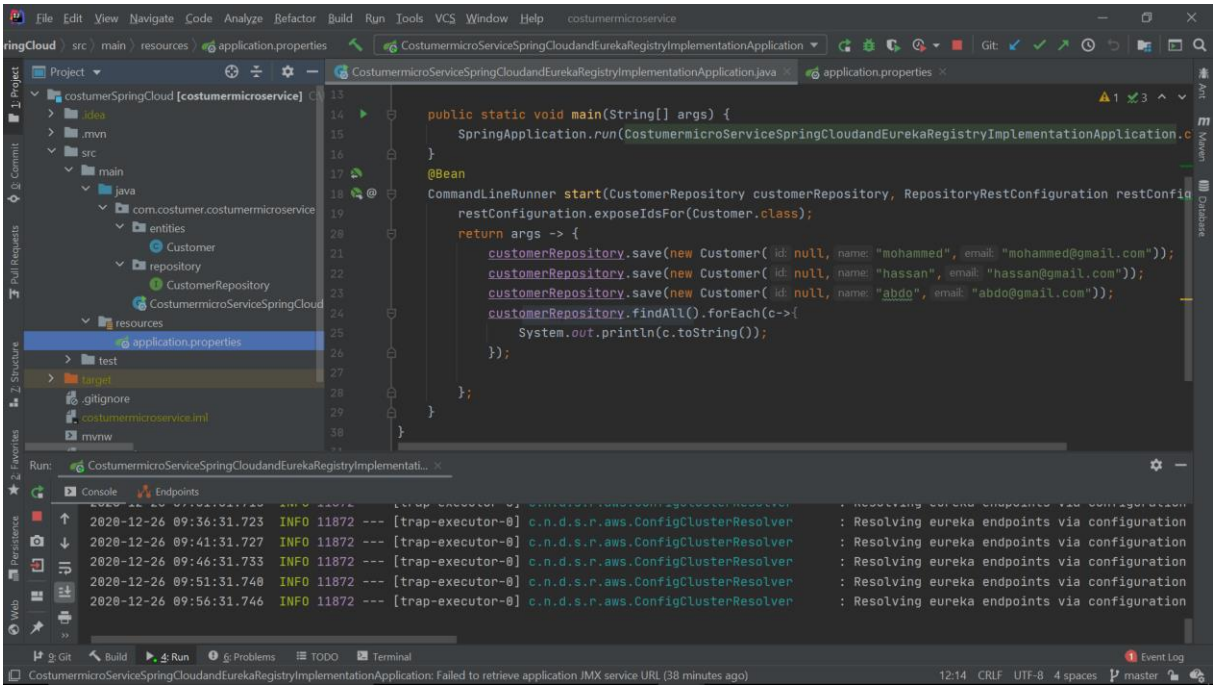
Sample SQL Script

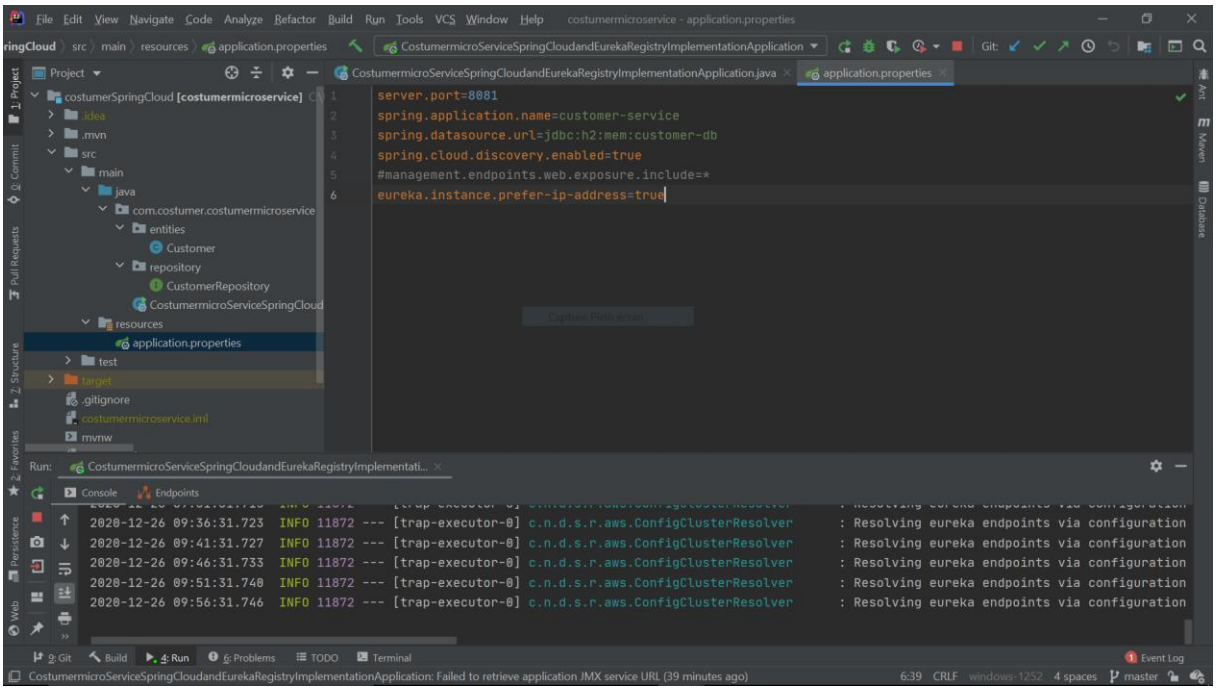
Delete the table if it exists	DROP TABLE IF EXISTS TEST;
Create a new table with ID and NAME columns	CREATE TABLE TEST(ID INT PRIMARY KEY, NAME VARCHAR(255));
Add a new row	INSERT INTO TEST VALUES(1, 'Hello');
Add another row	INSERT INTO TEST VALUES(2, 'World');
Query the table	SELECT * FROM TEST ORDER BY ID;
Change data in a row	UPDATE TEST SET NAME='Hi' WHERE ID=1;
Remove a row	DELETE FROM TEST WHERE ID=2;
Help	HELP ...

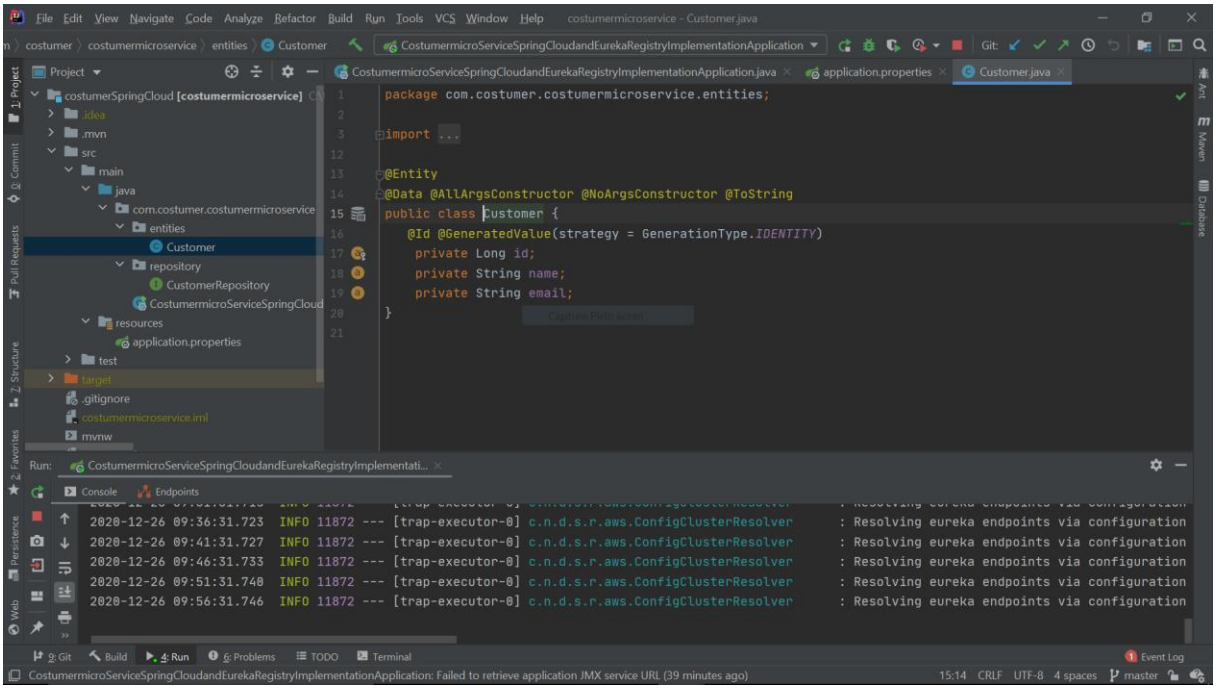
Adding Database Drivers

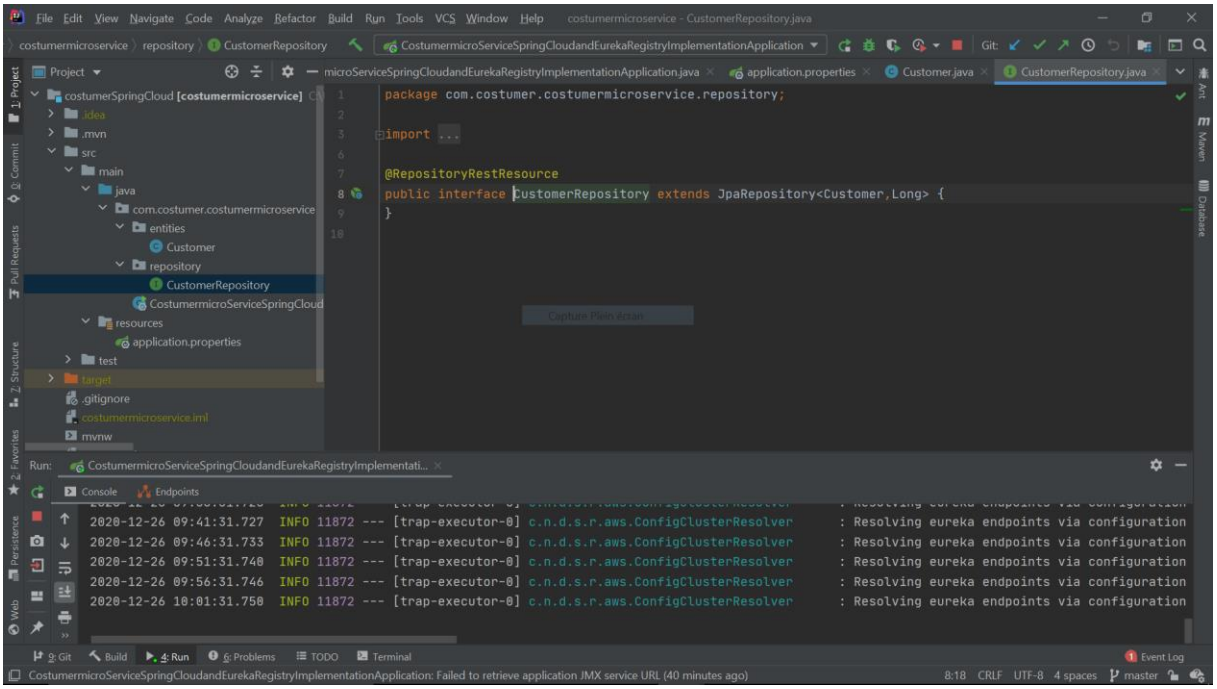
Additional database drivers can be registered by adding the Jar file location of the driver to the enviro
H2DRIVERS to C:/Programs/hsqldb/lib/hsqldb.jar.

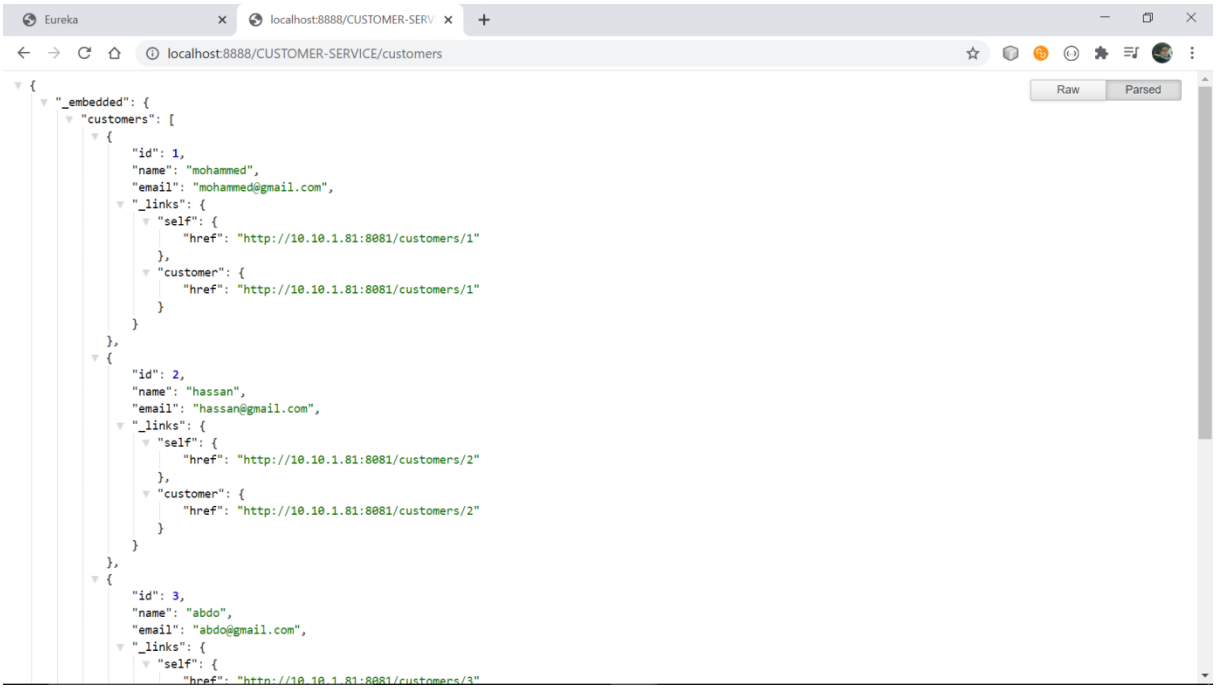
Costumer-service :



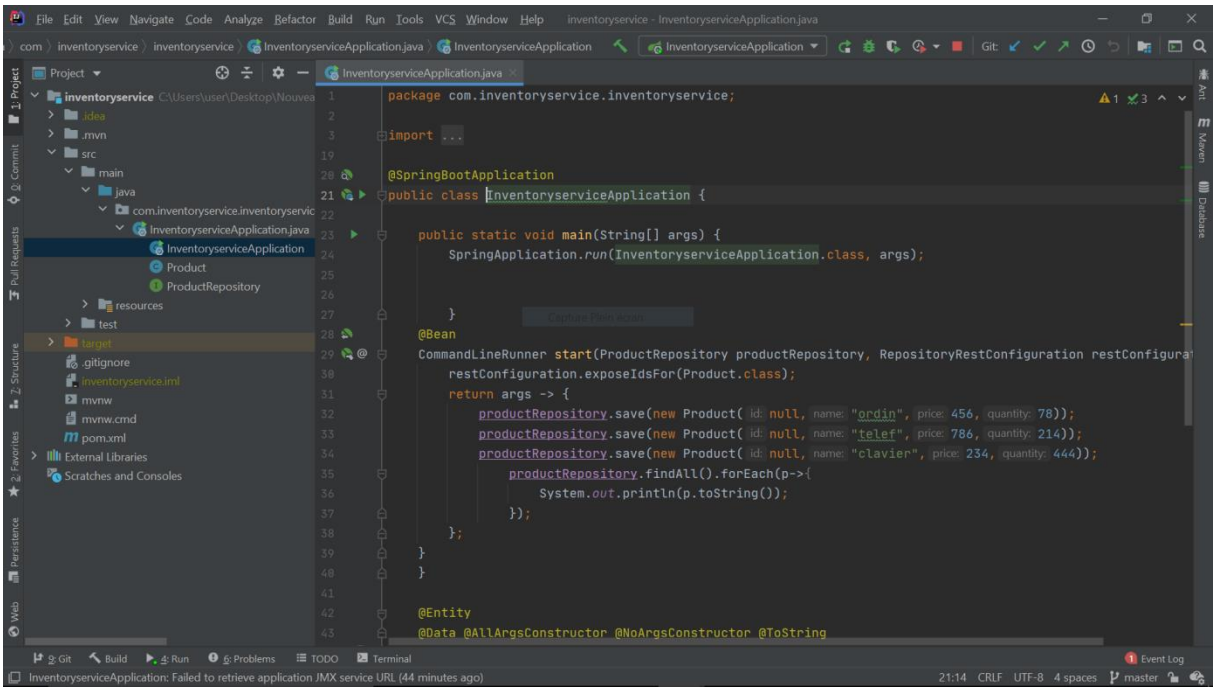


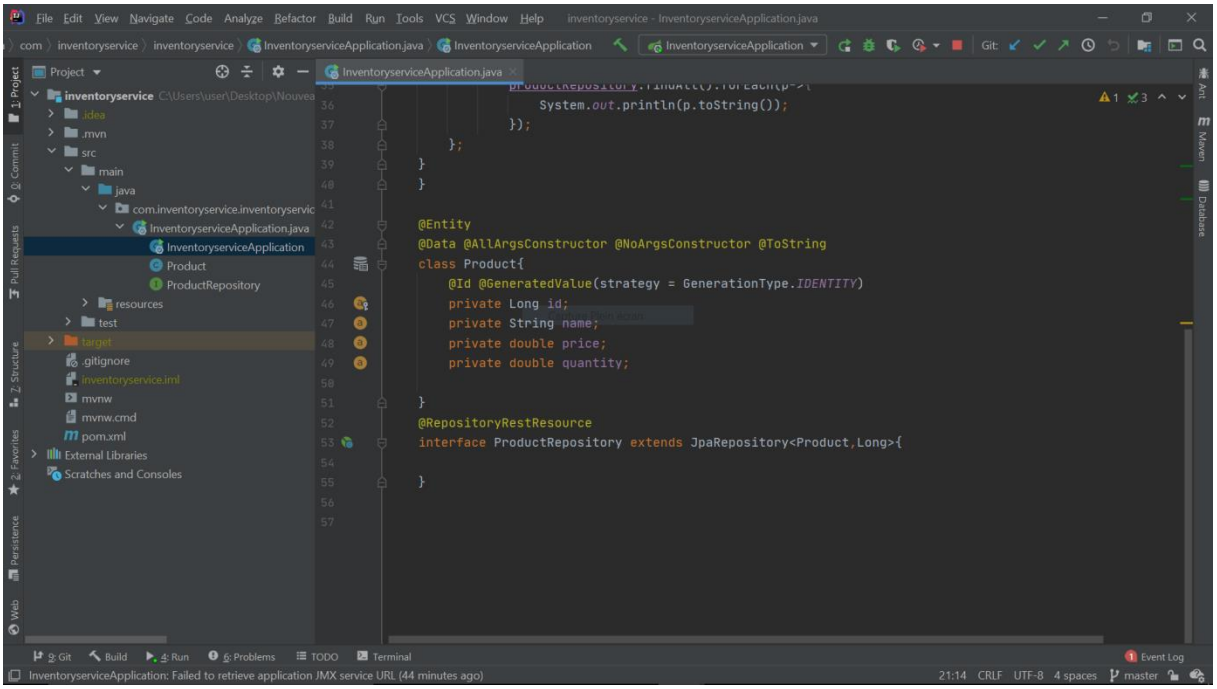

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
costumermicroservice - Customer.java
costumer costumermicroservice entities Customer
CostumermicroServiceSpringCloudandEurekaRegistryImplementationApplication
Git:
Project
costumerSpringCloud [costumermicroservice]
.idea
.mvn
src
main
java
com.costumer.costumermicroservice
entities
Customer
repository
CustomerRepository
CostumermicroServiceSpringCloud
resources
application.properties
test
target
.gitignore
costumermicroservice.iml
mvnw
CostumermicroServiceSpringCloudandEurekaRegistryImplementationApplication.java
application.properties
Customer.java
package com.costumer.costumermicroservice.entities;
import ...
@Entity
@Data @AllArgsConstructor @NoArgsConstructor @ToString
public class Customer {
@Id @GeneratedValue(strategy = GenerationType.IDENTITY)
private Long id;
private String name;
private String email;
}
Run: CostumermicroServiceSpringCloudandEurekaRegistryImplementati...
Console
Endpoints
2020-12-26 09:36:31.723 INFO 11872 --- [trap-executor-0] c.n.d.s.r.aws.ConfigClusterResolver : Resolving eureka endpoints via configuration
2020-12-26 09:41:31.727 INFO 11872 --- [trap-executor-0] c.n.d.s.r.aws.ConfigClusterResolver : Resolving eureka endpoints via configuration
2020-12-26 09:46:31.733 INFO 11872 --- [trap-executor-0] c.n.d.s.r.aws.ConfigClusterResolver : Resolving eureka endpoints via configuration
2020-12-26 09:51:31.740 INFO 11872 --- [trap-executor-0] c.n.d.s.r.aws.ConfigClusterResolver : Resolving eureka endpoints via configuration
2020-12-26 09:56:31.746 INFO 11872 --- [trap-executor-0] c.n.d.s.r.aws.ConfigClusterResolver : Resolving eureka endpoints via configuration
9: Git
Build
4: Run
6: Problems
TODO
Terminal
Event Log
CostumermicroServiceSpringCloudandEurekaRegistryImplementationApplication: Failed to retrieve application JMX service URL (39 minutes ago)
15:14 CRLF UTF-8 4 spaces master

