Dos project

Bazar.com

Book store

Project report

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Bazar.com Online Bookstore Project Report

Introduction

Bazar.com is envisioned as the world's smallest online bookstore, carrying a highly selective collection of four books tailored for a niche audience. Our task was to design a scalable, distributed online bookstore utilizing a multi-tier architecture with microservices to handle operations such as searching, retrieving information, and purchasing books.

System Design

Architecture

The system is designed with a two-tier web architecture:

Front-end Tier: This tier is responsible for interfacing with the user, accepting requests, and performing initial processing.

Back-end Tier: Comprises two main components:

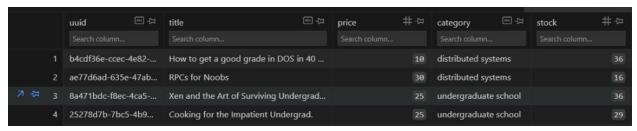
Catalog Server: Manages the book catalog and maintains book details like stock quantity, cost, and topic.

Order Server: Maintains a log of all book orders and handles purchase requests.

Each tier is comprised of microservices, with the front-end implemented as a singular microservice and the back-end divided into two distinct microservices for the catalog and order functionalities.

For database

Using sqlite



For run the project

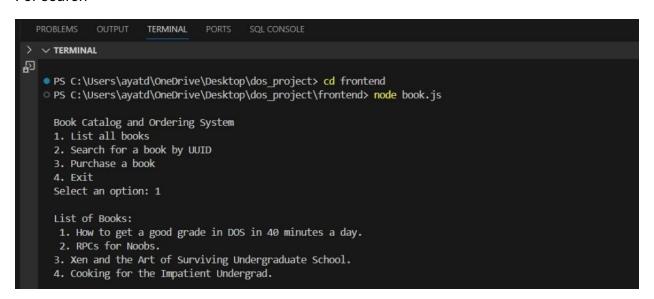
In terminal:

Cd frontend

Node book.js

List of book

For search



For order

```
Book Catalog and Ordering System

1. List all books
2. Search for a book by UUID
3. Purchase a book
4. Exit
Select an option: 3

Enter UUID of the book to purchase: ae77d6ad-635e-47ab-8109-188aa0aadc23
Enter quantity to purchase: 2
Buying succeeded

Book Catalog and Ordering System
```

```
Book Catalog and Ordering System

1. List all books

2. Search for a book by UUID

3. Purchase a book

4. Exit
Select an option: 2

Enter UUID of the book to search: ae77d6ad-635e-47ab-8109-188aa0aadc23
book details:

2. RPCs for Noobs.
price :30
category : distributed system
stock:16
```

We use Postman for testing endpoint:

