The source code of my project is available on my GitHub Public Repository as an Open-source Software at https://github.com/anasbanun/spring-data-jpa

You can clone this project to your local repository in your PC with git command:

git clone https://github.com/anasbanun/spring-data-jpa.git

or download the zip file from my GitHub.

Once you successfully manage to run my project you will get the same website as mine at www.anasbanun.com but you can make any changes to the source code and make it your own.

You can also download the project using IntelliJ Ultimate & checkout with version control to download the project but once downloaded by IntelliJ don't open the project as you need to import it as Maven Project.

To open my Project from Eclipse or Spring STS you need to import it as Existing Maven Project.

To run this project, you need to follow these steps:

Change the connection of MySQL from the application.properties to your own as you don't have remote access to my own MySQL. You need to change the following:

```
spring.datasource.url = jdbc:mysql://77.68.87.27:3306/anasbanu_DB2?useSSL=true
spring.datasource.username = anasbanu_DB2
spring.datasource.password = TemprorayTestingPasswordforMySQL2017
```

You need to provide your schema url & the database user with enough privilege access to perform all the required tasks.

Also, you need to make sure that you're using Oracle JDK in Tomcat Run Time Environment.

By default, Spring STS & Eclipse use Oracle JRE so you need to change it to the JDK otherwise the build will fail as Maven requires Oracle JDK. Then right click on the project and Run As then select Maven Install.

Once you have done the above then you can run the project as Spring Boot Application or you can run it on Tomcat Server from Spring STS or Eclipse.

IntelliJ use Oracle JDK by default so you don't have to change anything. You can run the project from IntelliJ as Spring Boot Application or you can deploy it on Tomcat Server but you have to add the war exploded Artifact in the deployment if you're using IntelliJ Ultimate.

My project will automatically build the database to the schema you have provided in the connection details above using Hibernate.

Remember that you need to generate keystore.jks and add the configuration below to your Tomcat server.xml file so that you can access the secure https urls.

```
<Connector KeystoreFile="C:\Program Files\Apache-Tomcat-8.5.6\conf\keystore.jks"
SSLEnabled="true" acceptCount="100" clientAuth="false" connectionTimeout="20000"
executor="tomcatThreadPool" keystorePass="yourpassword" maxKeepAliveRequests="15"
port="8443" scheme="https" secure="true" sslProtocol="TLSv1"/>
```

You almost done just one more step you need to do:

Before you can signup or login you need to go to MySQL or phpMyAdmin and add two entries to the role:

```
Role_User with role_id of 1
Role Admin with role id of 2.
```

That's all you need to do!!!

All the best,

Anas Banun