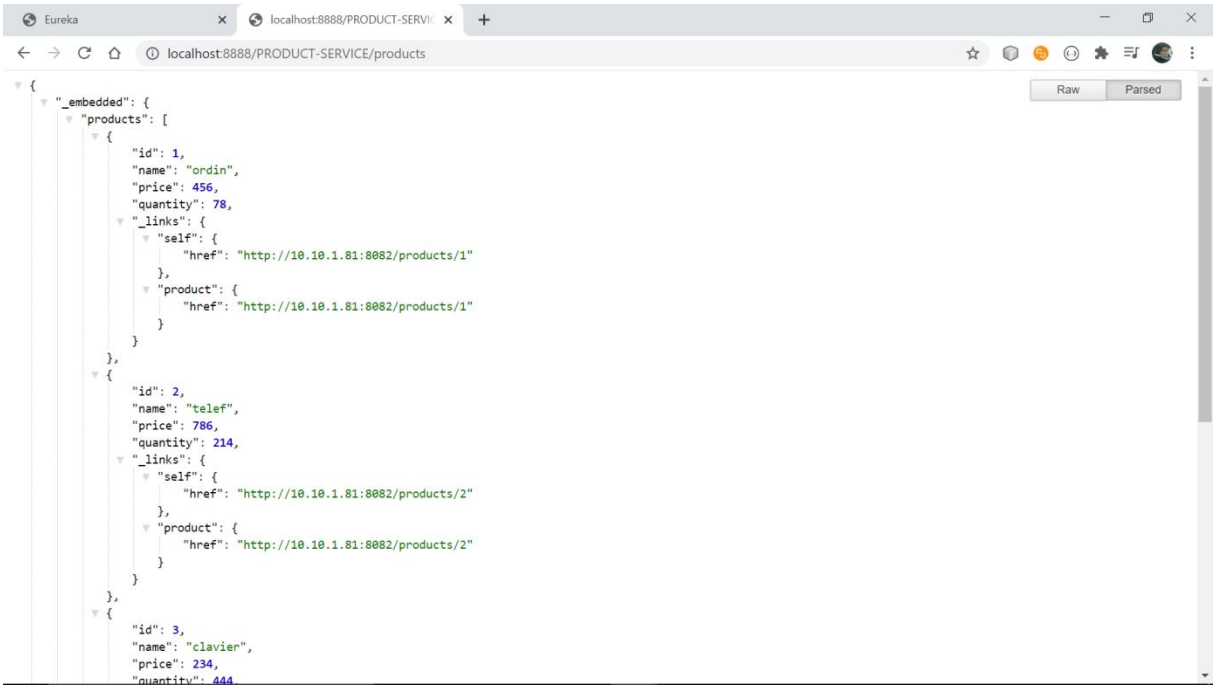

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
costumermicroservice - CustomerRepository.java
costumermicroservice repository CustomerRepository
CostumermicroServiceSpringCloudandEurekaRegistryImplementationApplication
Git:
Project
costumerSpringCloud [costumermicroservice]
.idea
.mvn
src
main
java
com.costumer.costumermicroservice
entities
Customer
repository
CustomerRepository
CostumermicroServiceSpringCloud
resources
application.properties
test
target
.gitignore
costumermicroservice.iml
mvnw
application.properties
Customer.java
CustomerRepository.java
package com.costumer.costumermicroservice.repository;
import ...
@RepositoryRestResource
public interface CustomerRepository extends JpaRepository<Customer,Long> {
}
Run: CostumermicroServiceSpringCloudandEurekaRegistryImplementati...
Console
Endpoints
2020-12-26 09:41:31.727 INFO 11872 --- [trap-executor-0] c.n.d.s.r.aws.ConfigClusterResolver : Resolving eureka endpoints via configuration
2020-12-26 09:46:31.733 INFO 11872 --- [trap-executor-0] c.n.d.s.r.aws.ConfigClusterResolver : Resolving eureka endpoints via configuration
2020-12-26 09:51:31.740 INFO 11872 --- [trap-executor-0] c.n.d.s.r.aws.ConfigClusterResolver : Resolving eureka endpoints via configuration
2020-12-26 09:56:31.746 INFO 11872 --- [trap-executor-0] c.n.d.s.r.aws.ConfigClusterResolver : Resolving eureka endpoints via configuration
2020-12-26 10:01:31.750 INFO 11872 --- [trap-executor-0] c.n.d.s.r.aws.ConfigClusterResolver : Resolving eureka endpoints via configuration
9: Git
Build
4: Run
6: Problems
TODO
Terminal
Event Log
CostumermicroServiceSpringCloudandEurekaRegistryImplementationApplication: Failed to retrieve application JMX service URL (40 minutes ago)
8:18 CRLF UTF-8 4 spaces master



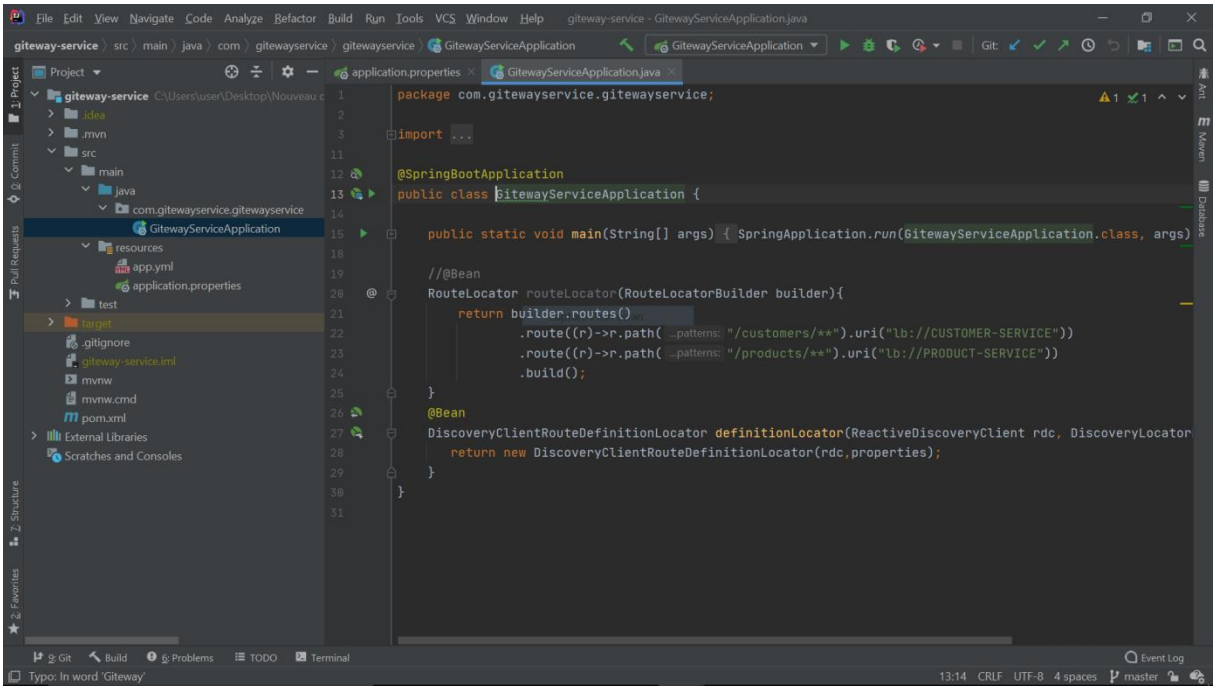
Product-service :

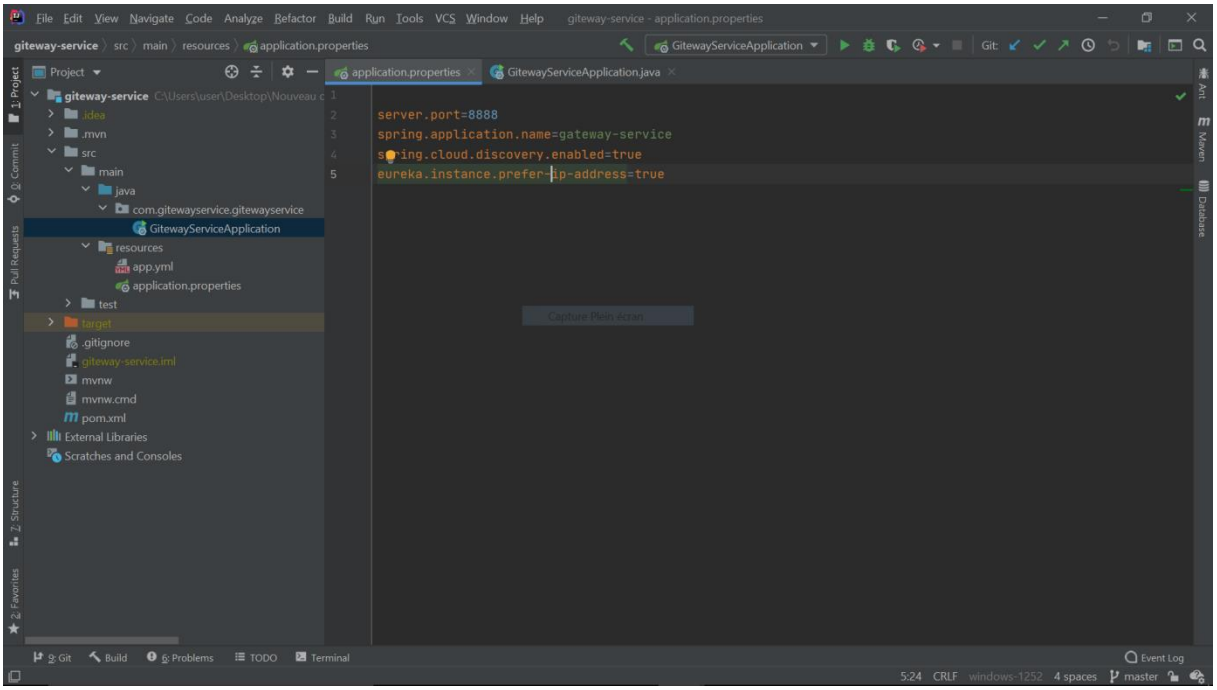



File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
inventoryservice - InventoryserviceApplication.java
InventoryserviceApplication.java
System.out.println(p.toString());
});
};
}
}
@Entity
@Data @AllArgsConstructor @NoArgsConstructor @ToString
class Product{
@Id @GeneratedValue(strategy = GenerationType.IDENTITY)
private Long id;
private String name;
private double price;
private double quantity;
}
@RepositoryRestResource
interface ProductRepository extends JpaRepository<Product,Long>{
}
InventoryserviceApplication: Failed to retrieve application JMX service URL (44 minutes ago)
21:14 CRLF UTF-8 4 spaces master

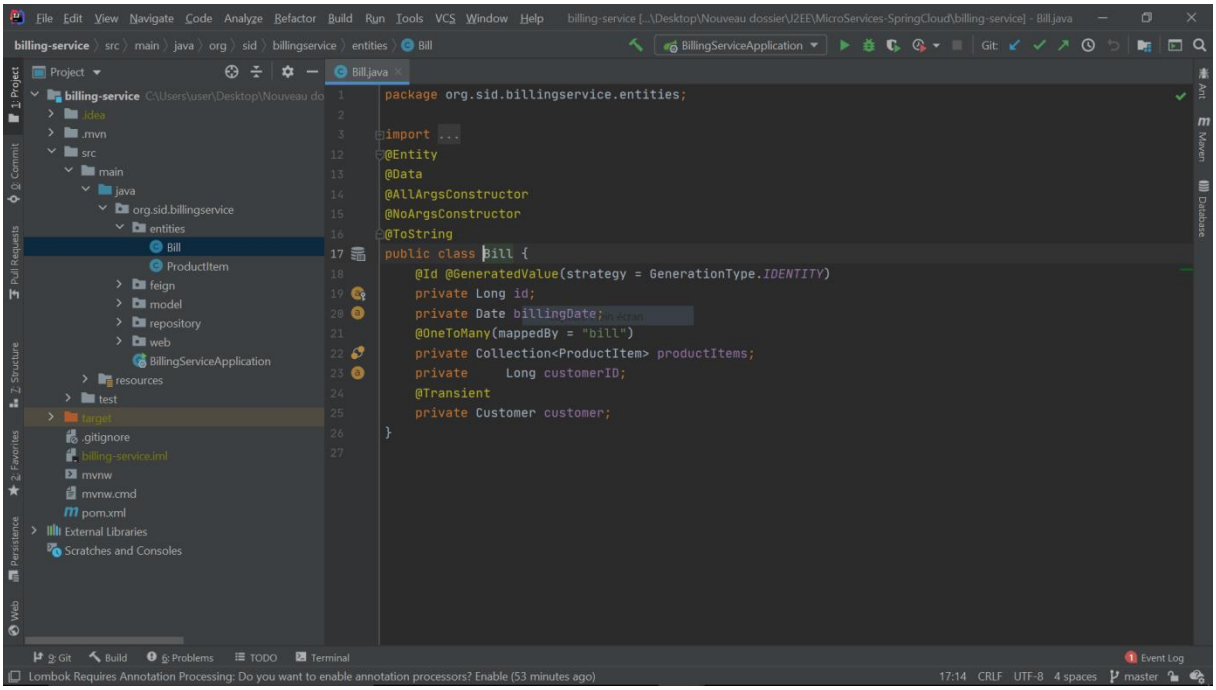

Eureka
localhost:8888/PRODUCT-SERVI
localhost:8888/PRODUCT-SERVICE/products
Raw
Parsed
{
"_embedded": {
"products": [
{
"id": 1,
"name": "ordin",
"price": 456,
"quantity": 78,
"_links": {
"self": {
"href": "http://10.10.1.81:8082/products/1"
},
"product": {
"href": "http://10.10.1.81:8082/products/1"
}
}
},
{
"id": 2,
"name": "telef",
"price": 786,
"quantity": 214,
"_links": {
"self": {
"href": "http://10.10.1.81:8082/products/2"
},
"product": {
"href": "http://10.10.1.81:8082/products/2"
}
}
},
{
"id": 3,
"name": "clavier",
"price": 234,
"quantity": 444

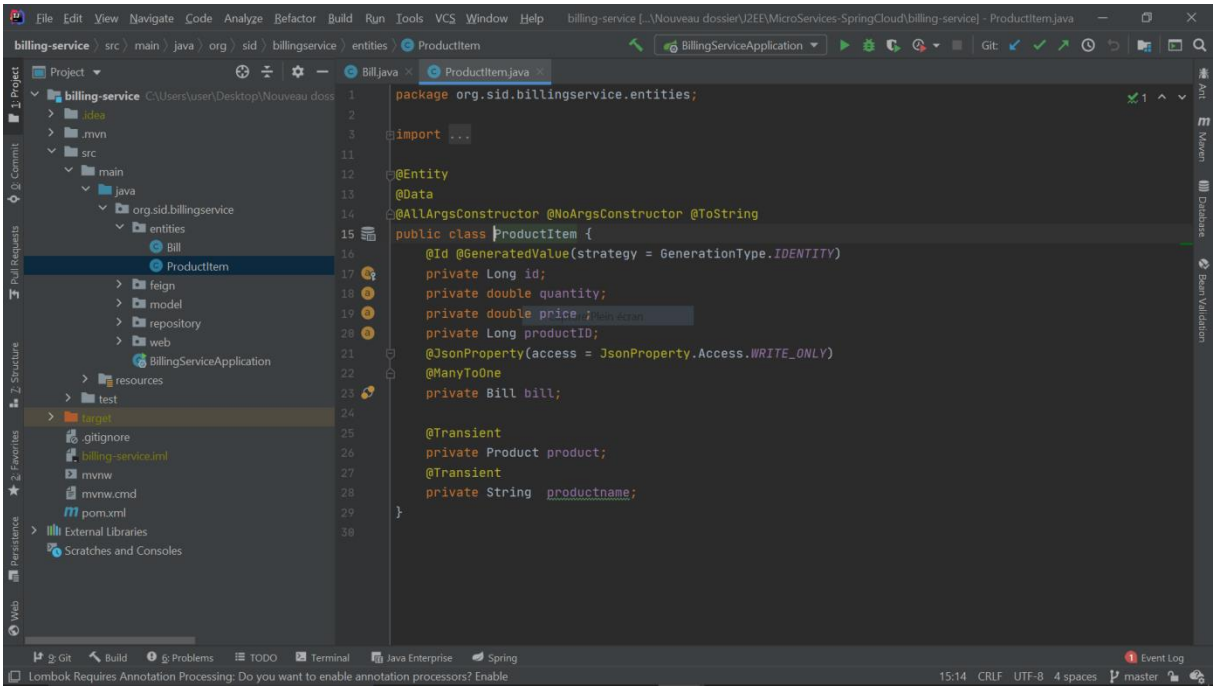
Gitway :

