

## Tasks with middle level complexity

### Task 1

Implement a **RESTful API** for a simple online bookstore using **Spring** and **Hibernate**. The **API** should allow users to perform **CRUD** operations on books, authors, and genres. Books should have a title, author, genre, price, and quantity available. Users should be able to search for books by title, author, or genre. Use **Hibernate** to persist data to a relational database.

ChatGPT conversation log file: <https://chat.openai.com/share/f33514da-27e2-4732-ba15-ec66642a58f5>

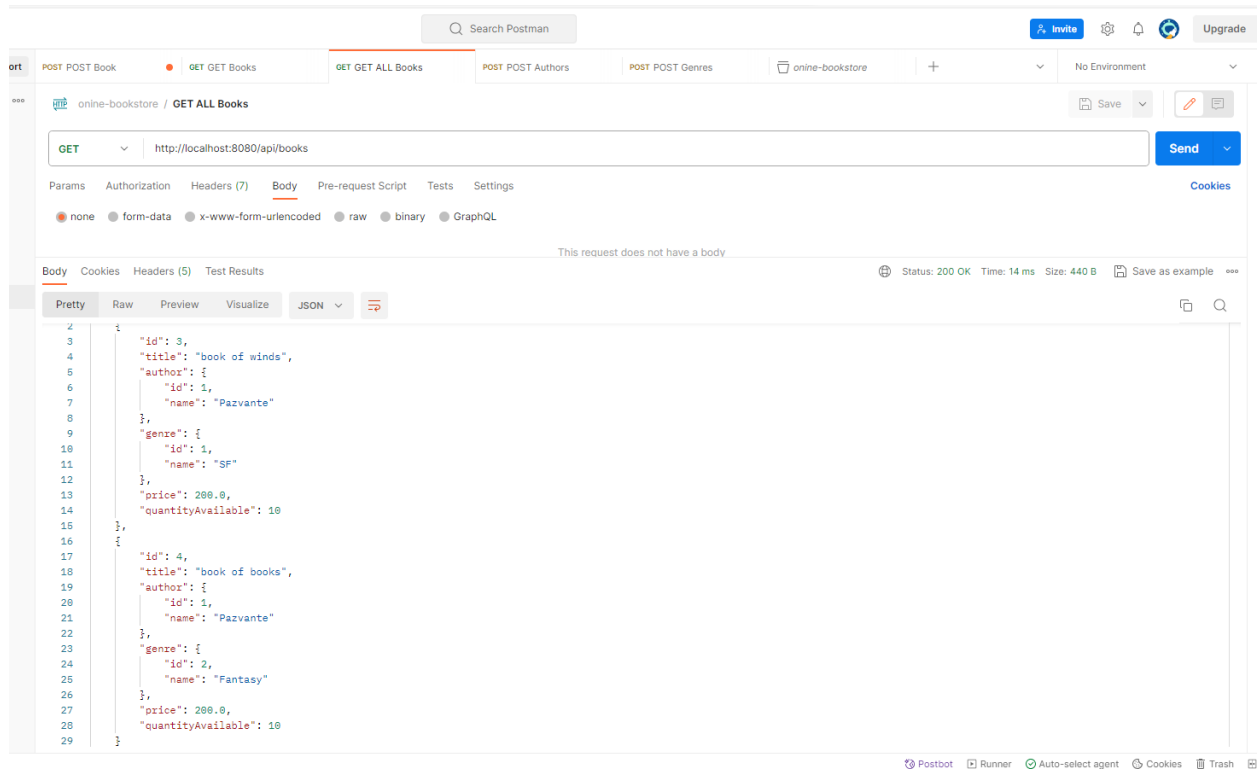
Tested some of the endpoints and they seem to be working:

The screenshot displays the Postman interface for a REST client. At the top, a collection named 'online-bookstore' is open, showing several endpoints. The 'POST Book' endpoint is selected, with the URL 'http://localhost:8080/api/books' and the method 'POST'. The 'Body' tab is active, showing a JSON payload for creating a new book. The payload includes a title, author (with id and name), genre (with id and name), price, and quantity available. The response tab shows the JSON response from the server, which includes an id for the newly created book. The status is 201 Created.

```
1 {
2   "title": "book of books",
3   "author": { "id": 1, "name": "Pazvante" },
4   "genre": { "id": 2, "name": "Fantasy" },
5   "price": 200,
6   "quantityAvailable": 10
7 }
```

```
2   "id": 4,
3   "title": "book of books",
4   "author": {
5     "id": 1,
6     "name": "Pazvante"
7   },
8   "genre": {
9     "id": 2,
10    "name": "Fantasy"
11  },
12  "price": 200.0,
13  "quantityAvailable": 10
14 }
```

Status: 201 Created



Used JaCoCo for test coverage and it's at 89%:

