<u>Library Management System using</u> <u>Spring Boot</u>

- Make sure that Java 17 and MySQL database has been installed in your machine.
- Go to application.properties file and change the database name to match your database name, change password and the database running port, in my case it's running on port 3306, and finally add this line server.port=8080 in the same file to make sure it's running on the same port number I use.
- Run The Project file using an IDE ex. IntelliJ IDEA.
- interact with API endpoints:

Book management endpoints:

- I. Get all Books request API -> localhost:8080/api/books
- II. Get one Book by id request API -> localhost:8080/api/books/1

Hint: the Get one Book by id request API will return the book with id 1 in that case.

III. Post request API-> localhost:8080/api/books

```
Body.JSON:
{
    "title":"Machine Learning",
    "author":"Andrew Ng",
    "publicationYear":2023,
    "isbn":"655-52-22"
}
```

IV. Put request API -> localhost:8080/api/books/1

Hint: the Put request API will update book with id 1 in that case. Body.JSON:

```
"name":"Java for beginners",
   "author":"Alex Maro",
   "publicationYear":2023,
   "isbn":"655-52-22"
```

V. Delete one record request API ->

localhost:8080/api/books/1

Hint: It will delete the record with id 1.

Patron management endpoints:

- I. Get all Patrons request API -> localhost:8080/api/patrons
- II. Get one Patron by id request API -> localhost:8080/api/patrons/1

Hint: the Get one Patron by id request API will return the patron with id 1 in that case.

III. Post request API-> localhost:8080/api/patrons

```
Body.JSON:
{
    "name":"Mahmoud Awad",
    "contactInfo":"01128127135"
}
```

IV. Put request API-> localhost:8080/api/patrons/1

```
Hint : the Put request API will update patron with id 1 in that case.
Body.JSON:
{
    "name":"Mahmoud Awad",
    "contactInfo":"01554566638"
```

V. Delete one record request API -> localhost:8080/api/patrons/1

Hint: It will delete the record with id 1.

Borrowing endpoints:

I. Post a borrowing record -> localhost:8080/api/borrow/1/patron/1

Hint: it will post a record with book_id 1 and patron_id 1.

```
Body.JSON
{
    "borrowDate": "2024-04-05",
    "returnDate": "2024-04-10"
}
```