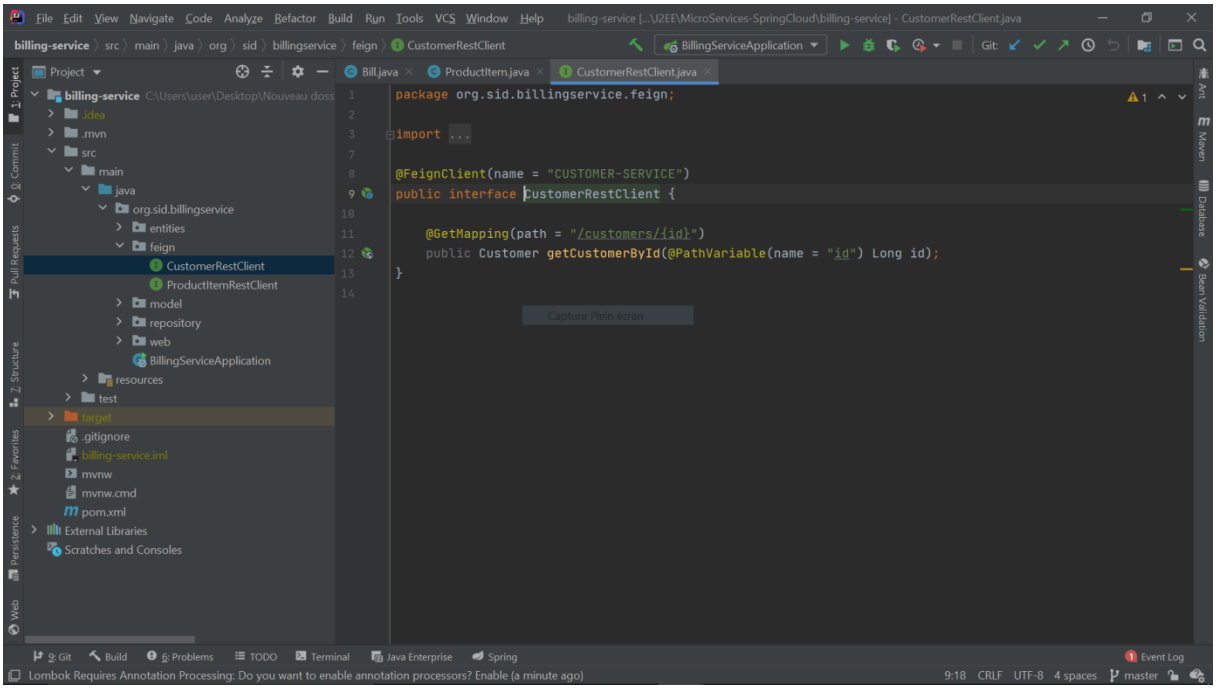

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
gateway-service - GitewayServiceApplication.java
gateway-service src main java com gitewayservice gitewayservice GitewayServiceApplication
GitewayServiceApplication
Git:
Project
application.properties
GitewayServiceApplication.java
gateway-service C:\Users\user\Desktop\Nouveau c
.idea
.mvn
src
main
java
com.gitewayservice.gitewayservice
GitewayServiceApplication
resources
app.yml
application.properties
test
target
.gitignore
gateway-service.iml
mvnw
mvnw.cmd
pom.xml
External Libraries
Scratches and Consoles
package com.gitewayservice.gitewayservice;
import ...
@SpringBootApplication
public class GitewayServiceApplication {
public static void main(String[] args) { SpringApplication.run(GitewayServiceApplication.class, args);
//@Bean
RouteLocator routeLocator(RouteLocatorBuilder builder){
return builder.routes()
.route((r)->r.path(...patterns: "/customers/**").uri("lb://CUSTOMER-SERVICE"))
.route((r)->r.path(...patterns: "/products/**").uri("lb://PRODUCT-SERVICE"))
.build();
}
@Bean
DiscoveryClientRouteDefinitionLocator definitionLocator(ReactiveDiscoveryClient rdc, DiscoveryLocator
return new DiscoveryClientRouteDefinitionLocator(rdc,properties);
}
}
Git Build Problems TODO Terminal
Event Log
Typo: In word 'Giteway'
13:14 CRLF UTF-8 4 spaces master

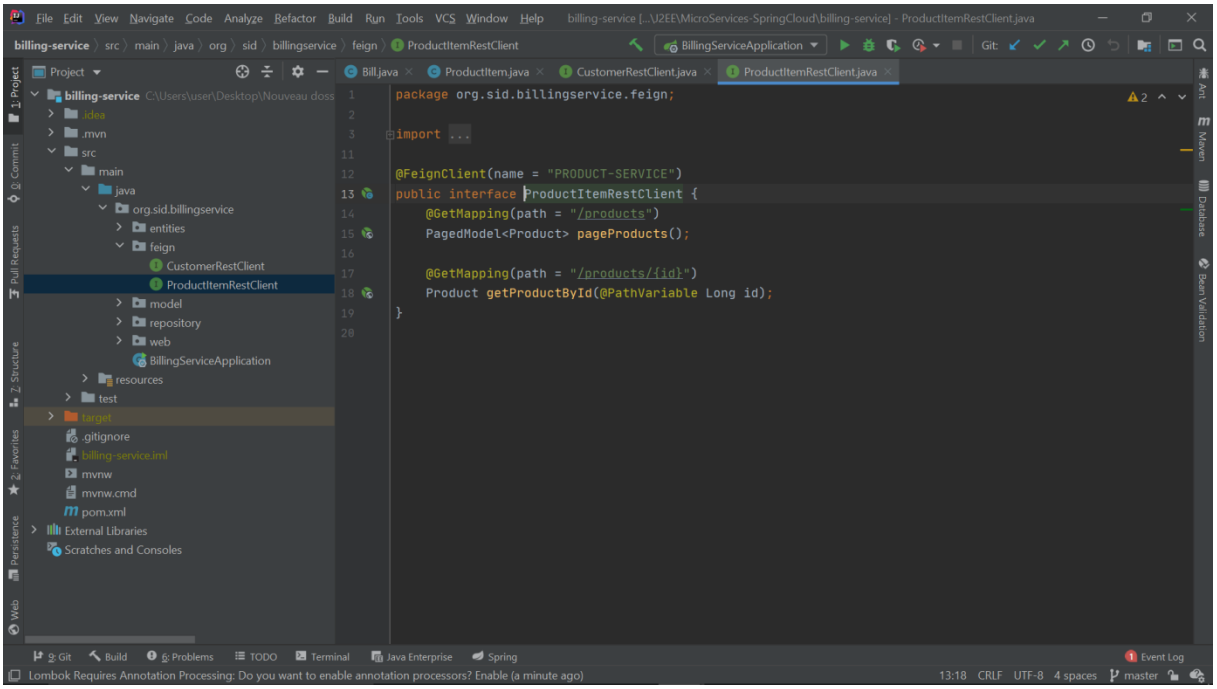

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
gateway-service - application.properties
gateway-service src main resources application.properties
GitewayServiceApplication
Git:
Project
application.properties
GitewayServiceApplication.java
gateway-service C:\Users\user\Desktop\Nouveau c
.idea
.mvn
src
main
java
com.gitewayservice.gitewayservice
GitewayServiceApplication
resources
app.yml
application.properties
test
target
.gitignore
gateway-service.iml
mvnw
mvnw.cmd
pom.xml
External Libraries
Scratches and Consoles
server.port=8888
spring.application.name=gateway-service
spring.cloud.discovery.enabled=true
eureka.instance.prefer-ip-address=true
Capture Plein écran
Git Build Problems TODO Terminal
Event Log
5:24 CRLF windows-1252 4 spaces master

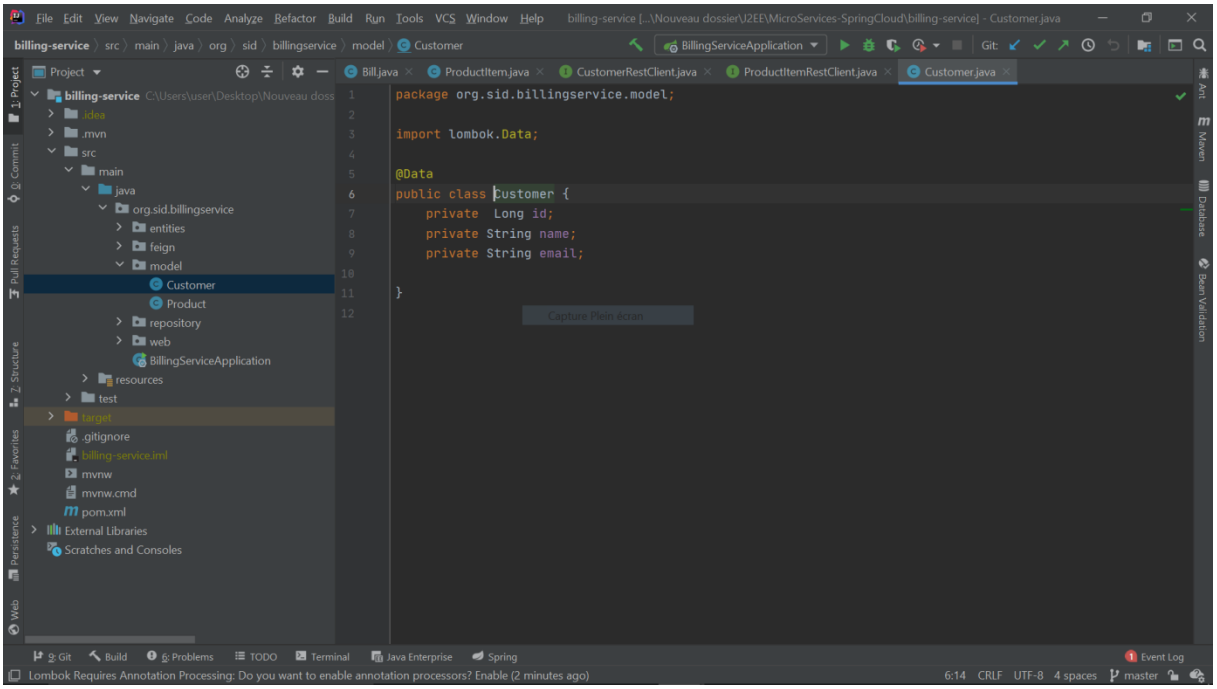
Billing-service :

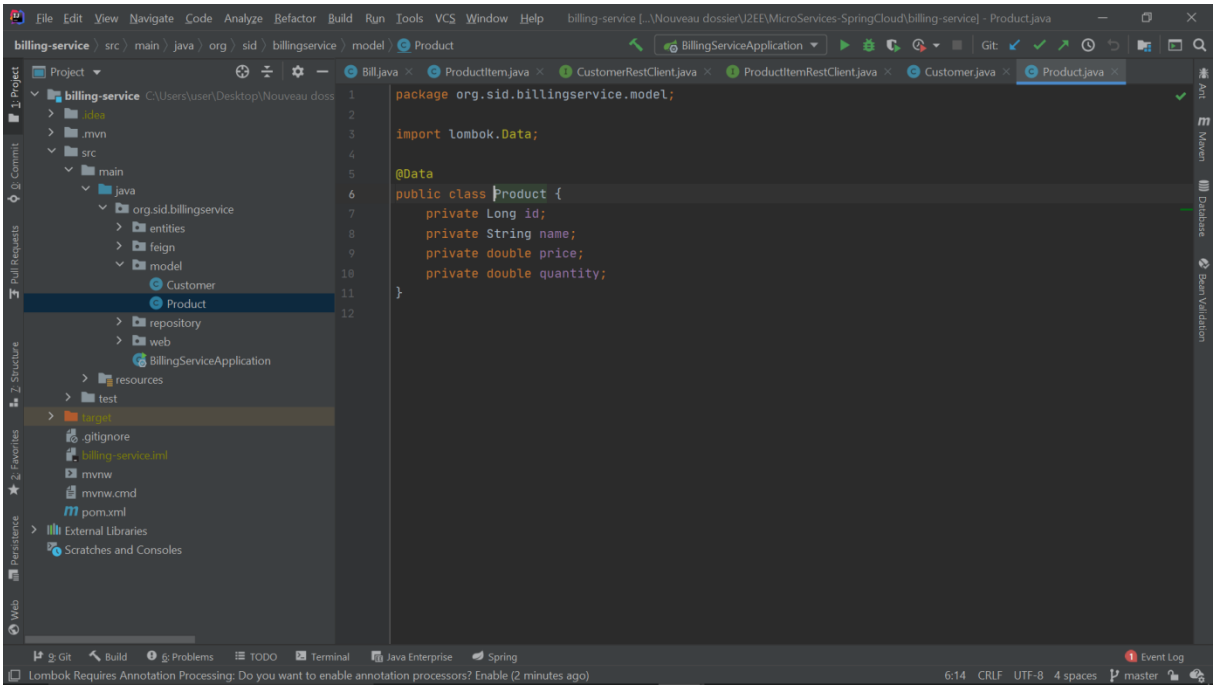


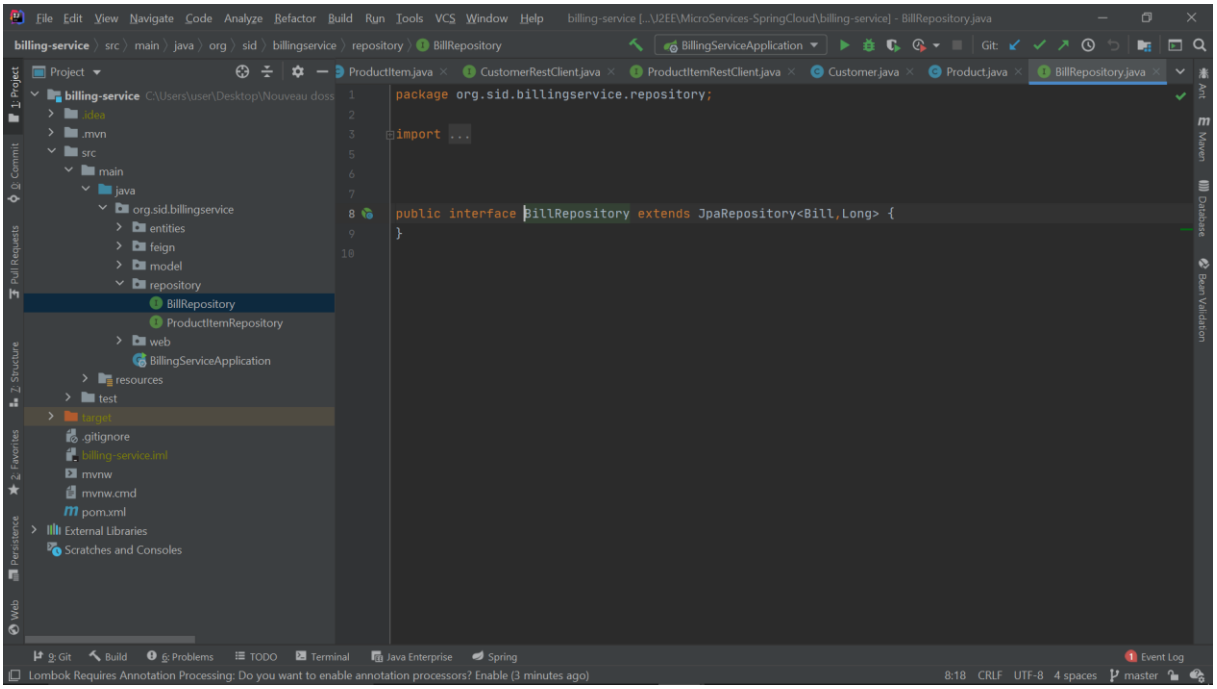



File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
billing-service [...\J2EE\MicroServices-SpringCloud\billing-service] - CustomerRestClient.java
billing-service > src > main > java > org > sid > billingservice > feign > CustomerRestClient
BillingServiceApplication
Git:
Project
billing-service C:\Users\user\Desktop\Nouveau doss
.idea
.mvn
src
main
java
org.sid.billingservice
entities
feign
CustomerRestClient
ProductItemRestClient
model
repository
web
BillingServiceApplication
resources
test
target
.gitignore
billing-service.iml
mvnw
mvnw.cmd
pom.xml
External Libraries
Scratches and Consoles
Bill.java
ProductItem.java
CustomerRestClient.java
1 package org.sid.billingservice.feign;
3 import ...
8 @FeignClient(name = "CUSTOMER-SERVICE")
9 public interface CustomerRestClient {
11 @GetMapping(path = "/customers/{id}")
12 public Customer getCustomerById(@PathVariable(name = "id") Long id);
13 }
Capture Plein écran
Git Build Problems TODO Terminal Java Enterprise Spring
Event Log
Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (a minute ago)
9:18 CRLF UTF-8 4 spaces master


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
billing-service [...\J2EE\MicroServices-SpringCloud\billing-service] - ProductItemRestClient.java
billing-service > src > main > java > org > sid > billingservice > feign > ProductItemRestClient
BillingServiceApplication
Git:
Project
billing-service C:\Users\user\Desktop\Nouveau doss
.idea
.mvn
src
main
java
org.sid.billingservice
entities
feign
CustomerRestClient
ProductItemRestClient
model
repository
web
BillingServiceApplication
resources
test
target
.gitignore
billing-service.iml
mvnw
mvnw.cmd
pom.xml
External Libraries
Scratches and Consoles
Bill.java
ProductItem.java
CustomerRestClient.java
ProductItemRestClient.java
1 package org.sid.billingservice.feign;
3 import ...
12 @FeignClient(name = "PRODUCT-SERVICE")
13 public interface ProductItemRestClient {
14 @GetMapping(path = "/products")
15 PagedModel<Product> pageProducts();
17 @GetMapping(path = "/products/{id}")
18 Product getProductById(@PathVariable Long id);
19 }
Git Build Problems TODO Terminal Java Enterprise Spring
Event Log
Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (a minute ago)
13:18 CRLF UTF-8 4 spaces master


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
billing-service [...\Nouveau dossier\J2EE\MicroServices-SpringCloud\billing-service] - Customer.java
billing-service src main java org sid billingservice model Customer
BillingServiceApplication
Git:
Project
billing-service C:\Users\user\Desktop\Nouveau doss
.idea
.mvn
src
main
java
org.sid.billingservice
entities
feign
model
Customer
Product
repository
web
BillingServiceApplication
resources
test
target
.gitignore
billing-service.iml
mvnw
mvnw.cmd
pom.xml
External Libraries
Scratches and Consoles
Bill.java
ProductItem.java
CustomerRestClient.java
ProductItemRestClient.java
Customer.java
package org.sid.billingservice.model;
import lombok.Data;
@Data
public class Customer {
private Long id;
private String name;
private String email;
}
Capture Plein écran
Ant
Maven
Database
Bean Validation
1: Project
0: Commit
Pull Requests
7: Structure
2: Favorites
Persistence
Web
9: Git
Build
6: Problems
TODO
Terminal
Java Enterprise
Spring
Event Log
Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (2 minutes ago)
6:14 CRLF UTF-8 4 spaces master


