

Practical exercise 1

Implement a RESTful web service of a simple online library application. The service should manage three kinds of resources: Books, Categories and Customers.

Books consists of the attributes title, author, publisher, publishing year and is assigned to a single category. A book category consists of a name and a description and provides information about the number of Books that are assigned to it.

Customers are the users of the library application. A Customer consists of a name, email and password. Email and password can be used as credentials for login into the application.

An anonymous user should be able to read books and categories. But only authenticated customers should also be able to create, change or delete books or categories as well as customers.

Please do:

1. Implement CRUD operations for Customer resource (entity) as RESTful web service.
2. Implement a validation for email address used as username.
3. Implement login endpoint that will return a token. The token should be used to authorize requests to all secured endpoints
4. Implement CRUD operations for Category and Books resources (entities)
5. Implement tests for these endpoints

Recommendations:

- We recommend to use Spring Boot <https://spring.io/projects/spring-boot> , but you can use any other framework.
- Also, we recommend allocating max 4 hours for this assignment.
- You can use any IDE or database you prefer.
- Use Maven or Gradle to build the project

Please submit back the JAVA project within the next 7 days, so we can review it. To achieve this use a public repo in <https://github.com/>