MuseumPlus Application

Language: Java 21

Frameworks: Spring Boot, Maven

Data base: MySQL Workbench

Project Structure Overview:



The names of the classes, fields and methods are self-explanatory. Here is a quick summary:

src\main\java\com\museumPlus: class Main starts the application.

src\main\java\com\museumPlus\dao: interface UserRepository extends JpaRepository<User, Integer> saving boilerplate code for data access and modification.

src\main\java\com\museumPlus\dataImporter: class CSVDataImporter reads the input file and creates a list of User objects.

src\main\java\com\museumPlus\entity: class User contains the blueprint for User objects.

src\main\java\com\museumPlus\rest: class UserRestController implements the REST API: GET, POST, PUT, DELETE.

src\main\java\com\museumPlus\service: interface UserService declares wrapper methods over UserRepository / JpaRepository<User, Integer> for data access and modification just for these methods that we need for this application.

src\main\java\com\museumPlus\service: class UserServiceImpl implements the wrapper methods from UserService by calling the corresponding methods from interface UserRepository / JpaRepository < User, Integer >.

In addition to the required POST API, the application implements, for the sake of completeness, GET, PUT and DELETE.

In the Main class, only POST API is called with users from the list, which are transformed to JSON strings before calling the API.

The MySQL table 'user' can be easily created by using the provided SQL scripts in src\main\resources\scriptsForCreatingMySQLDatabesAndUse:

01-create-MySQL-user.sql to create the user of the data base 02-user-tracker.sql to create the data base and a table named 'user'

Of course, these can be created on your own but if the names in the data source are different, you must make the appropriate changes in file src\main\resources\application.properties. Currently, for these are:

spring.datasource.url = jdbc:mysql://localhost:3306/user_tracker spring.datasource.username = lachezar spring.datasource.password = lachezar