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
billing-service [...\Nouveau dossier\J2EE\MicroServices-SpringCloud\billing-service] - Product.java
billing-service src main java org sid billingservice model Product
BillingServiceApplication
Git:
Project
billing-service C:\Users\user\Desktop\Nouveau doss
.idea
.mvn
src
main
java
org.sid.billingservice
entities
feign
model
Customer
Product
repository
web
BillingServiceApplication
resources
test
target
.gitignore
billing-service.iml
mvnw
mvnw.cmd
pom.xml
External Libraries
Scratches and Consoles
Bill.java
ProductItem.java
CustomerRestClient.java
ProductItemRestClient.java
Customer.java
Product.java
package org.sid.billingservice.model;
import lombok.Data;
@Data
public class Product {
private Long id;
private String name;
private double price;
private double quantity;
}
Ant
Maven
Database
Bean Validation
1: Project
0: Commit
Pull Requests
7: Structure
2: Favorites
Persistence
Web
9: Git
Build
6: Problems
TODO
Terminal
Java Enterprise
Spring
Event Log
Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (2 minutes ago)
6:14 CRLF UTF-8 4 spaces master


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
billing-service [...\J2EE\MicroServices-SpringCloud\billing-service] - BillRepository.java
billing-service › src › main › java › org › sid › billingservice › repository › BillRepository
BillingServiceApplication
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src
main
java
org.sid.billingservice
entities
feign
model
repository
BillRepository
ProductItemRepository
web
BillingServiceApplication
resources
test
target
.gitignore
billing-service.iml
mvnw
mvnw.cmd
pom.xml
External Libraries
Scratches and Consoles
ProductItem.java
CustomerRestClient.java
ProductItemRestClient.java
Customer.java
Product.java
BillRepository.java
package org.sid.billingservice.repository;
import ...
public interface BillRepository extends JpaRepository<Bill,Long> {
}
9: Git
Build
6: Problems
TODO
Terminal
Java Enterprise
Spring
Event Log
Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (3 minutes ago)
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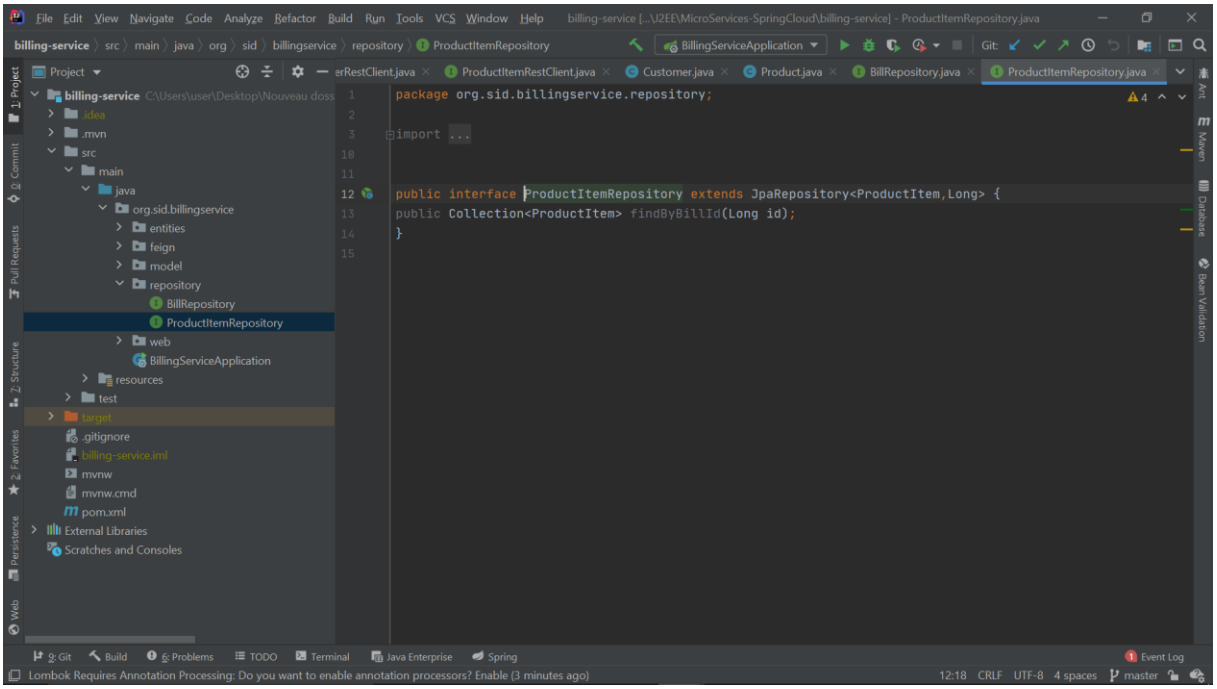
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
billing-service [...\J2EE\MicroServices-SpringCloud\billing-service] - ProductItemRepository.java
billing-service › src › main › java › org › sid › billingservice › repository › ProductItemRepository
BillingServiceApplication
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entities
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BillRepository
ProductItemRepository
web
BillingServiceApplication
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test
target
.gitignore
billing-service.iml
mvnw
mvnw.cmd
pom.xml
External Libraries
Scratches and Consoles
erRestClient.java
ProductItemRestClient.java
Customer.java
Product.java
BillRepository.java
ProductItemRepository.java
package org.sid.billingservice.repository;
import ...
public interface ProductItemRepository extends JpaRepository<ProductItem,Long> {
public Collection<ProductItem> findByBillId(Long id);
}
9: Git
Build
6: Problems
TODO
Terminal
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Event Log
Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (3 minutes ago)
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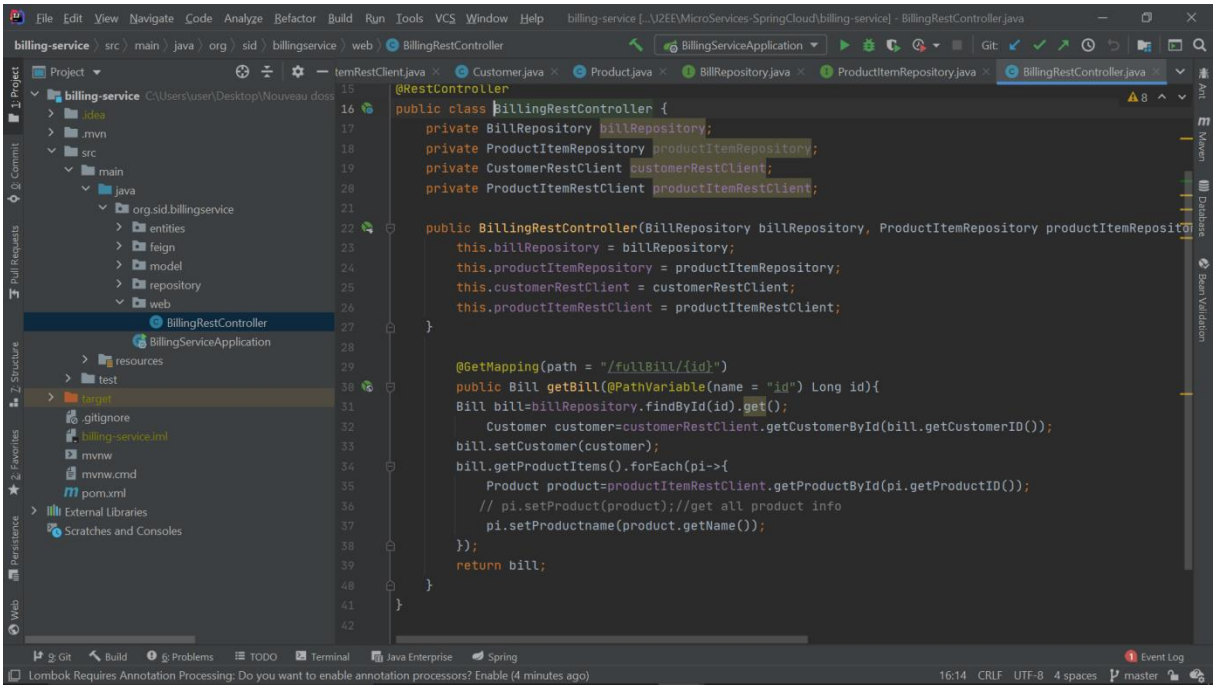
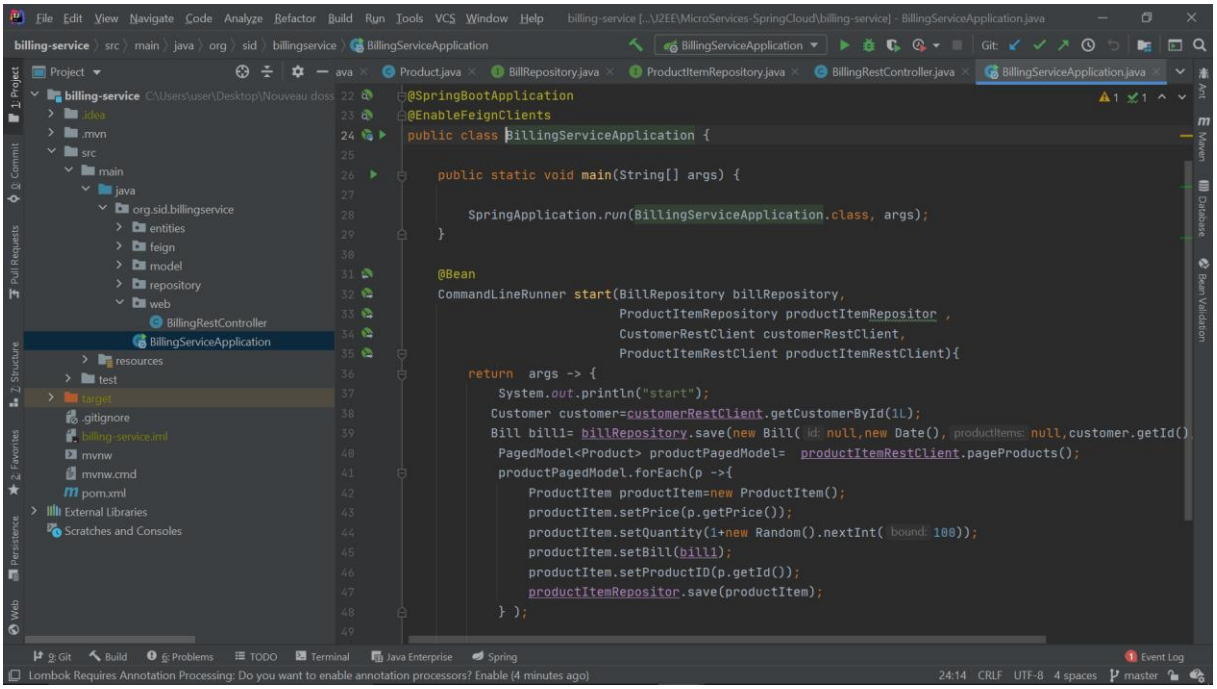
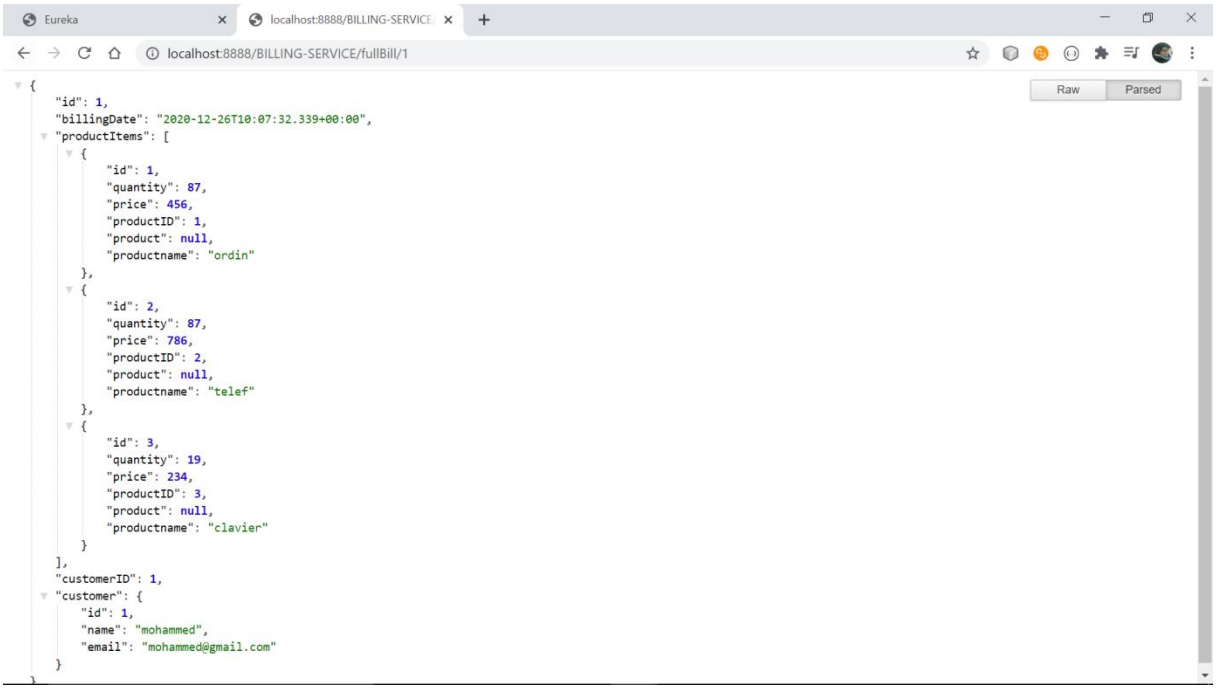


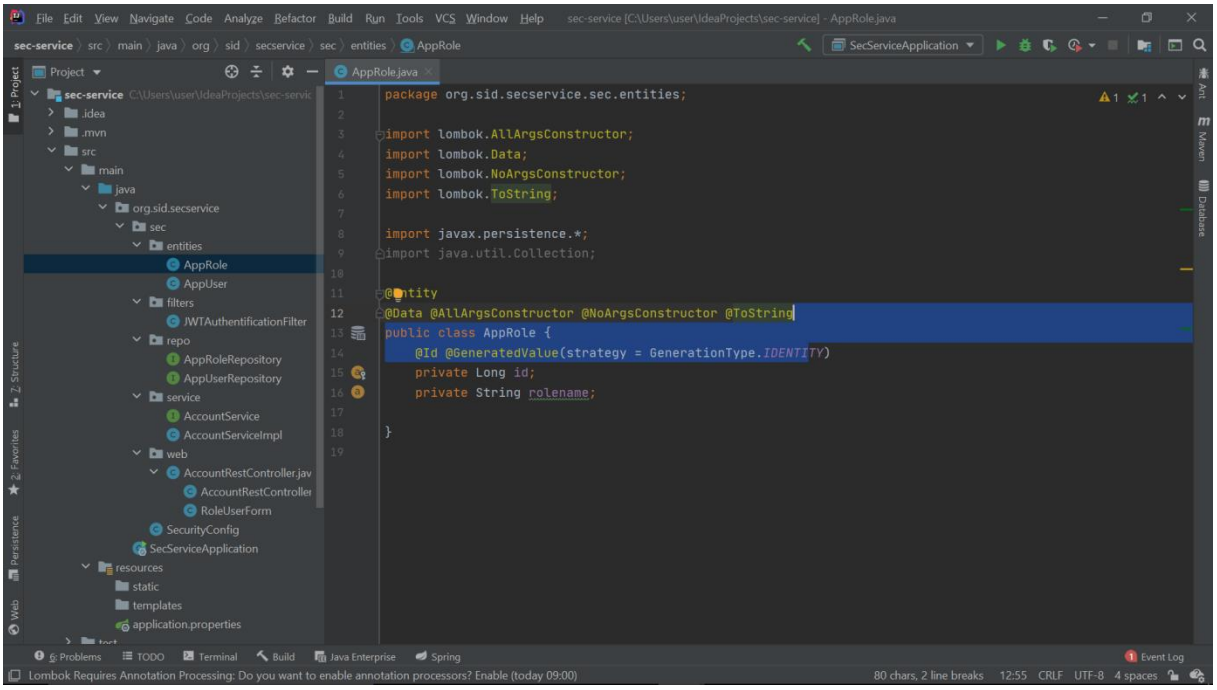
```
@RestController
public class BillingRestController {
    private BillRepository billRepository;
    private ProductItemRepository productItemRepository;
    private CustomerRestClient customerRestClient;
    private ProductItemRestClient productItemRestClient;

    public BillingRestController(BillRepository billRepository, ProductItemRepository productItemRepositor
        this.billRepository = billRepository;
        this.productItemRepository = productItemRepository;
        this.customerRestClient = customerRestClient;
        this.productItemRestClient = productItemRestClient;
    }

        @GetMapping(path = "/fullBill/{id}")
        public Bill getBill(@PathVariable(name = "id") Long id){
        Bill bill=billRepository.findById(id).get();
            Customer customer=customerRestClient.getCustomerById(bill.getCustomerID());
        bill.setCustomer(customer);
        bill.getProductItems().forEach(pi->{
            Product product=productItemRestClient.getProductById(pi.getProductID());
           // pi.setProduct(product);//get all product info
            pi.setProductname(product.getName());
        });
        return bill;
    }
}
```

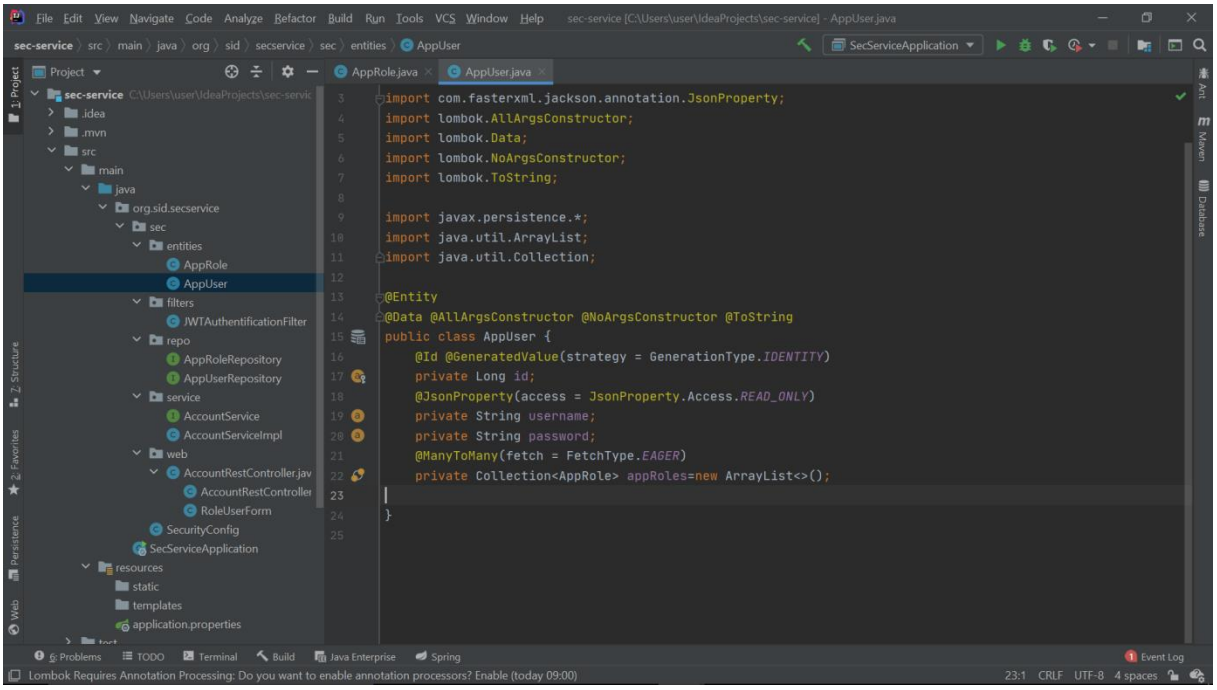


```
@SpringBootApplication
@EnableFeignClients
public class BillingServiceApplication {

    public static void main(String[] args) {

        SpringApplication.run(BillingServiceApplication.class, args);
    }

    @Bean
    CommandLineRunner start(BillRepository billRepository,
                            ProductItemRepository productItemRepositor ,
                            CustomerRestClient customerRestClient,
                            ProductItemRestClient productItemRestClient){
        return  args -> {
            System.out.println("start");
           Customer customer=customerRestClient.getCustomerById(1L);
           Bill bill1= billRepository.save(new Bill( id: null,new Date(), productItems: null,customer.getId()
            PagedModel<Product> productPagedModel=  productItemRestClient.pageProducts();
            productPagedModel.forEach(p ->{
                ProductItem productItem=new ProductItem();
                productItem.setPrice(p.getPrice());
                productItem.setQuantity(1+new Random().nextInt( bound: 100));
                productItem.setBill(bill1);
                productItem.setProductID(p.getId());
                productItemRepositor.save(productItem);
            } );
```



