

Phase 3 Project 3 Writeup

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Source code:

<https://github.com/agarriga21/HCLclassProjects/tree/master/Authenticate/src>

My project, which is a sample login with username and password application, uses a custom MySQL database users.user created by me. This project also utilizes Spring Boot, Hibernate, Maven and controllers. Also Junit 5 is utilized for testing.

The database users has a table called user which has four variables. They are: id, name, password, and email. There is only one user admin since this project is more about testing practice.

The program uses four webpages to show basic functionality of the program. The first one is the login page which is login.jsp which has the option to login with username and password credentials. The other three are the response pages with either Success.jsp for a success, Invalid.jsp for a wrong password, and Nouser.jsp for a user not found.

I wrote six Junit 5 tests for this project all of which successfully passed. They are:

testServiceCall() - To test connecting to MySQL

testExistingUserByName() - To test finding an existing user with
userService.getUserByName

testExistingUserByValidPass() - To test userService.ValidPassword with a user and a valid password input.

testExistingUserByInvalidPass() - To test userService.ValidPassword with a user and an invalid password input.

testNonExistingUserByName() - To test userService.getUserByName with a non existing username.

whenFindByName_thenReturnUser() - To test userRepository.findByName

The program is connected to the local MySQL database through hibernate and server Tomcat through Maven. The following is the url and the MySQL code used to create the database and table.

<http://localhost:8090>

MySQL Code:

```
CREATE DATABASE users;  
create user 'springuser'@'%' identified by 'ThePassword';  
grant all on users.user to 'springuser'@'%';
```

```
CREATE TABLE users.user (  
id int(11) AUTO_INCREMENT,  
name VARCHAR(256),  
email VARCHAR(256),  
password VARCHAR(256),  
PRIMARY KEY (`id`)  
);
```

```
INSERT INTO user (name,email,password) VALUES ("admin", "admin@test.com",  
"admin");
```