# RADAR-AD User Authentication Test Procedures

# Introduction

This document presents an integration test for user authentication via JWT tokens. The client side is supposed to be a mobile application and server side is a java-based web application. The test environment utilizes the technologies below

1. Docker
2. Spring boot
3. JWT auth token
4. Javascript & JQuery
5. Curl

The server side consists of spring boot and JWT auth library and client side consists of curl and/or javascript.

## Set up codebase

The following command copy the GitHub repository.

|  |
| --- |
| git clone https://github.com/halilagin/rest-jwt-auth.git |

The directory container-programs should have two program installed in 1) JDK 2) MAVEN. The git repository does not contain these programs and you need to download and locate those programs in container-programs directory.

The filename **${root directory}/container-programs/jdk** should point to JDK home and **${root directory}/container-programs/mvn** home.

**Setting up a maven repository**

The docker-compose configuration file (docker-compose.yml) points to a maven repository directory. The default is **/Users/halil/.m2** in docker-compose.yml. This path should be changed accordingly so that maven could compile the codebase properly.

## Creating a docker virtual network

|  |
| --- |
| sh create-radaradnet.sh |

## Starting the Docker Container

|  |
| --- |
| sh dcup.sh |

## Connecting to the Docker Container via a terminal

|  |
| --- |
| sh dcterminal.sh |

# Running the Auth Server

|  |
| --- |
| cd /home/ruser/workdir/jwt-spring-security-demo  mvn clean install  mvn spring-boot:run |

After running the commands above the server should listen at port 8080 and docker redirect the port 8080 to 18051 for the host machine.

# Testing

There are two ways to test JWT auth mechanism 1) CURL 2) Javascript&JQuery based web page.

## Testing via Curl

Following steps shows how auth test is achieved via curl command.

**Testing the login operation**

|  |
| --- |
| cd /home/ruser/workdir/jwt-spring-security-demo/test  sh test.login.sh |

The command above sends a POST request to the server and stores the token received in token\_received.txt

**Testing the login operation**

|  |
| --- |
| cd /home/ruser/workdir/jwt-spring-security-demo/test  sh test.get\_userinfo.sh |

The command above sends a POST request to the server and stores the user information received in userinfo\_received.txt.

Each POST request should be performed with having authentication token in the headers, where the token is stored in token\_received after first request done as in the section “**Testing the login operation**

” above.

## Testing via browser

The server’s url is <http://localhost:18051>.

The port address of the server’s url is defined in docker-compose.yml. If it is different, be aware of that.

Visit the page is <http://localhost:18051>.

The auth server serves a web page who looks like the one in Figure 1.

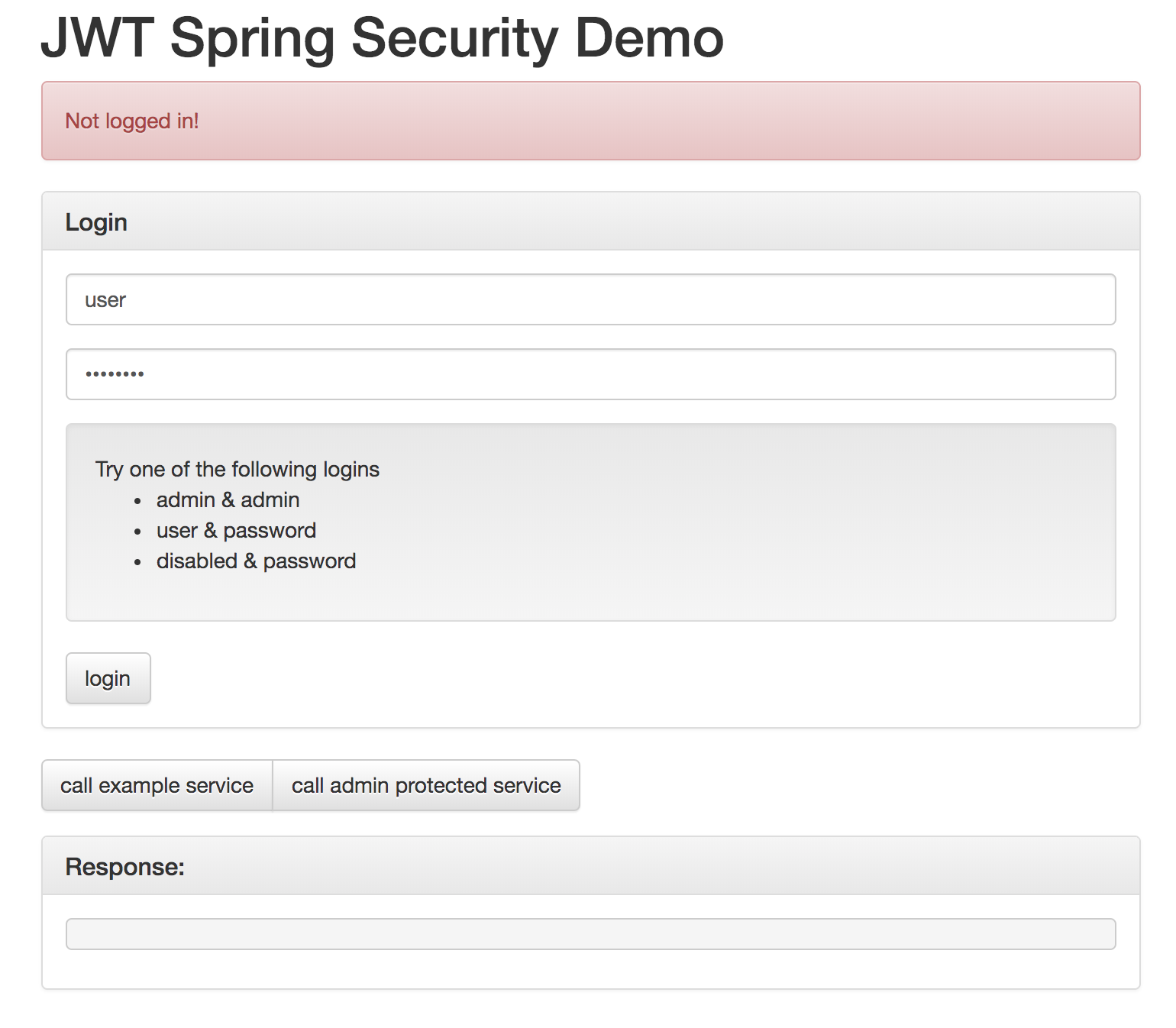


Figure 1 The home page of the auth test server

The test can be achieved by entering the credentials below.

1. Username:admin password: admin
2. Username:user password: password
3. Username:disabled password: password

The HTTP request and response can be observed in the debug screen of the browser.