

You have just completed half of your 20 days journey, the time has come to once again test out your new skills!

TOPIC:

Create a Library Catalogue backend

**CONCEPTS TESTED:**

1. Basics of Redis

- Querying the Redis Database
- Insert key/value to the Redis DB
- Update key/value to the Redis DB
- Search records from the Redis DB

2. Spring Boot / Web

- Routes / End-points
- Handling HTTP requests/response
- Connecting to a Redis Database
- Upload a file (Optional)

**RESOURCES:**

You will be provided with a sample library cover thumbnails (<https://bit.ly/3neGjG1>). Use Advanced Rest Client or Postman to test all your routes/end points.

**MANDATORY REQUIREMENTS:**

Requirement 1

1. Search fields using queries: Title & Author

2. Directory of books

- List of 10 books by default, with the titles in alphabetical order
- Each item in the books list should return the following information:
  - i. Thumbnail of the Cover (image URL)
  - ii. Title
  - iii. Author

c. Search result should include all possibilities based on keywords found in Title or Author fields

d. Able to sort books list by Title or Author from A-Z and Z-A

e. Pagination

f. Ability to change a number of books listed in a page

g. You may use GET or POST methods for the search

Requirement 2

1. Search fields using parameters: book id

2. Return a single book.

3. Query Book info return as all details result.

4. Markdown all your restful API with best practice naming convention on your project README.md

OPTIONAL REQUIREMENTS:

1. Define an upload route to upload a book cover image to your local server where all the book thumbnail images are kept and check if size is not more than 20MB
2. Deploy your app to Heroku.

DURATION:

You have 6 hours (not inclusive of 1-hour lunch break) to complete this Assessment. Your final commit must be pushed to your BitBucket or GitHub repo before 5.30pm. Please indicate in Slack, if you are using a different username for your BitBucket/GitHub account.