

Book Shop Management System

Read Me

Introduction

The **Book Shop Management System** is a simple, console-based application designed to manage a bookstore's inventory. It provides essential functionalities for adding, removing, updating book details, searching for books, and calculating total sales. This project is ideal for small to medium-sized bookstores that need a lightweight inventory management tool.

Project Type

Backend

Deployed App

- This project is a console-based application and does not have a deployed frontend or backend. It runs locally on your machine.

Directory Structure

bash

Copy code

csweek/

```
|-- BookShop.mjs      # Main class for managing the bookshop
|-- helpers.mjs      # Helper functions for the project
|-- test.mjs         # Test file to demonstrate the functionality
|-- package.json     # Project metadata and configuration
```

Video Walkthrough of the Project

(No video walkthrough available as this is a console-based application)

Video Walkthrough of the Codebase

(No video walkthrough available as this is a console-based application)

Features

- **Add Books:** Add new books to the inventory with title, author, price, and quantity.
- **Remove Books:** Remove books from the inventory by title.
- **Update Book Price:** Update the price of an existing book.
- **Search Books:** Search for books by title or author.
- **List All Books:** Display all books currently in the inventory.
- **Calculate Total Sales:** Calculate the total sales value based on the current inventory.

Design Decisions or Assumptions

- **Book Title Uniqueness:** The system assumes that book titles are unique to simplify operations like adding and removing books.
- **In-Memory Storage:** The current implementation stores all data in memory, meaning the data will be lost once the application is closed.
- **Simple Search:** The search functionality is based on a simple string match for book titles and authors.

Installation & Getting Started

To run the Book Shop Management System on your local machine, follow these steps:

1. Clone the repository to your local machine.

```
bash
```

```
Copy code :- git clone <repository-url>
```

```
cd csweek
```

2. Ensure you have Node.js installed.
3. Run the test file to see the Book Shop Management System in action:

```
bash
```

```
Copy code :- node test.mjs
```

Usage

- The application begins by displaying a welcome message.
- Various methods from the BookShop class are tested in test.mjs to demonstrate the system's capabilities.

Credentials

No authentication is required for this project as it is a simple console-based application.

➤ APIs Used

This project does not use any external APIs.

➤ API Endpoints

As this is a console-based application, there are no API endpoints available.

Technology Stack

- **Node.js:** A JavaScript runtime environment used for executing the application.
- **JavaScript (ES Modules):** The application is structured using ECMAScript Modules for modularity and reuse.