

Here's a Java project question related to API development:

You have been assigned to develop an API for a simple online bookstore. The API should allow users to perform various operations related to books and orders. Design and implement a Java project that satisfies the following requirements:

1. Book Management:

- Users should be able to retrieve a list of all books available in the bookstore.
- Users should be able to search for books by title, author, or genre.
- Users should be able to add a new book to the bookstore's inventory.
- Users should be able to update the details of an existing book (e.g., title, author, price).
- Users should be able to delete a book from the bookstore's inventory.

2. Order Management:

- Users should be able to place an order by specifying the book(s) they want to purchase and the quantity of each book.
- Users should be able to retrieve the details of a specific order.
- Users should be able to retrieve a list of all orders placed.
- Users should be able to update the status of an order (e.g., processing, shipped, delivered).

3. Security:

- Implement authentication and authorization mechanisms to ensure that only authorized users can perform certain operations (e.g., adding a new book, updating an order).

4. Data Persistence:

- Implement a data storage mechanism (e.g., a relational database, file system) to store and retrieve book and order data.

5. Error Handling:

- Implement proper error handling and return appropriate HTTP status codes and error messages when exceptions occur or invalid requests are made.

6. Documentation:

- Provide clear and comprehensive documentation for the API, including endpoints, request/response formats, and any necessary authentication/authorization details.

Note: You are free to choose any Java web framework or library (e.g., Spring Boot, JAX-RS) to develop the API.

Your task is to design and implement the Java project that fulfills the requirements mentioned above. Provide the necessary classes, interfaces, and any other components required to build the API. You can also include sample code to demonstrate the usage of your API.



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Please submit your project as a compressed file containing all the source code, configuration files, and any other necessary resources to srichandana@sparkinfotech.com , jay@sparkinfotech.com and hr@sparkinfotech.com

Good luck!



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