

# Compte Rendu

## JPA Hibernate Spring

### Data ManyToMany

### Case Users & Roles

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## Table Users

The screenshot shows the H2 console interface. On the left, a tree view displays the database structure: jdbc:h2:mem:users\_db, ROLE, ROLE\_USERS, USERS, INFORMATION\_SCHEMA, Sequences, and Users. The 'USERS' table is selected. The main area shows the SQL statement 'SELECT \* FROM USERS' and its results. The results are displayed in a table with three columns: USER\_ID, PASSWORD, and USER\_NAME. There are two rows of data: one for 'User1' and one for 'admin'. Below the table, it indicates '(2 rows, 1 ms)'. An 'Edit' button is visible at the bottom.

USER_ID	PASSWORD	USER_NAME
2b020717-53b0-4545-989f-6fe67bf020d6	1234	User1
74357386-1bfb-4b5c-af5c-9349b690aa35	1234	admin

## Table Role

The screenshot shows the H2 console interface. On the left, a tree view displays the database structure: jdbc:h2:mem:users\_db, ROLE, ROLE\_USERS, USERS, INFORMATION\_SCHEMA, Sequences, and Users. The 'ROLE' table is selected. The main area shows the SQL statement 'SELECT \* FROM ROLE' and its results. The results are displayed in a table with two columns: ID and ROLE\_NAME. There are three rows of data: '1 Student', '2 User', and '3 Admin'. Below the table, it indicates '(3 rows, 2 ms)'. An 'Edit' button is visible at the bottom.

ID	ROLE_NAME
1	Student
2	User
3	Admin

## Table d'association ROLE\_USERS

localhost:8088/h2-console/login.do?jsessionid=09d71acaa1fbb83f4628b57bfaef710b

Auto commit: ☒ Max rows: 1000 Auto complete: Off Auto select: On

jdbc:h2:mem:users\_db

- ROLE
- ROLE\_USERS
- USERS
- INFORMATION\_SCHEMA
- Sequences
- Users
- H2 1.4.200 (2019-10-14)

Run Run Selected Auto complete Clear SQL statement:

SELECT \* FROM ROLE\_USERS

SELECT \* FROM ROLE\_USERS:

ROLES_ID	USERS_USER_ID
1	2b020717-53b0-4545-989f-6fe67bf020d6
2	2b020717-53b0-4545-989f-6fe67bf020d6
3	74357386-1bfb-4b5c-af5c-9349b890aa35

(3 rows, 3 ms)

localhost:8088/h2-console/login.do?jsessionid=09d71acaa1fbb83f4628b57bfaef710b

Auto commit: ☒ Max rows: 1000 Auto complete: Off Auto select: On

jdbc:h2:mem:users\_db

- ROLE
- ROLE\_USERS
- ROLES\_ID
- USERS\_USER\_ID
- Indexes
- USERS
- INFORMATION\_SCHEMA
- Sequences
- Users
- H2 1.4.200 (2019-10-14)

Run Run Selected Auto complete Clear SQL statement:

SELECT \* FROM USERS ;  
SELECT \* FROM ROLE ;  
SELECT \* FROM ROLE\_USERS ;

SELECT \* FROM USERS :

USER_ID	PASSWORD	USER_NAME
2b020717-53b0-4545-989f-6fe67bf020d6	1234	User1
74357386-1bfb-4b5c-af5c-9349b890aa35	1234	admin

(2 rows, 0 ms)

SELECT \* FROM ROLE :

ID	ROLE_NAME
1	Student
2	User
3	Admin

(3 rows, 0 ms)

SELECT \* FROM ROLE\_USERS:

ROLES_ID	USERS_USER_ID
1	2b020717-53b0-4545-989f-6fe67bf020d6
2	2b020717-53b0-4545-989f-6fe67bf020d6
3	74357386-1bfb-4b5c-af5c-9349b890aa35

(3 rows, 0 ms)

## L'authentification

```
@Bean
CommandLineRunner start(UserService userService) {
    return args -> {
        User user1 = new User();
        user1.setUsername("User1");
        user1.setPassword("1234");
        userService.addUser(user1);

        User user2 = new User();
        user2.setUsername("admin");
        user2.setPassword("1234");
        userService.addUser(user2);
    }
}
```

```
try {
    User user = userService.authentication( username: "User1", password: "1234");
    System.out.println(user.toString());
} catch (Exception e) {
    e.printStackTrace();
}
};
```

Si l'utilisateur authentifié



```
2022-03-24 00:02:52.373 INFO 33296 --- [main] o.s.b.w.embbedded.Tomcat.TomcatWebServer : Tomcat started on port(s): 8080 (http) with context
path ""
2022-03-24 00:02:52.582 INFO 33296 --- [main] ma.enset.jpaenset.JpaEnsetApplication : Started JpaEnsetApplication in 3.177 seconds (JVM
Running for 4.233)
User(userId=864097e-d289-4587-9873-5ad7d7931e48, username=User1, password=1234, roles=[Role(id=1, roleName=Student), Role(id=2, roleName=User)])
```

Si username ou password est incorrect une exception va générer dans la méthode d'authentification

```
@Override
public User authentication(String username, String password) {
    User user = userRepository.findByUsername(username);
    if (username==null) throw new RuntimeException("UserName or Password Incorrect");
    if (user.getPassword().equals(password)){
        return user;
    }
    throw new RuntimeException("UserName or Password Incorrect");
}
```

```
try {
    User user = userService.authentication( username: "User1", password: "incorrectPassword");
    System.out.println(user.toString());
} catch (Exception e) {
    e.printStackTrace();
}
};
```

```
Run: JpaEnsatApplication
Console
Therefore, database queries may be performed during view rendering. Explicitly configure spring.jpa.open-in-view to disable this warning
2022-03-24 08:10:54.201 INFO 11746 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8088 (http) with context
path ''
2022-03-24 08:10:54.212 INFO 11746 --- [main] ss.enst.jpasenet.JpaEnsatApplication : Started JpaEnsatApplication in 3.621 seconds (JVM
running for 4.45)
java.lang.RuntimeException: Credentials : Username or Password Incorrect
at ss.enst.jpasenet.service.UserServiceImpl.authentication(UserServiceImpl.java:84)
```

`java.lang.RuntimeException` Create breakpoint : Username or Password Incorrect