

The Pergamum library is one of the oldest libraries in the world. Renting a book from there means that you should go the library and ask the librarian for a certain book. The librarian will manually search for the book on the shelves (they have no technology there).

However, they want to improve this and they ask [Ness Digital Engineering](#) to create a simple application to help them in easily finding books in the library.

[Ness Digital Engineering](#) decided to start with a simple web application (RESTful api) for managing the books in the library. A book has a title and an author

1. Adding a new book – will add a new book to list of library books
2. Get all books from the library sorted by the author and by their title (in case an author has more books)
3. Delete a book from the library
4. Search for a book by title
5. Update the author for a book.

#### **Technical considerations:**

1. The application should be a RESTfull api, Java based application. It can be implemented with Spring/Spring boot.
2. Preferably using Java 8+
3. The application should have an http endpoint for every of the above functionality. E.g. <http://localhost:8080/library/books> -> get all books
4. The application should be stored in [GitHub](#) and shared with [Ness Digital Engineering](#) by email to [ioan.cioclut@ness.com](mailto:ioan.cioclut@ness.com)
5. No data base required (any data structures can be used)
6. For testing the application, any REST API client can be used: e.g. [Postman](#), [Curl](#), [SoapUI](#), etc

#### **References:**

1. <https://spring.io/guides/tutorials/rest/>
2. <https://spring.io/guides/gs/rest-service/>
3. <https://www.postman.com/product/rest-client/>
4. <https://curl.se>
5. <https://www.soapui.org>
6. <https://www.techtarget.com/searchapparchitecture/definition/RESTful-API>