Authentification-service :




File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
sec-service [C:\Users\user\IdeaProjects\sec-service] - AppUser.java
sec-service › src › main › java › org › sid › secservice › sec › entities › AppUser
SecServiceApplication
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AppRole.java
AppUser.java
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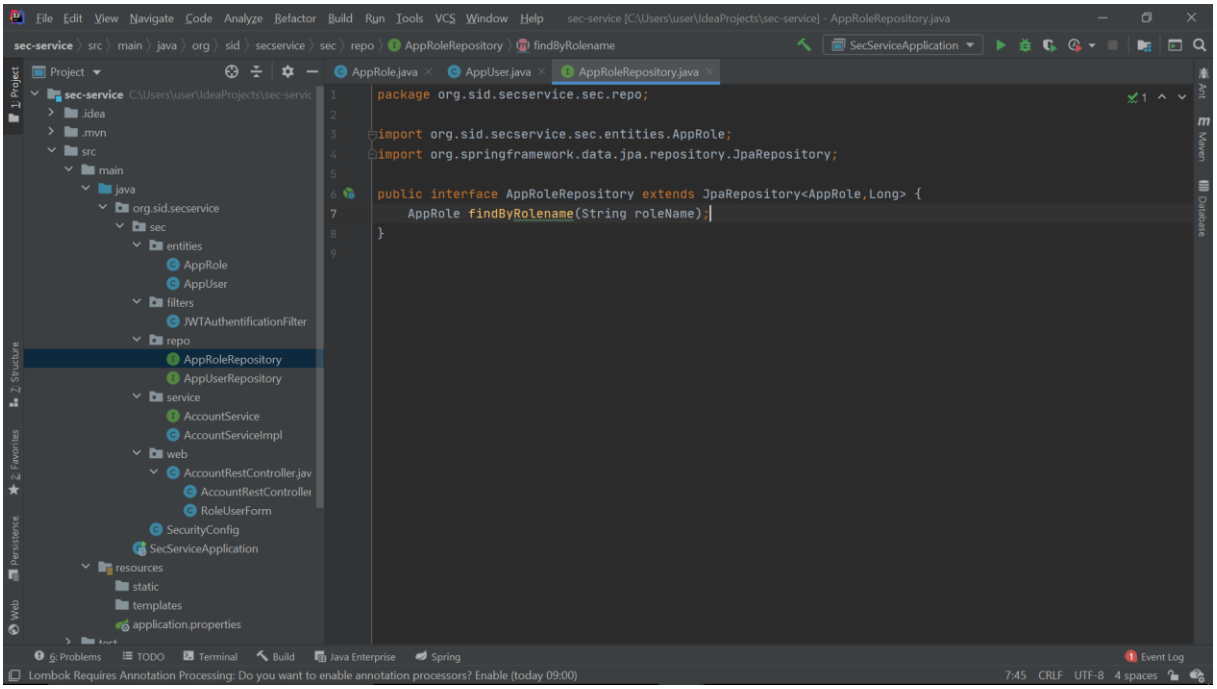
entities
AppRole
AppUser
filters
JWTAuthentificationFilter
repo
AppRoleRepository
AppUserRepository
service
AccountService
AccountServiceImpl
web
AccountRestController.jav
AccountRestControlle
RoleUserForm
SecurityConfig
SecServiceApplication
resources
static
templates
application.properties
import com.fasterxml.jackson.annotation.JsonProperty;
import lombok.AllArgsConstructor;
import lombok.Data;
import lombok.NoArgsConstructor;
import lombok.ToString;
import javax.persistence.*;
import java.util.ArrayList;
import java.util.Collection;
@Entity
@Data @AllArgsConstructor @NoArgsConstructor @ToString
public class AppUser {
@Id @GeneratedValue(strategy = GenerationType.IDENTITY)
private Long id;
@JsonProperty(access = JsonProperty.Access.READ_ONLY)
private String username;
private String password;
@ManyToMany(fetch = FetchType.EAGER)
private Collection<AppRole> appRoles=new ArrayList<>();
}
6: Problems
TODO
Terminal
Build
Java Enterprise
Spring
Event Log
Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (today 09:00)
23:1 CRLF UTF-8 4 spaces


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
sec-service [C:\Users\user\IdeaProjects\sec-service] - AppRoleRepository.java
sec-service › src › main › java › org › sid › secservice › sec › repo › AppRoleRepository › findByRolename
SecServiceApplication
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AppRole.java
AppUser.java
AppRoleRepository.java
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entities
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AppUser
filters
JWTAuthentificationFilter
repo
AppRoleRepository
AppUserRepository
service
AccountService
AccountServiceImpl
web
AccountRestController.jav
AccountRestControlle
RoleUserForm
SecurityConfig
SecServiceApplication
resources
static
templates
application.properties
package org.sid.secservice.sec.repo;
import org.sid.secservice.sec.entities.AppRole;
import org.springframework.data.jpa.repository.JpaRepository;
public interface AppRoleRepository extends JpaRepository<AppRole,Long> {
AppRole findByRolename(String roleName);
}
6: Problems
TODO
Terminal
Build
Java Enterprise
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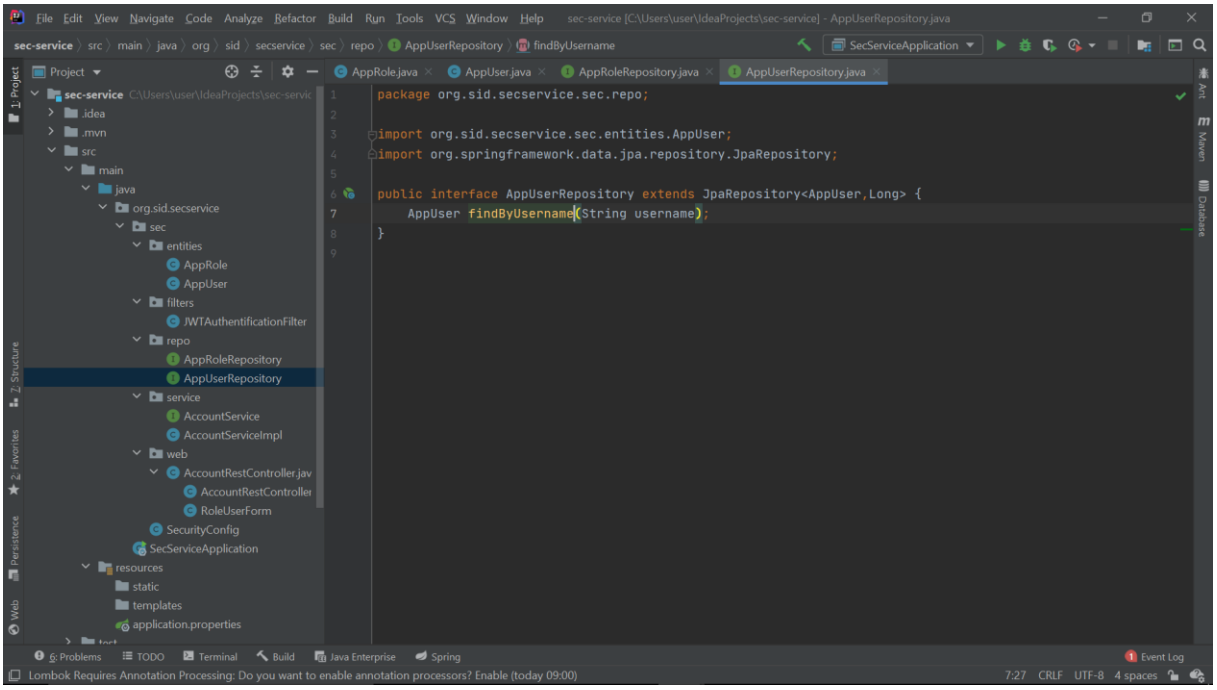
Event Log
Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (today 09:00)
7:45 CRLF UTF-8 4 spaces


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
sec-service [C:\Users\user\IdeaProjects\sec-service] - AppUserRepository.java
sec-service src main java org sid secservice sec repo AppUserRepository findByUsername
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AppRole.java
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AppUser
filters
JWTAuthentificationFilter
repo
AppRoleRepository
AppUserRepository
service
AccountService
AccountServiceImpl
web
AccountRestController.jav
AccountRestController
RoleUserForm
SecurityConfig
SecServiceApplication
resources
static
templates
application.properties
1 package org.sid.secservice.sec.repo;
2
3 import org.sid.secservice.sec.entities.AppUser;
4 import org.springframework.data.jpa.repository.JpaRepository;
5
6 public interface AppUserRepository extends JpaRepository<AppUser,Long> {
7 AppUser findByUsername(String username);
8 }
9
6: Problems
TODO
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Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (today 09:00)
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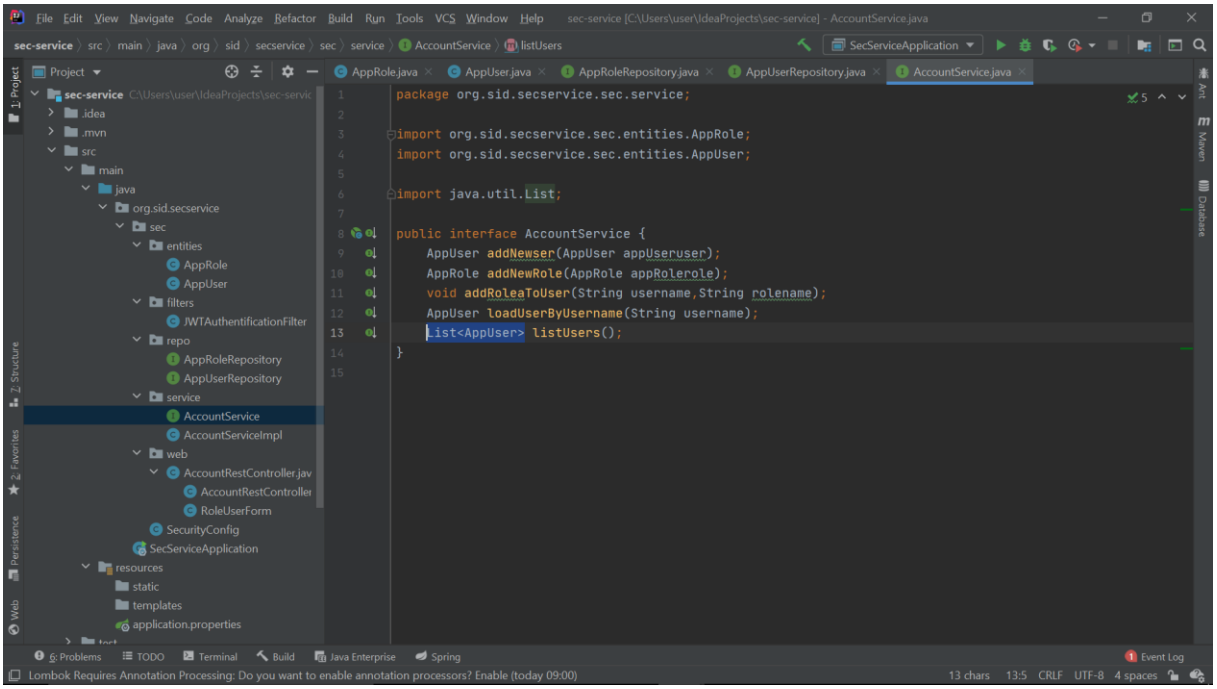
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
sec-service [C:\Users\user\IdeaProjects\sec-service] - AccountService.java
sec-service src main java org sid secservice sec service AccountService listUsers
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AppRole.java
AppUser.java
AppRoleRepository.java
AppUserRepository.java
AccountService.java
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entities
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AppUser
filters
JWTAuthentificationFilter
repo
AppRoleRepository
AppUserRepository
service
AccountService
AccountServiceImpl
web
AccountRestController.jav
AccountRestController
RoleUserForm
SecurityConfig
SecServiceApplication
resources
static
templates
application.properties
1 package org.sid.secservice.sec.service;
3 import org.sid.secservice.sec.entities.AppRole;
4 import org.sid.secservice.sec.entities.AppUser;
6 import java.util.List;
8 public interface AccountService {
9 AppUser addNewser(AppUser appUseruser);
10 AppRole addNewRole(AppRole appRolerole);
11 void addRoleaToUser(String username,String rolename);
12 AppUser loadUserByUsername(String username);
13 List<AppUser> listUsers();
14 }
15
6: Problems
TODO
Terminal
Build
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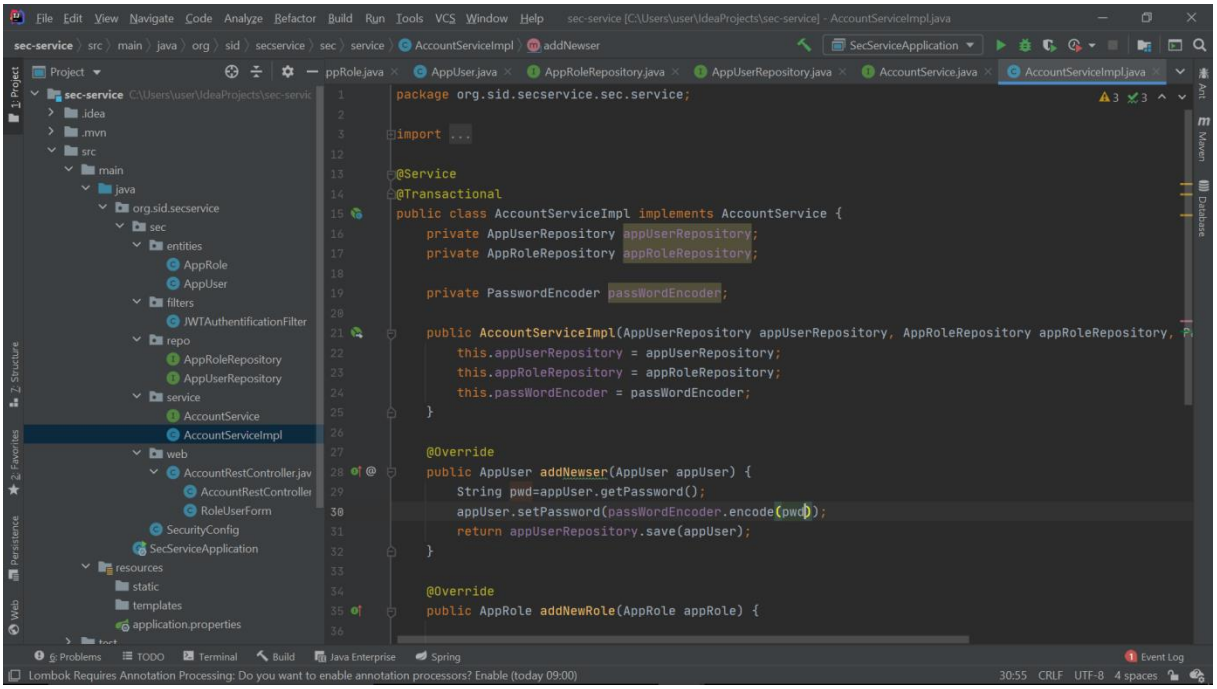
Event Log
Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (today 09:00)
13 chars 13:5 CRLF UTF-8 4 spaces


