A logo for a company

Description automatically generatedOnline Bookstore Management System

# Description

The system should offer customers the ability to browse through available books, request books for borrowing, and manage the borrowing and return dates.

Additionally, it should enable administrators to maintain the inventory by adding, updating, or deleting books as needed.

# Requirements

Implement RESTful APIs that provide the following functionalities:

## User administration

* Add new books.
* Update book details
* Manage the inventory (e.g., update stock levels, set book

availability) (assuming every book has only one copy)

## Customer

* Customers should be able to browse books by categories.
* View book details (Title, Author, Publish Date, Category)
* Request to borrow a book.

**With the following specifications**

* Implementing at least 2 microservices and communicate each other using JWT
* Apply any one of database Version control Tools

# Bonus requirements (if applicable)

1. Perform unit tests for one service at least.
2. Enable Swagger on Spring boot “API Documentation.”
3. Implement a system that recommends books based on a customer's browsing and borrowing history.
4. Users should be able to create an account, log in, and log out. The system should store user information such as name, email address, and shipping address.

# Things needed to complete the challenge.

# Deliverable

* A link to your Git repository using (Github/GitLab/Bitbucket/AzureDevOps Repos).
* A README file that explains how to run your code.

# Evaluation Criteria

* Applying the overall software architecture of the application (micro-service design & JWT authentication)
* Implement micro-services architecture with services written in Spring Boot mostly, with either Java 11+ / Kotlin.
* Applying Database Version Control Tool
* The structure and quality of the code itself (Clean Codes Principles)
* The use of well-known patterns for REST and Spring development
* The ability to model the problem domain (data models and APIs)
* Correctness: Does your backend meet all the requirements?
* Efficiency: Is your backend fast and efficient?
* Usability: Is your backend easy to use for administrators and users?

# Milestones (Checkpoints)

1. Design/implement Microservices with JWT authentication
2. Add new books.
3. Customers should be able to browse books by categories.
4. Request to borrow a book.
5. Update book details, View book details

**Bonus Checkpoints**

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