# Authentication: User guide

The document explains how the authentication works on this application.

# **User Entity**

The user is represented by the user entity in /src/Entity/User.php.
It has to implement the interface UserInterface to be able to manage user login, security etc...

The UserInterface needs 5 methods:

- getRoles(): return the user's role
- getPassword(): return the hash password
- getSalt(): return the salt used for the password hash
- **getUsername()**: return the unique username
- eraseCredentials(): erase sensitive data

# **Security Setup**

The security system is configured in /config/packages/security.yaml.

#### 1. Encoders

This part describes the hash used to hash the user's password.

```
encoders:
   App\Entity\User: bcrypt
```

### 2. Providers

The provider explains where the User's information is and how to access it.

```
providers:
    doctrine:
        entity:
        class: App:User
        property: username
```

### 3.Firewalls

The firewalls config allows you to set up the way to login and logout. It's our authentication system.

```
firewalls:
    dev:
        pattern: ^/(_(profiler|wdt)|css|images|js)/
        security: false

main:
        anonymous: ~
        pattern: ^/
        form_login:
            login_path: login
            check_path: login_check
            always_use_default_target_path: true
            default_target_path: /
            logout: ~
```

## 4.Access Control

On the access\_control part we can define the authorisation access for each page of the website and the users' roles allowed.

```
access_control:
    - { path: ^/tasks, roles: ROLE_USER}
    - { path: ^/users/list, roles: ROLE_ADMIN}
    - { path: ^/login, roles: IS_AUTHENTICATED_ANONYMOUSLY }
```

We can see that we need at least a ROLE\_USER for access to the tasks part of the website. The users/list is only accessible by Admin and everybody is allowed on the login page.