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
sec-service [C:\Users\user\IdeaProjects\sec-service] - AccountServiceImpl.java
sec-service › src › main › java › org › sid › secservice › sec › service › AccountServiceImpl › addNewser
SecServiceApplication
AppRole.java
AppUser.java
AppRoleRepository.java
AppUserRepository.java
AccountService.java
AccountServiceImpl.java
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AppUser
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AppRoleRepository
AppUserRepository
service
AccountService
AccountServiceImpl
web
AccountRestController.jav
AccountRestController
RoleUserForm
SecurityConfig
SecServiceApplication
resources
static
templates
application.properties
package org.sid.secservice.sec.service;
import ...
@Service
@Transactional
public class AccountServiceImpl implements AccountService {
private AppUserRepository appUserRepository;
private AppRoleRepository appRoleRepository;
private PasswordEncoder passWordEncoder;
public AccountServiceImpl(AppUserRepository appUserRepository, AppRoleRepository appRoleRepository,
this.appUserRepository = appUserRepository;
this.appRoleRepository = appRoleRepository;
this.passWordEncoder = passWordEncoder;
}
@Override
public AppUser addNewser(AppUser appUser) {
String pwd=appUser.getPassword();
appUser.setPassword(passWordEncoder.encode(pwd));
return appUserRepository.save(appUser);
}
@Override
public AppRole addNewRole(AppRole appRole) {
6: Problems
TODO
Terminal
Build
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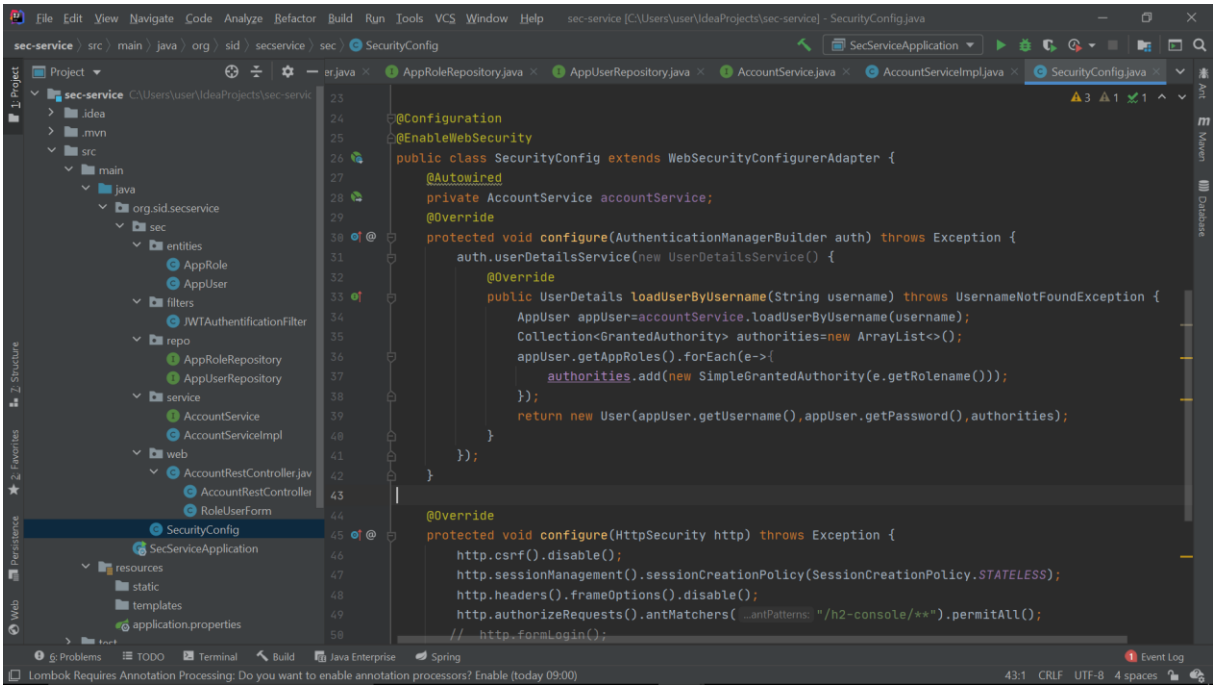
Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (today 09:00)
30:55 CRLF UTF-8 4 spaces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sec-service [C:\Users\user\IdeaProjects\sec-service] - SecurityConfig.java
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SecServiceApplication
AppRoleRepository.java
AppUserRepository.java
AccountService.java
AccountServiceImpl.java
SecurityConfig.java
@Configuration
@EnableWebSecurity
public class SecurityConfig extends WebSecurityConfigurerAdapter {
@Autowired
private AccountService accountService;
@Override
protected void configure(AuthenticationManagerBuilder auth) throws Exception {
auth.userDetailsService(new UserDetailsService() {
@Override
public UserDetails loadUserByUsername(String username) throws UsernameNotFoundException {
AppUser appUser=accountService.loadUserByUsername(username);
Collection<GrantedAuthority> authorities=new ArrayList<>();
appUser.getAppRoles().forEach(e->{
authorities.add(new SimpleGrantedAuthority(e.getRolename()));
});
return new User(appUser.getUsername(),appUser.getPassword(),authorities);
}
});
}
@Override
protected void configure(HttpSecurity http) throws Exception {
http.csrf().disable();
http.sessionManagement().sessionCreationPolicy(SessionCreationPolicy.STATELESS);
http.headers().frameOptions().disable();
http.authorizeRequests().antMatchers(...antPatterns: "/h2-console/**").permitAll();
// http.formLogin();
6: Problems
TODO
Terminal
Build
Java Enterprise
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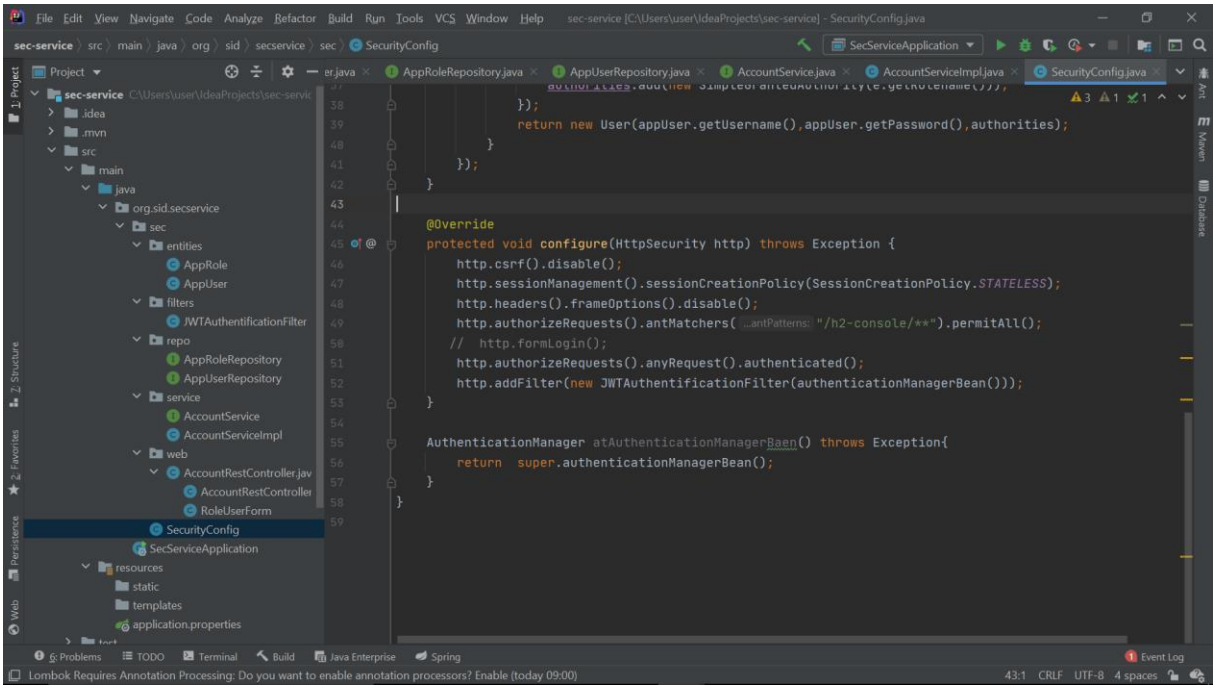
Event Log
Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (today 09:00)
43:1 CRLF UTF-8 4 spaces


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
sec-service [C:\Users\user\IdeaProjects\sec-service] - SecurityConfig.java
sec-service src main java org sid secservice sec SecurityConfig
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AppUserRepository.java
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AppRoleRepository
AppUserRepository
service
AccountService
AccountServiceImpl
web
AccountRestController.jav
AccountRestController
RoleUserForm
SecurityConfig
SecServiceApplication
resources
static
templates
application.properties
return new User(appUser.getUsername(),appUser.getPassword(),authorities);
@Override
protected void configure(HttpSecurity http) throws Exception {
http.csrf().disable();
http.sessionManagement().sessionCreationPolicy(SessionCreationPolicy.STATELESS);
http.headers().frameOptions().disable();
http.authorizeRequests().antMatchers(...antPatterns: "/h2-console/**").permitAll();
// http.formLogin();
http.authorizeRequests().anyRequest().authenticated();
http.addFilter(new JWTAuthentificationFilter(authenticationManagerBean()));
AuthenticationManager atAuthenticationManagerBaen() throws Exception{
return super.authenticationManagerBean();
6: Problems
TODO
Terminal
Build
Java Enterprise
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Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (today 09:00)
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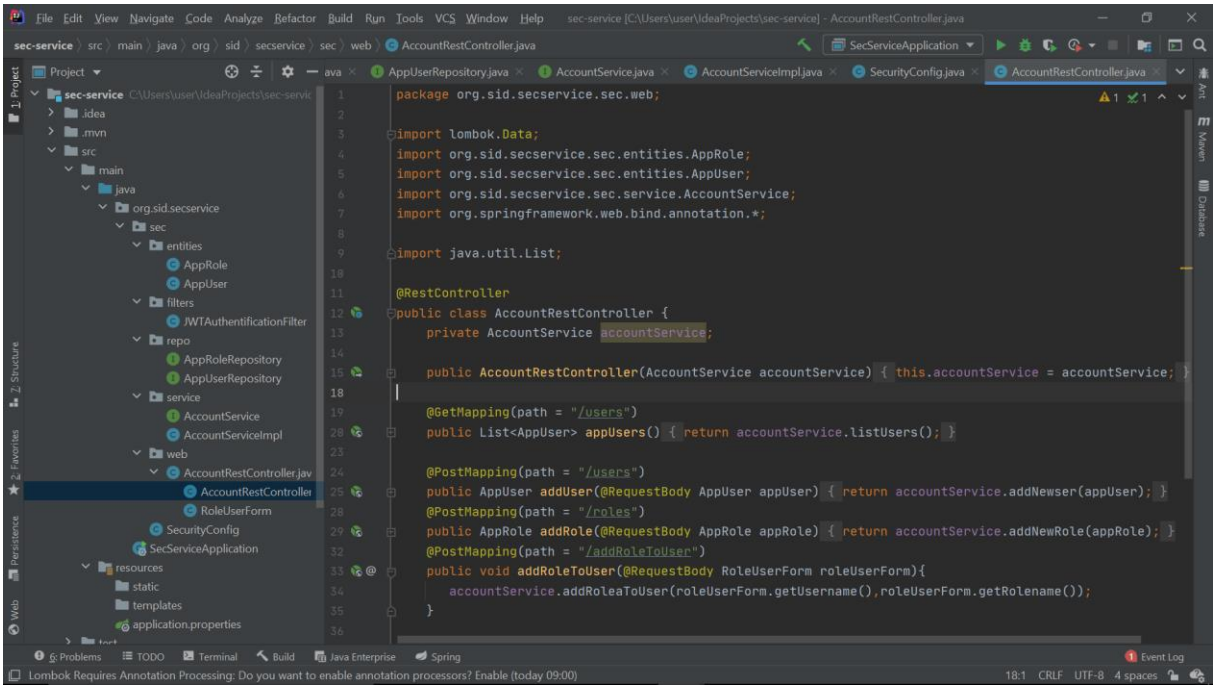
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
sec-service [C:\Users\user\IdeaProjects\sec-service] - AccountRestController.java
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AccountServiceImpl.java
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AccountRestController.java
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AppUserRepository
service
AccountService
AccountServiceImpl
web
AccountRestController.jav
AccountRestController
RoleUserForm
SecurityConfig
SecServiceApplication
resources
static
templates
application.properties
package org.sid.secservice.sec.web;
import lombok.Data;
import org.sid.secservice.sec.entities.AppRole;
import org.sid.secservice.sec.entities.AppUser;
import org.sid.secservice.sec.service.AccountService;
import org.springframework.web.bind.annotation.*;
import java.util.List;
@RestController
public class AccountRestController {
private AccountService accountService;
public AccountRestController(AccountService accountService) { this.accountService = accountService; }
@GetMapping(path = "/users")
public List<AppUser> appUsers() { return accountService.listUsers(); }
@PostMapping(path = "/users")
public AppUser addUser(@RequestBody AppUser appUser) { return accountService.addNewser(appUser); }
@PostMapping(path = "/roles")
public AppRole addRole(@RequestBody AppRole appRole) { return accountService.addNewRole(appRole); }
@PostMapping(path = "/addRoleToUser")
public void addRoleToUser(@RequestBody RoleUserForm roleUserForm){
accountService.addRoleaToUser(roleUserForm.getUsername(),roleUserForm.getRolename());
6: Problems
TODO
Terminal
Build
Java Enterprise
Spring
Event Log
Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (today 09:00)
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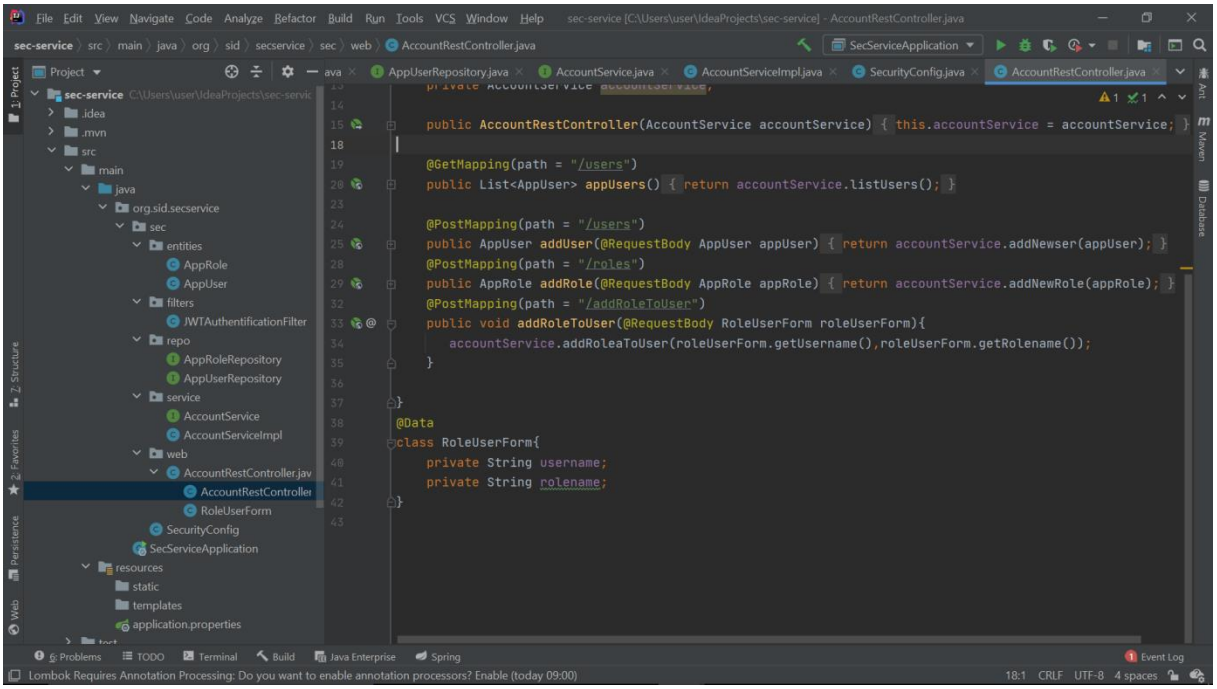
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
sec-service [C:\Users\user\IdeaProjects\sec-service] - AccountRestController.java
sec-service src main java org sid secservice sec web AccountRestController.java
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AppUserRepository.java
AccountService.java
AccountServiceImpl.java
SecurityConfig.java
AccountRestController.java
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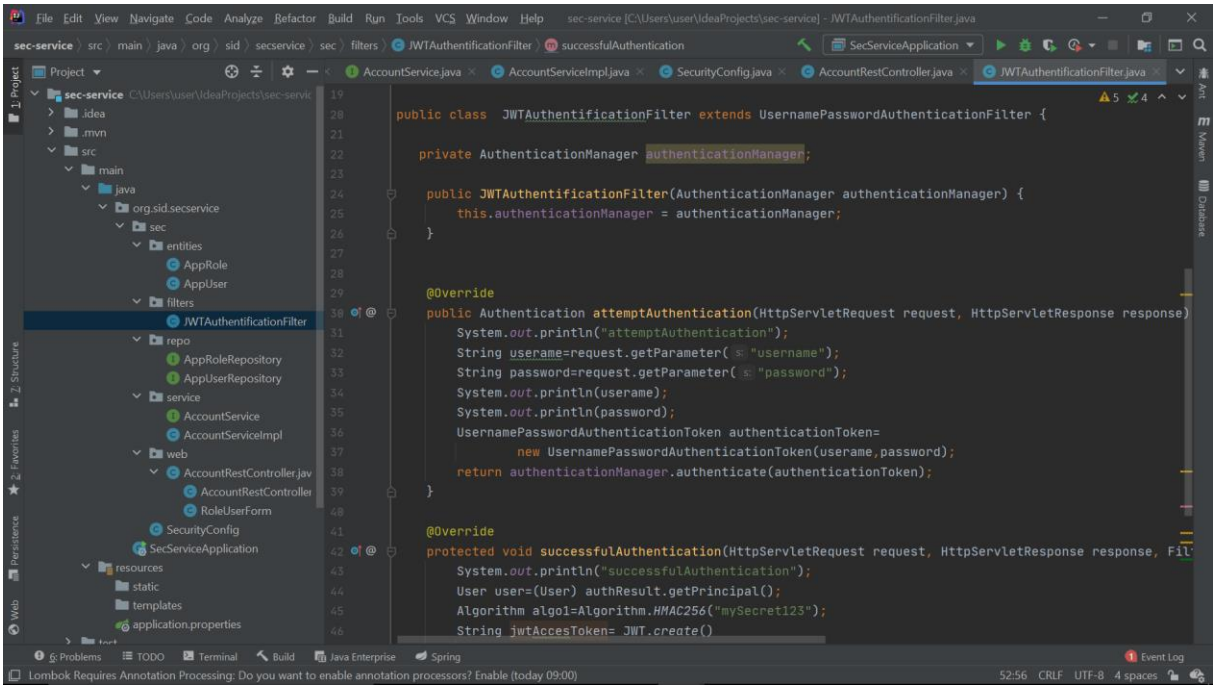
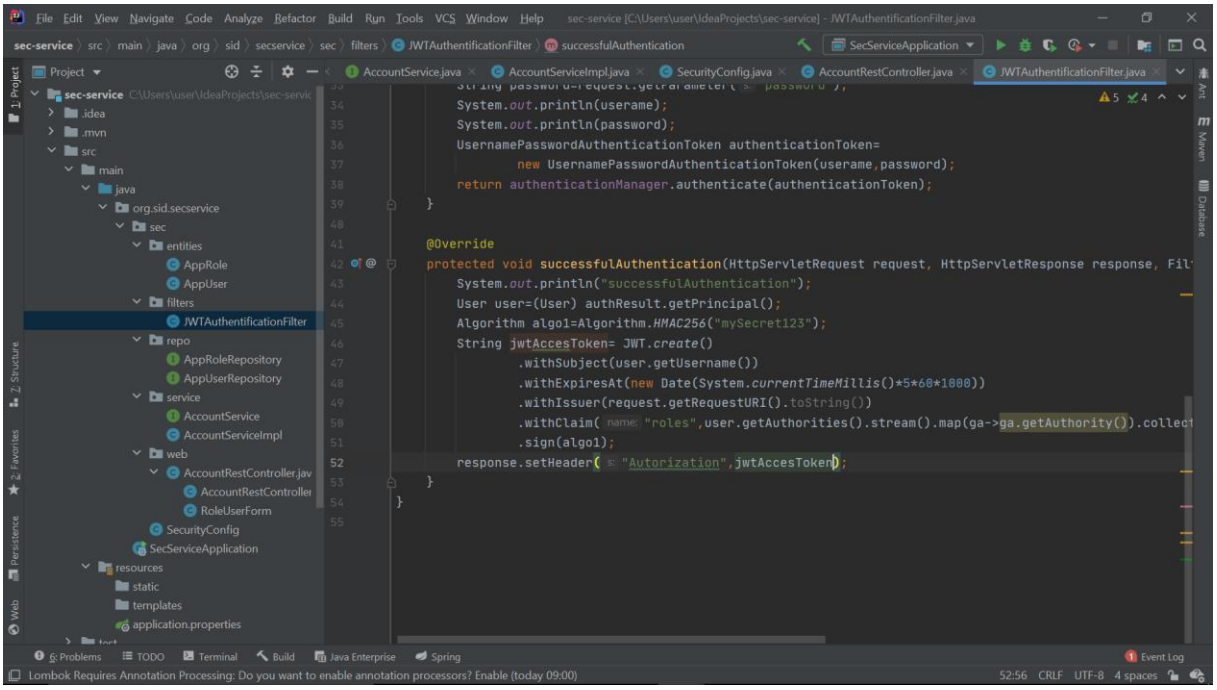
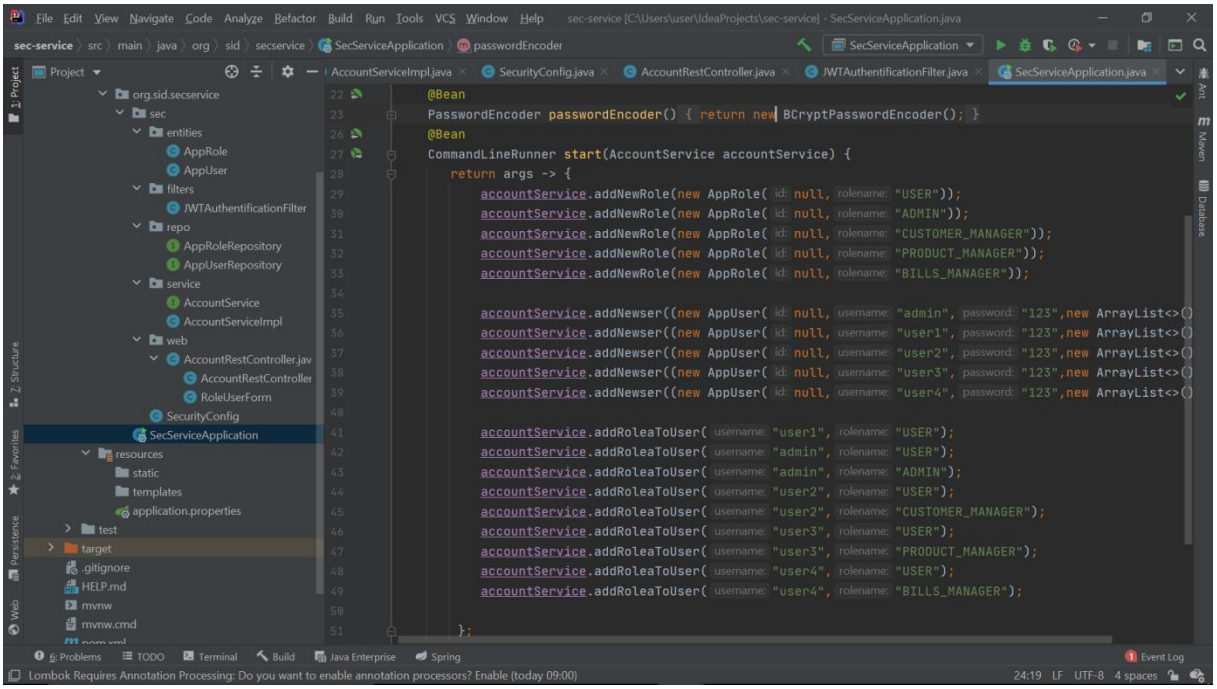
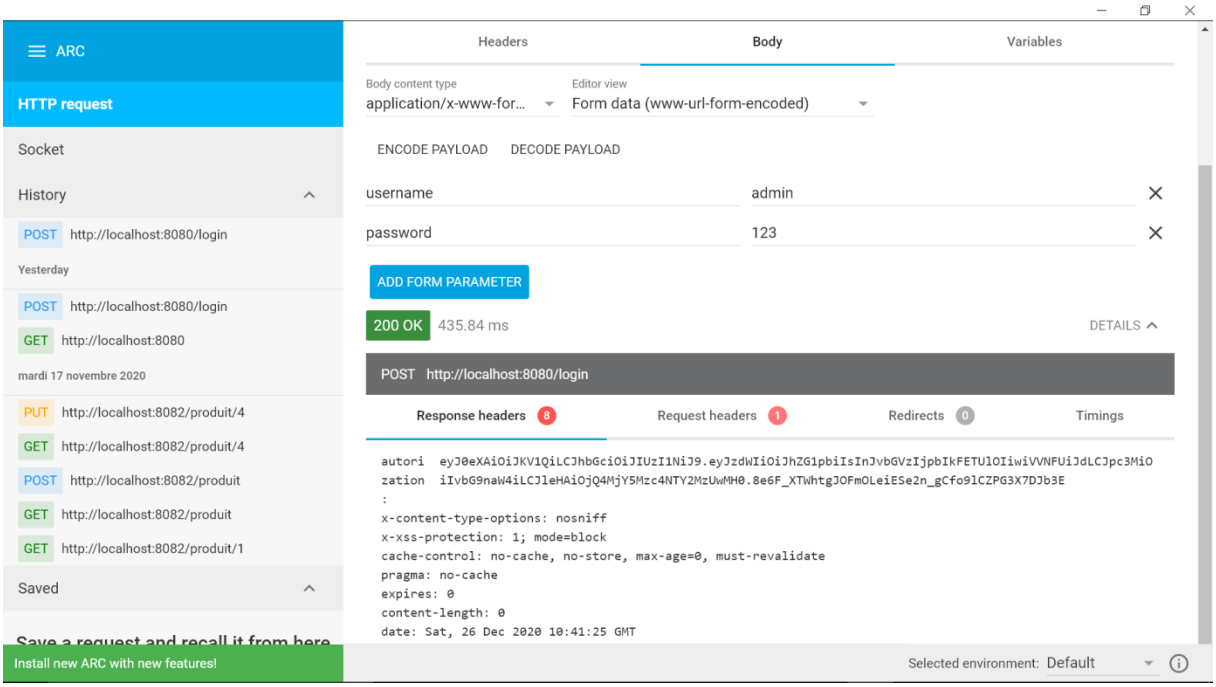
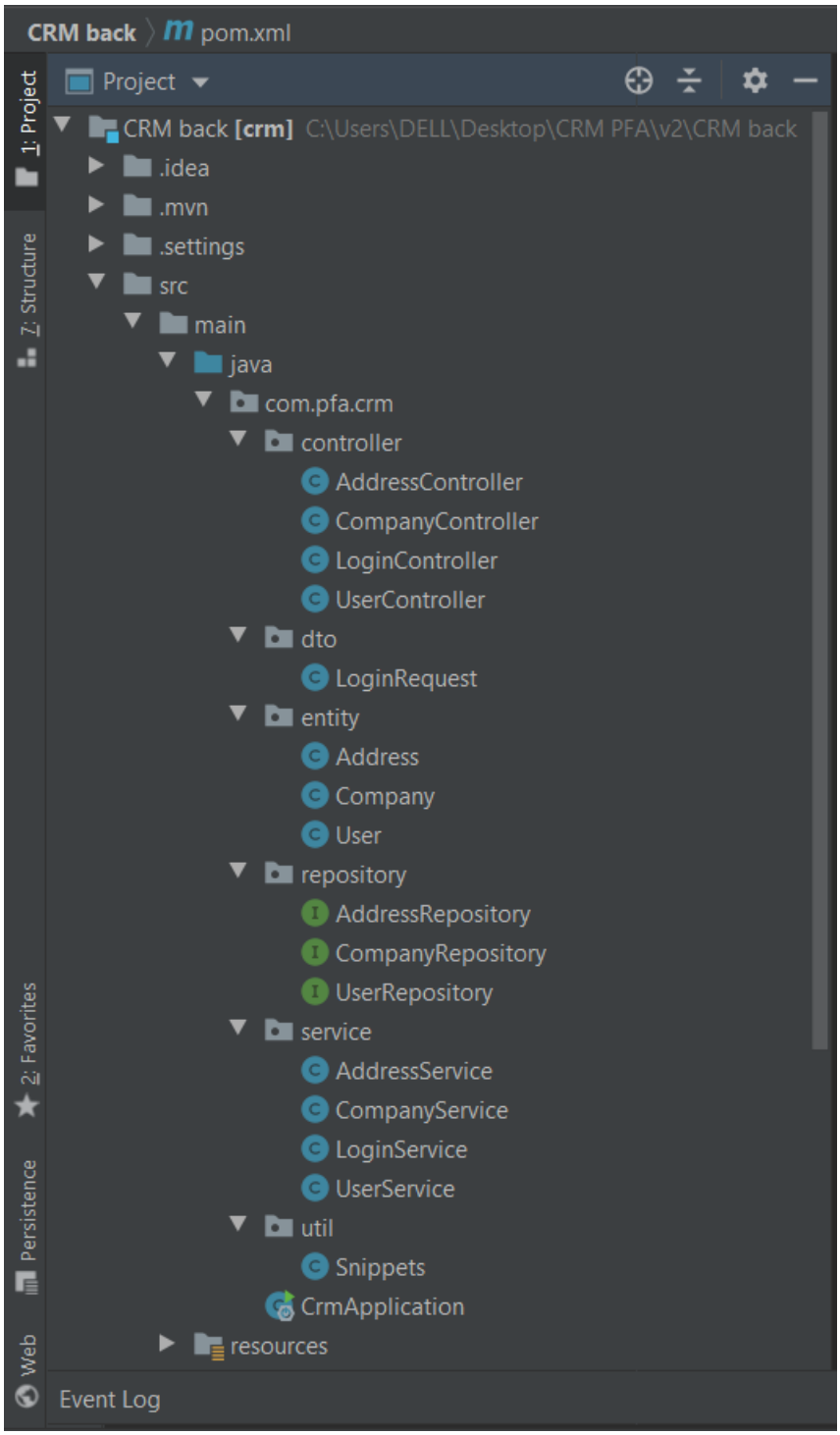
org.sid.secservice
sec
entities
AppRole
AppUser
filters
JWTAuthentificationFilter
repo
AppRoleRepository
AppUserRepository
service
AccountService
AccountServiceImpl
web
AccountRestController.jav
AccountRestControlle
RoleUserForm
SecurityConfig
SecServiceApplication
resources
static
templates
application.properties
public AccountRestController(AccountService accountService) { this.accountService = accountService; }
@GetMapping(path = "/users")
public List<AppUser> appUsers() { return accountService.listUsers(); }
@PostMapping(path = "/users")
public AppUser addUser(@RequestBody AppUser appUser) { return accountService.addNewser(appUser); }
@PostMapping(path = "/roles")
public AppRole addRole(@RequestBody AppRole appRole) { return accountService.addNewRole(appRole); }
@PostMapping(path = "/addRoleToUser")
public void addRoleToUser(@RequestBody RoleUserForm roleUserForm){
accountService.addRoleaToUser(roleUserForm.getUsername(),roleUserForm.getRolename());
}
}
@Data
class RoleUserForm{
private String username;
private String rolename;
}
6: Problems TODO Terminal Build Java Enterprise Spring Event Log
Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (today 09:00)
18:1 CRLF UTF-8 4 spaces


