Project Instructions

1. Build the JAR File

To build the JAR file for your Spring Boot project, follow these steps:

- 1. Navigate to the Root Directory of the Project: Open a terminal or command prompt and navigate to the root folder of your project where the pom.xml file is located.
- 2. **Run the Maven Command to Build the JAR**: In the root directory of your project, execute the following command to clean, install, and skip tests during the build process:

```
mvn clean install -DskipTests=true
```

You should see a .jar file with the name of your project.

2. Build the Docker Image

To build the Docker image for your Spring Boot project, follow these steps:

- 1. **Navigate to the Folder Containing the Dockerfile**: Ensure you are in the root directory of your project or the directory where the Dockerfile is located.
- 2. **Build the Docker Image**: Run the following Docker command to build the Docker image:

```
docker build -t lms-image:latest .
```

3. Run PostgreSQL & Spring Boot Containers

To run PostgreSQL and Spring Boot containers, use Docker Compose to manage the containers. Follow these steps:

- 1. Navigate to the Folder Containing env.yml: Open a terminal where env.yml (Docker Compose configuration file) is located.
- 2. **Run Docker Compose to Start Containers**: Execute the following command to start PostgreSQL and Spring Boot containers in detached mode:

```
docker-compose -f env.yml up -d
```

This command will:

- o Start the containers based on the configuration in env.yml.
- o Run the containers in the background.

4. Send the Register and Login Requests

After starting the containers, interact with the API to perform user registration and login to retrieve the token.

1. **Send a Register Request**: Use **Postman** or another API client to send a POST request to the registration endpoint.

```
POST

url: http://localhost:8080/users/register

Body raw (json)

json {

"email":"marwa4@gmail.com",

"password":"12345678",

"name":"marwa"

}
```

2. **Send a Login Request**: Once registration is successful, send a POST request to the login endpoint to obtain a JWT token.

```
POST

url: <a href="http://localhost:8080/login">http://localhost:8080/login</a>

Body raw (json)

json {

"email":"marwa3@gmail.com",

"password":"12345678"

}
```

3. **Retrieve the Token**: The login response will contain a JWT token. Copy this token as it will be required in the next steps.

5. Install Python Libraries

Before running the Python script, ensure that all the required libraries are installed. Follow these steps:

1. **Install the Required Libraries**: Install the necessary libraries by running the following command:

```
pip install requests faker pandas
```

6. Run the Python Script

With the environment set up and libraries installed, you can now run the Python script. Here's how you can do it:

1. **Modify the Python Script**: Insert the token you received from the login response into the Python script. Replace your jwt token with the actual token in the script:

```
headers = {
   "Authorization": "Bearer your_jwt_token",
   "Content-Type": "application/json"
}
```

Then Run the script