# The Best Book

John has joined a new consultancy firm as a full stack developer and has been asked to code a full stack component for filtering books from a database using a UI.

The Statement of Work given to him is as follows:

# **Backend Instructions**

For the backend, SpringBoot with MySQL is to be used. The product model is as follows:

Field	DataType	Present in Request Body
bookid	Number	Yes
book_name	String	Yes
product_costprice	Number	Yes
author	type: String	Yes

The API's to be created are as follows:

Base URL: localhost:8081/books/

API Route	API Type	Success Response Code	Validation Error Code
/books	POST	200	400
/book	GET	200	NA
/book	DELETE	200	NA

1) saveBook : Assume that the request body has all the parameters present in the model.

If any of the parameters are empty, a 400 status code is expected with the response For BookID there is another validation that the id cannot be less than 0 and more than 1000, for any invalid entry, a 400 status code should be returned.

#### 2) Get All Products

No parameter is to be sent. All the books from the database are to be queried and returned in the following manner:

```
JSON Raw Data Headers

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[
    "bookid": 1,
    "bookname": "The Alchemist",
    "author": "Paulo Coelho",
    "book_costprice": "160"
    },
    {
        "bookid": 255,
        "bookname": "Murder On The Orient Express'
        "author": "Agatha Christie",
        "book_costprice": "446"
    }
]
```

#### 3) Delete All Products

No parameter is to be sent. All the books from the database are to be deleted and a 200 status response should be sent.

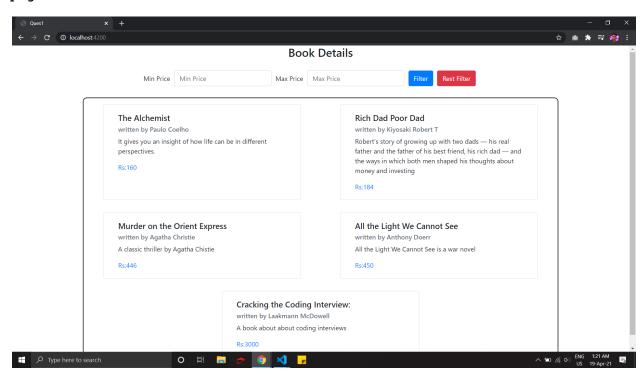
#### **Project Files:**

- 1. You only have to finish up the files which are inside the Controller and Service folder
- 2. Do not remove any existing dependency or make changes in a file other than the Controller Folder.
- 3. To test your progress, you can hit the mvn test command or you can run the DemoApplicationTestFile as a JUnit Test.

### **Frontend Instructions**

For the Frontend, Angular is to be used.

The frontend component should only have one component which should look like this on page load.



There will be 2 input boxes with the following field:

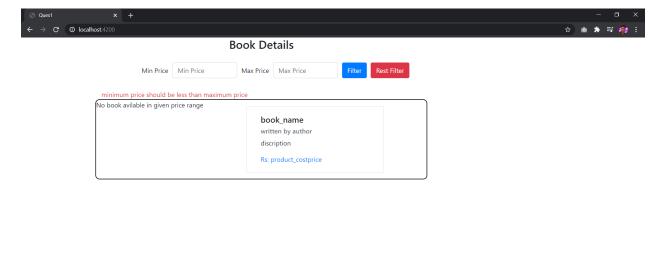
Parameter	Form Field Name	Validations to be done
Minimum Book Price	min_price	Any positive number
Maximum Book Price.	max_price	Any positive number

There are 2 input boxes for price filtering and a Submit button.

On clicking the submit button, if both the parameters are right then filter the book array and only show the books in that range.

If everything is right, then the filtered books should only be shown instead of all the books.

Otherwise if max price is greater than min price or there are no books in that range then something like this should be shown :





## **Project Files:**

- 1. You only have to finish up the book-details component to achieve the final result.
- 2. Do not remove any existing dependency or make changes in a file other than the ones mentioned above.
- 3. To test your progress, you can hit the ng test command.