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
sec-service [C:\Users\user\IdeaProjects\sec-service] - JWTAuthentificationFilter.java
sec-service src main java org sid secservice sec filters JWTAuthentificationFilter successfulAuthentication
SecServiceApplication
AccountService.java
AccountServiceImpl.java
SecurityConfig.java
AccountRestController.java
JWTAuthentificationFilter.java
Project
sec-service C:\Users\user\IdeaProjects\sec-servic
.idea
.mvn
src
main
java
org.sid.secservice
sec
entities
AppRole
AppUser
filters
JWTAuthentificationFilter
repo
AppRoleRepository
AppUserRepository
service
AccountService
AccountServiceImpl
web
AccountRestController.jav
AccountRestControlle
RoleUserForm
SecurityConfig
SecServiceApplication
resources
static
templates
application.properties
public class JWTAuthentificationFilter extends UsernamePasswordAuthenticationFilter {
private AuthenticationManager authenticationManager;
public JWTAuthentificationFilter(AuthenticationManager authenticationManager) {
this.authenticationManager = authenticationManager;
}
@Override
public Authentication attemptAuthentication(HttpServletRequest request, HttpServletResponse response)
System.out.println("attemptAuthentication");
String userame=request.getParameter(s: "username");
String password=request.getParameter(s: "password");
System.out.println(userame);
System.out.println(password);
UsernamePasswordAuthenticationToken authenticationToken=
new UsernamePasswordAuthenticationToken(userame,password);
return authenticationManager.authenticate(authenticationToken);
}
@Override
protected void successfulAuthentication(HttpServletRequest request, HttpServletResponse response, Fil
System.out.println("successfulAuthentication");
User user=(User) authResult.getPrincipal();
Algorithm algo1=Algorithm.HMAC256("mySecret123");
String jwtAccesToken= JWT.create()
6: Problems TODO Terminal Build Java Enterprise Spring Event Log
Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (today 09:00)
52:56 CRLF UTF-8 4 spaces


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
sec-service [C:\Users\user\IdeaProjects\sec-service] - JWTAuthentificationFilter.java
sec-service src main java org sid secservice sec filters JWTAuthentificationFilter successfulAuthentication
SecServiceApplication
Project
AccountService.java
AccountServiceImpl.java
SecurityConfig.java
AccountRestController.java
JWTAuthentificationFilter.java
System.out.println(userame);
System.out.println(password);
UsernamePasswordAuthenticationToken authenticationToken=
new UsernamePasswordAuthenticationToken(userame,password);
return authenticationManager.authenticate(authenticationToken);
@Override
protected void successfulAuthentication(HttpServletRequest request, HttpServletResponse response, Fil
System.out.println("successfulAuthentication");
User user=(User) authResult.getPrincipal();
Algorithm algo1=Algorithm.HMAC256("mySecret123");
String jwtAccesToken= JWT.create()
.withSubject(user.getUsername())
.withExpiresAt(new Date(System.currentTimeMillis()+5*60*1000))
.withIssuer(request.getRequestURI().toString())
.withClaim(name: "roles",user.getAuthorities().stream().map(ga->ga.getAuthority()).collect
.sign(algo1);
response.setHeader(s: "Autorization",jwtAccesToken);
org.sid.secservice
sec
entities
AppRole
AppUser
filters
JWTAuthentificationFilter
repo
AppRoleRepository
AppUserRepository
service
AccountService
AccountServiceImpl
web
AccountRestController.jav
AccountRestController
RoleUserForm
SecurityConfig
SecServiceApplication
resources
static
templates
application.properties
6: Problems
TODO
Terminal
Build
Java Enterprise
Spring
Event Log
Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (today 09:00)
52:56 CRLF UTF-8 4 spaces


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
sec-service [C:\Users\user\IdeaProjects\sec-service] - SecServiceApplication.java
sec-service src main java org sid secservice SecServiceApplication passwordEncoder
SecServiceApplication
Project
AccountServiceImpl.java
SecurityConfig.java
AccountRestController.java
JWTAuthentificationFilter.java
SecServiceApplication.java
@Bean
PasswordEncoder passwordEncoder() { return new BCryptPasswordEncoder(); }
@Bean
CommandLineRunner start(AccountService accountService) {
return args -> {
accountService.addNewRole(new AppRole(id: null, rolename: "USER"));
accountService.addNewRole(new AppRole(id: null, rolename: "ADMIN"));
accountService.addNewRole(new AppRole(id: null, rolename: "CUSTOMER_MANAGER"));
accountService.addNewRole(new AppRole(id: null, rolename: "PRODUCT_MANAGER"));
accountService.addNewRole(new AppRole(id: null, rolename: "BILLS_MANAGER"));
accountService.addNewser((new AppUser(id: null, username: "admin", password: "123",new ArrayList<>()
accountService.addNewser((new AppUser(id: null, username: "user1", password: "123",new ArrayList<>()
accountService.addNewser((new AppUser(id: null, username: "user2", password: "123",new ArrayList<>()
accountService.addNewser((new AppUser(id: null, username: "user3", password: "123",new ArrayList<>()
accountService.addNewser((new AppUser(id: null, username: "user4", password: "123",new ArrayList<>()
accountService.addRoleaToUser(username: "user1", rolename: "USER");
accountService.addRoleaToUser(username: "admin", rolename: "USER");
accountService.addRoleaToUser(username: "admin", rolename: "ADMIN");
accountService.addRoleaToUser(username: "user2", rolename: "USER");
accountService.addRoleaToUser(username: "user2", rolename: "CUSTOMER_MANAGER");
accountService.addRoleaToUser(username: "user3", rolename: "USER");
accountService.addRoleaToUser(username: "user3", rolename: "PRODUCT_MANAGER");
accountService.addRoleaToUser(username: "user4", rolename: "USER");
accountService.addRoleaToUser(username: "user4", rolename: "BILLS_MANAGER");
};
org.sid.secservice
sec
entities
AppRole
AppUser
filters
JWTAuthentificationFilter
repo
AppRoleRepository
AppUserRepository
service
AccountService
AccountServiceImpl
web
AccountRestController.jav
AccountRestController
RoleUserForm
SecurityConfig
SecServiceApplication
resources
static
templates
application.properties
test
target
.gitignore
HELP.md
mvnw
mvnw.cmd
6: Problems
TODO
Terminal
Build
Java Enterprise
Spring
Event Log
Lombok Requires Annotation Processing: Do you want to enable annotation processors? Enable (today 09:00)
24:19 LF UTF-8 4 spaces

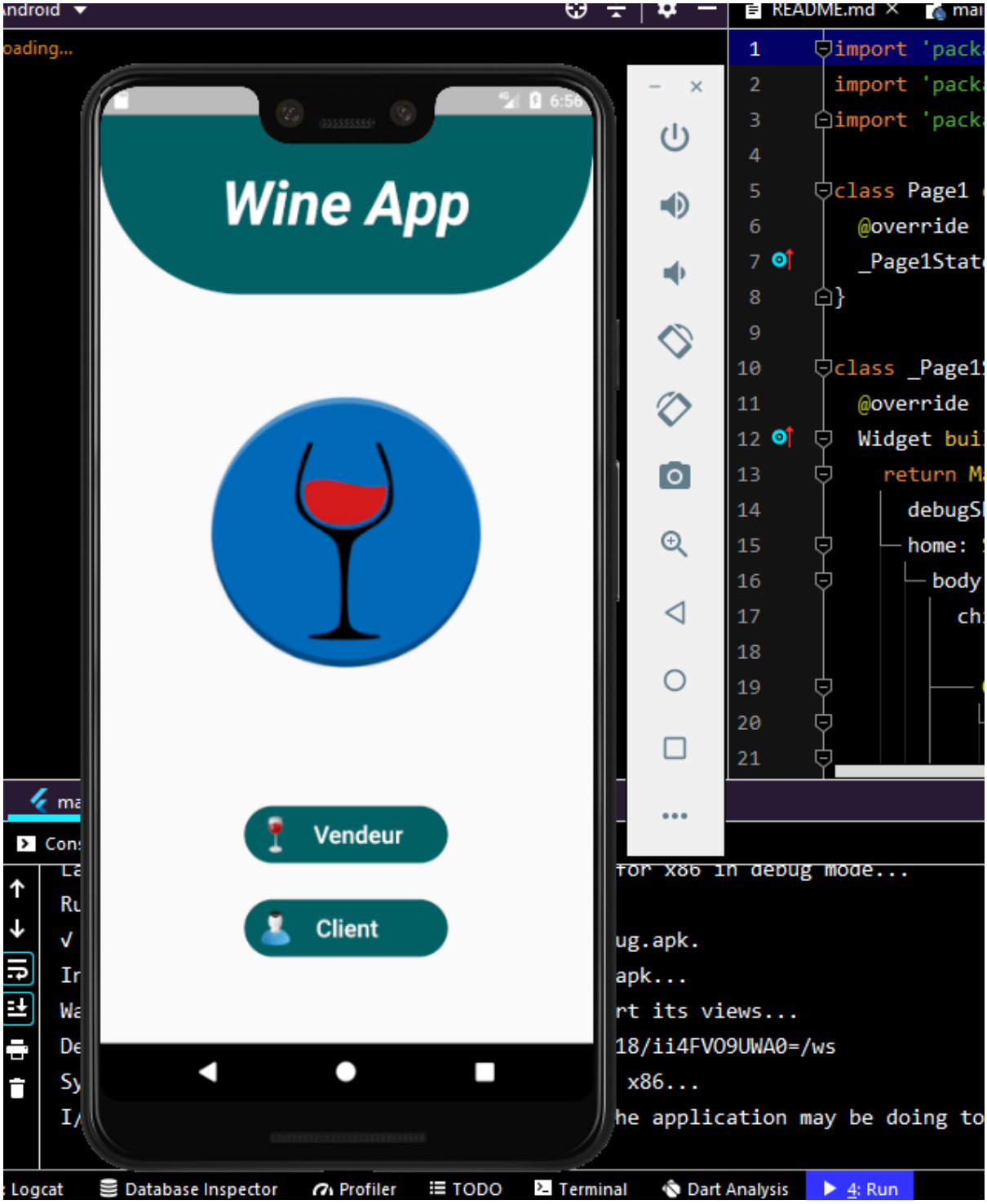

ARC
HTTP request
Socket
History
POST http://localhost:8080/login
Yesterday
POST http://localhost:8080/login
GET http://localhost:8080
mardi 17 novembre 2020
PUT http://localhost:8082/produit/4
GET http://localhost:8082/produit/4
POST http://localhost:8082/produit
GET http://localhost:8082/produit
GET http://localhost:8082/produit/1
Saved
Install new ARC with new features!
Headers
Body
Variables
Body content type
application/x-www-for...
Editor view
Form data (www-url-form-encoded)
ENCODE PAYLOAD
DECODE PAYLOAD
username
admin
password
123
ADD FORM PARAMETER
200 OK
435.84 ms
DETAILS
POST http://localhost:8080/login
Response headers 8
Request headers 1
Redirects 0
Timings
autori eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJzdWIiOiJhZG1pbiIsInJvbGVzIjpbIkFETUlOIiwiVVNFUiJdLCJpc3MiO
zation iIvbG9naW4iLCJleHAiOjQ4MjY5Mzc4NTY2MzUwMH0.8e6F_XTWhtgJOFmOLeiESe2n_gCfo9lCZPG3X7DJb3E
:
x-content-type-options: nosniff
x-xss-protection: 1; mode=block
cache-control: no-cache, no-store, max-age=0, must-revalidate
pragma: no-cache
expires: 0
content-length: 0
date: Sat, 26 Dec 2020 10:41:25 GMT
Selected environment: Default

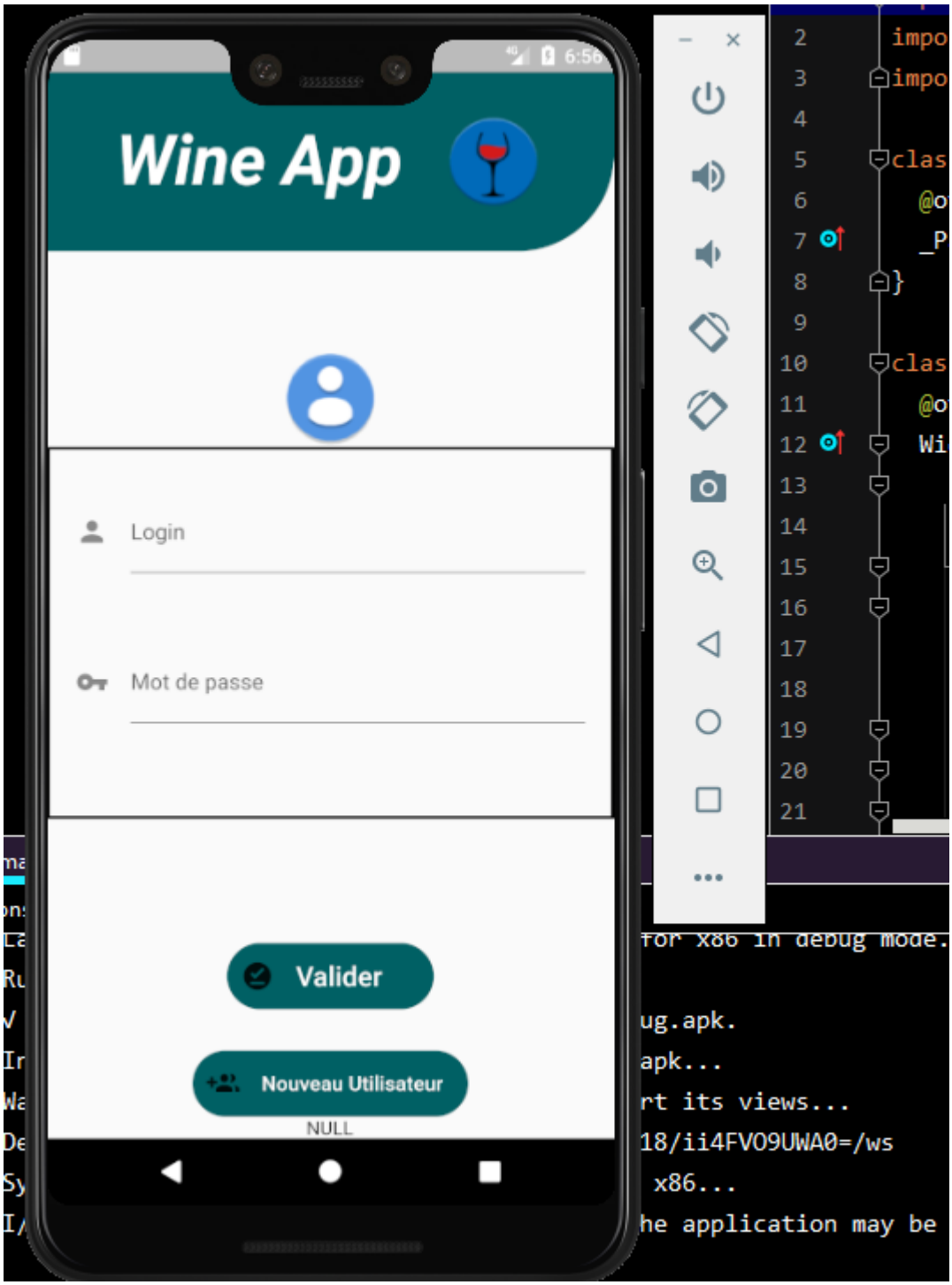

CRM back
pom.xml
Project
CRM back [crm] C:\Users\DELL\Desktop\CRM PFA\v2\CRM back
.idea
.mvn
.settings
src
main
java
com.pfa.crm
controller
AddressController
CompanyController
LoginController
UserController
dto
LoginRequest
entity
Address
Company
User
repository
AddressRepository
CompanyRepository
UserRepository
service
AddressService
CompanyService
LoginService
UserService
util
Snippets
CrmApplication
resources
Event Log
1: Project
7: Structure
2: Favorites
Persistence
Web

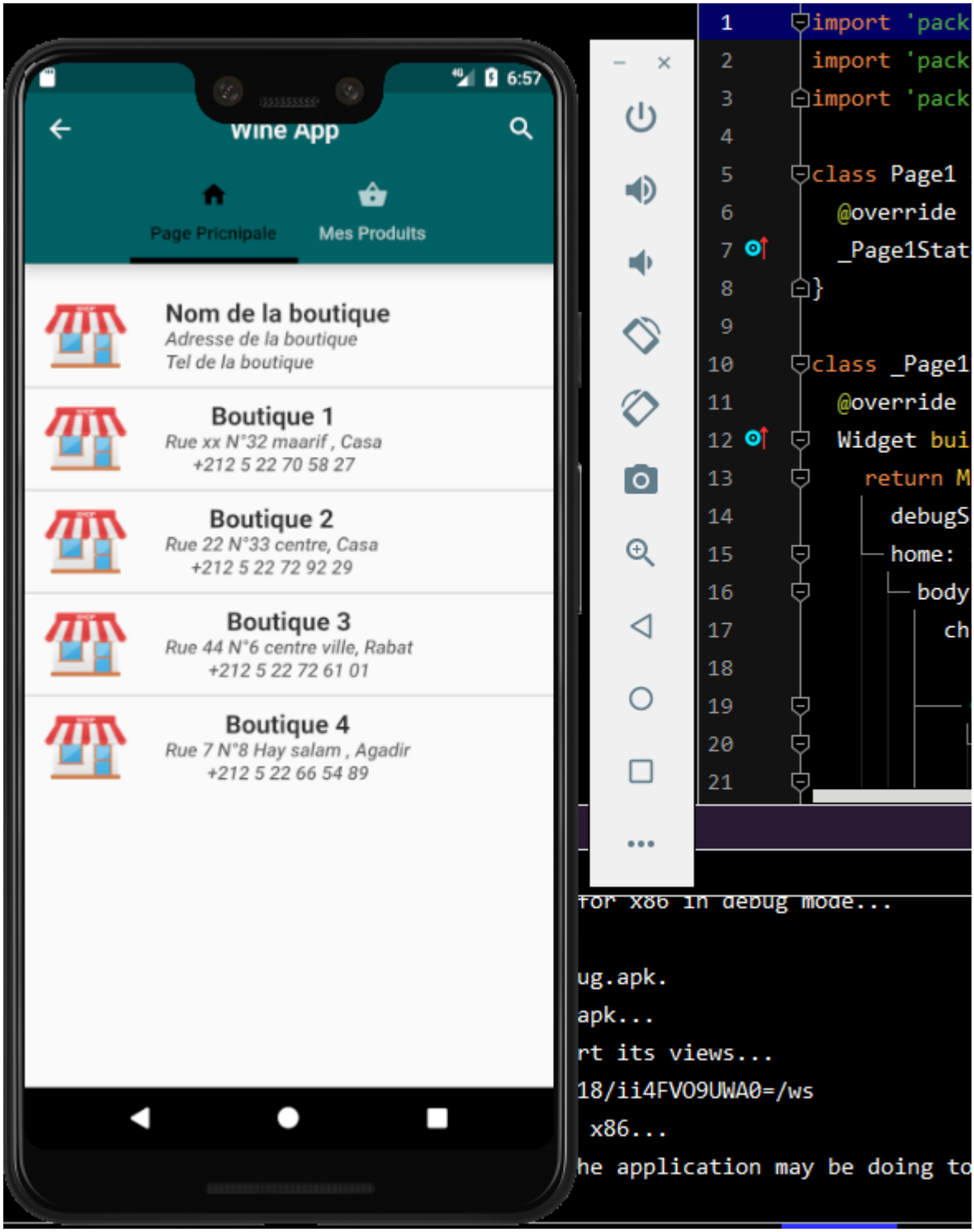
Raw Parsed

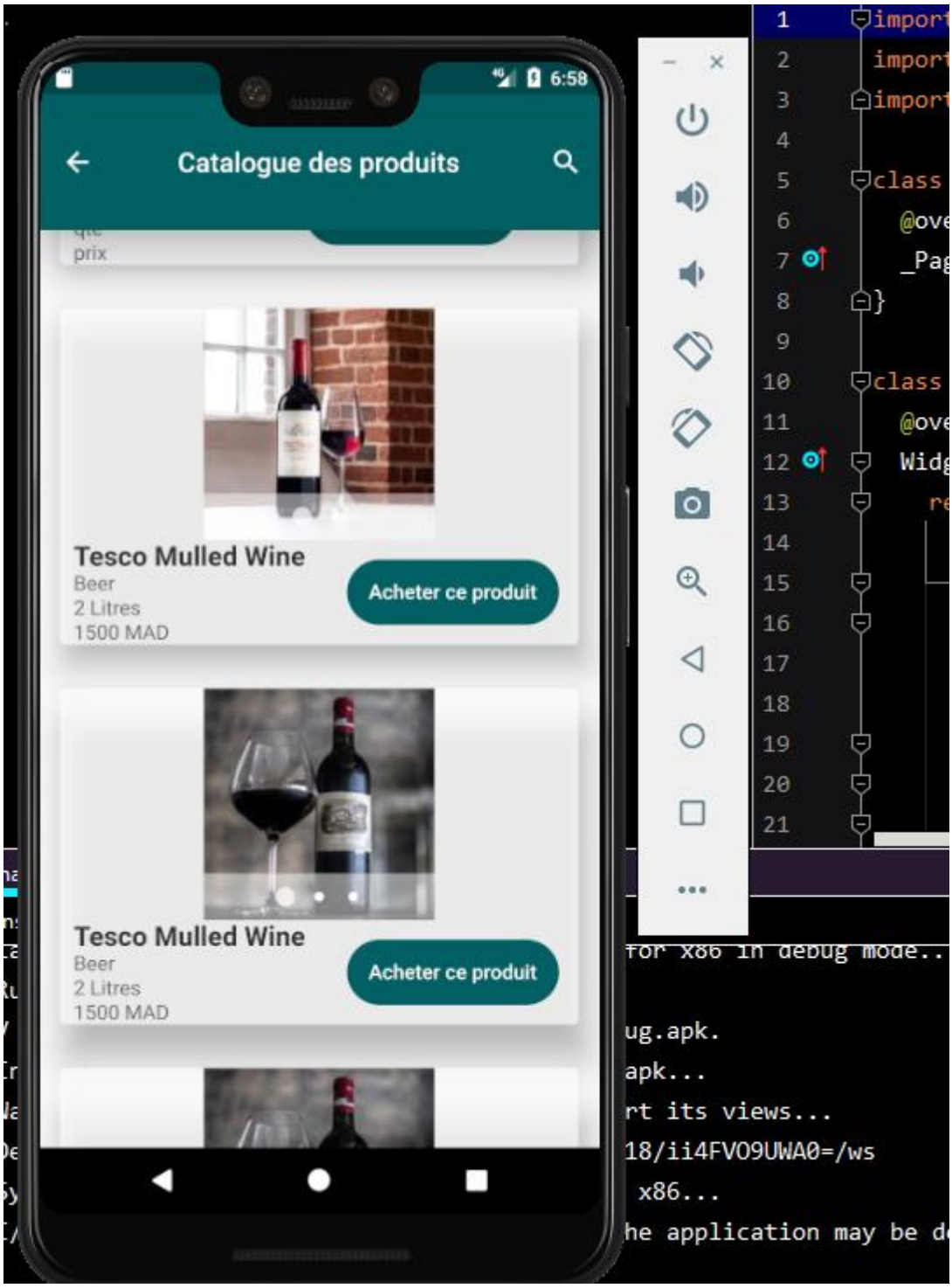

```
{
  "_links": {
    "suppliers": {
      "href": "http://localhost:8083/suppliers{?page,size,sort}",
      "templated": true
    },
    "profile": {
      "href": "http://localhost:8083/profile"
    }
  }
}
```

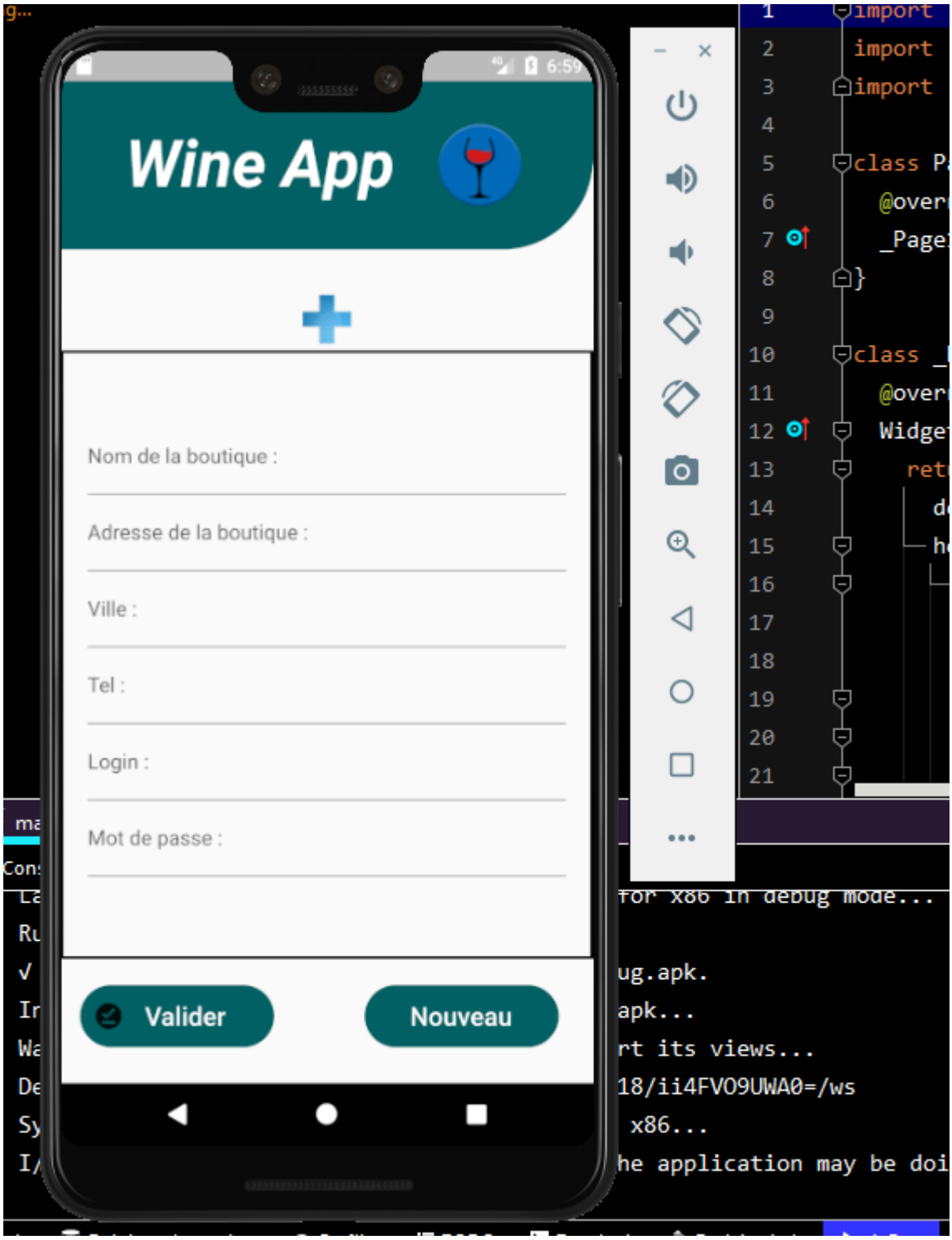
Partie Front – end




6:56
Wine App
Login
Mot de passe
Valider
Nouveau Utilisateur
NULL
for x86 in debug mode.
ug.apk.
apk...
rt its views...
18/ii4FVO9UWA0=/ws
x86...
he application may be


6:57
Wine App
Page Pricnipale
Mes Produits
Nom de la boutique
Adresse de la boutique
Tel de la boutique
Boutique 1
Rue xx N°32 maarif , Casa
+212 5 22 70 58 27
Boutique 2
Rue 22 N°33 centre, Casa
+212 5 22 72 92 29
Boutique 3
Rue 44 N°6 centre ville, Rabat
+212 5 22 72 61 01
Boutique 4
Rue 7 N°8 Hay salam , Agadir
+212 5 22 66 54 89
import 'pack
import 'pack
import 'pack
class Page1
@override
_Page1Stat
}
class _Page1
@override
Widget bui
return M
debugS
home:
body
ch
for x86 in debug mode...
ug.apk.
apk...
rt its views...
18/ii4FVO9UWA0=/ws
x86...
he application may be doing to


6:58
Catalogue des produits
prix
Tesco Mulled Wine
Beer
2 Litres
1500 MAD
Acheter ce produit
Tesco Mulled Wine
Beer
2 Litres
1500 MAD
Acheter ce produit
for x86 in debug mode..
ug.apk.
apk...
rt its views...
18/ii4FVO9UWA0=/ws
x86...
he application may be d


Wine App
Nom de la boutique :
Adresse de la boutique :
Ville :
Tel :
Login :
Mot de passe :
Valider
Nouveau