UXP Systems Java Developer Assignment

1 Introduction

The task is to create a simple web application that will make use of the frameworks and technologies found at UXP Systems.

2 Features

2.1 Required

1. Create a **Maven** project to implement a simple **Spring** based **web application** with a controller exposing the following 4 APIs:

   - GET /user
   - POST /user
   - PUT /user
   - DELETE /user

2. These APIs will perform CRUD operations using **Hibernate** as a persistence framework on a User entity with at minimum the following fields:

   - id (long) / primary key
   - username (String) / unique
   - status (String) / possible values: Activated/Deactivated

3. Secure these APIs with **Spring Security** using BASIC authentication

4. Provide **unit tests** for controllers, services and DAO classes

5. Host the project in a local **GIT** repository.

2.2 Optional

1. Configure Hibernate to use Hazelcast as a second level cache
2. Secure service layer methods

3 Provided Materials

The attached assignment.zip provides a basic directory layout and POM file
to help get you started.

4 Guidelines

- You can use any IDE of your choice (IntelliJ, Eclipse, Netbeans, . . .)
- You are free to choose between Spring Annotation or XML configuration
- You are free to choose between Hibernate Annotation or XML configuration
- For simplicity, use an in-memory DB like (HSQLDB or H2)
- Also for simplicity, use jetty web server
- Please follow the provided project structure
- The submitted project will be evaluated for implementation completeness, code quality and documentation
- Be prepared to discuss any part of the application during the in-person interview

5 Deliverable Results

1. Edit the README.md file in the root directory with documentation of any important configurations, references or design concerns

2. A zip file of the project containing the source code and .git folder (local GIT repo), without build artifacts or compiled classes

3. The project should be easily locally executable without any extra configuration with the following commands:

```
mvn clean install
mvn jetty:run
```

4. The application should be accessible in the browser at this url:

```
http://localhost:9090/assignment
```