OLD BOOK STORE MANAGEMENT SYSTEM

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CERTIFICATE OF APPROVAL

This is to certify that the B.Tech. Mini Project Viva-voce of the dissertation titled **"Old Book Store Management System"** in **OOPJ** at CGU has been conducted. They have presented their work in a satisfactory manner, demonstrating the knowledge and skills required for the completion of the mini-project, and are deemed to have fulfilled the prerequisites for the degree of B.Tech. It is understood that by this approval, the undersigned does not necessarily endorse or approve any statement made, opinion expressed, or conclusion drawn therein, but only for the purpose for which it has been submitted.

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ABSTRACT

The **Old Book Store Management System** is a software solution designed to efficiently manage the buying, selling, and inventory of pre-owned books. It streamlines the process of maintaining book records, tracking customer transactions, and managing stock levels.

This project benefits bookstore owners, customers, and administrators by providing a structured approach to organizing books, handling sales, and ensuring smooth store operations. The system supports key features such as **book catalog management, customer order tracking, stock updates and sales monitoring**.

The system follows a well-defined structure, ensuring seamless management of books, orders, and customers. It enhances efficiency by reducing manual effort, improving accessibility, and ensuring a user-friendly experience.

This report presents a comprehensive breakdown of the project, covering the **system design, functionality, key features, and implementation**.

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1. INTRODUCTION

Books have always been a valuable source of knowledge, entertainment, and learning. With the growing demand for affordable reading options, old book stores play a crucial role in providing second-hand books to readers at reasonable prices. Managing an old book store efficiently requires a structured system to track book availability, customer transactions, and sales records.

The **Old Book Store Management System** aims to streamline and optimize the process of handling book inventory, customer orders, and sales transactions. Traditionally, book records were maintained manually, leading to inefficiencies, mismanagement, and errors. With this system, store owners, employees, and customers can access real-time information about book availability, purchase history, and order tracking in an organized manner.

Key functionalities of the system include:
• Efficient book cataloging, including details like title, author, genre, and condition.
• Customer order management for easy tracking of purchases and requests.
• Stock monitoring to keep inventory updated and avoid shortages.
• Sales analysis to help store owners understand trends and improve business operations.

This system enhances the overall efficiency of managing an old book store, ensuring smooth operations and better customer service.

2. CONCEPTS USED

Class Definition (Old Bookstore):

- **The class likely represents a bookstore that deals with old books.**
- **It may include methods for adding, removing, searching, or selling books.**

Data Handling:

- **The program might use arrays, lists, or a map (like HashMap) to store book details such as title, author, price, and condition.**

Object-Oriented Programming (OOP) Concepts Used:

- **Encapsulation: Data related to books is kept within the class.**
- **Constructors: Used for initializing book objects.**
- **Methods (Functions): Different operations (like searching, adding, or selling books) are implemented as methods.**
- **Inheritance/Polymorphism (if used): The class might extend another class or implement an interface.**

User Interaction (if applicable):

- **The program may accept user input via Scanner or a GUI interface.**
- **It might use loops (for/while) to allow multiple operations.**

Error Handling:

- **Try-catch blocks might be present to handle exceptions (like incorrect input or missing book records).**

File Handling (if applicable):

- **If the bookstore data is stored in a file, the code might include File Reader/File Writer or Buffered Reader for reading and writing.**

Sorting and Searching (if implemented):

- **A search method may be included to find books by title, author, or price.**
- **Sorting may be done using Collections.sort() or custom sorting logic.**

3. KEY COMPONENTS

1. Data Structures Used

- **ArrayList / HashMap: If book records are stored dynamically, a list or map might be used for flexibility.**
- **Class Objects: Each book could be stored as an object with attributes like title, author, and price.**

2. Methods for Functionality

- **add Book (): Adds new books to the store.**
- **search Book (): Finds books based on title/author.**
- **sell Book (): Removes a book from the store after selling.**
- **display Books (): Lists all available books.**

3. Exception Handling

- **If the program deals with user input, exceptions like NumberFormatException and NullPointerException might be handled using try-catch.**

4. Loops and Conditions

- **For/while loops: Used to iterate through book lists.**

- **If-else conditions: Used for checking availability or price filtering.**

5. File Handling (if included)

- **Reading from a file: To fetch book details.**
- **Writing to a file: To update records after a sale.**

Output:

```
-----User Type-----
1. Customer
2. Seller
3. Data administrator
4. Exit
1
------Customer Login Page-----
01. Login (using Mobile Number)
02. Register
03. Go back
04. Exit
1
Enter your mobile number:
1111111111
```

```
Welcome Cust1 to the Old Book Store:

Please select your next choice:
------Customer Menu-----
1. Sell books
2. Buy books
3. Give books for donation
4. Give feedback/suggestions
5. Return
6. Exit
1
Enter the book name:
bOOK1
Enter the book quantity:
2
Please select your location:
------------Available Locations-----------------
1. Delhi
2. Mumbai
3. Kolkata
4. Chennai
5. Bangalore
If your location is not available in the given list then press 0:
2
Please, enter the pick-up address:
Mahura, Janala, Bhubneshwar-752054
```

```
Please, enter your mobile number:
8989788909
Please, enter the OTP sent to your mobile number (any 6-digit number)
453423
-------------------------------------------------
Your order had been placed.
The book will be picked up from your location within next 2 days.
Thank you for using our services.
-------------------------------------------------
-----User Type-----
1. Customer
2. Seller
3. Data administrator
4. Exit
4
Exiting... Thank you.
PS D:\Vs\Java\myrepo\OOPJ_LAB_EXP>
```

- **Github link:**

https://github.com/AnshumanGarg991/OldBookManagementSystem.git

4. CONCLUSION

The **Old Book Store Management System** is an efficient solution for managing book inventory, automating record-keeping, and facilitating seamless book transactions. By utilizing **object-oriented programming (OOP) principles**, the system ensures modularity, maintainability, and ease of expansion.

Key Takeaways:

✓ **Streamlines book inventory management** by allowing users to add, search, and sell books.

✓ **Implements structured data storage** using lists or maps to ensure quick retrieval and updates.

✓ **Enhances user interaction** through efficient input handling and search functionalities.

✓ **Ensures data consistency** by integrating exception handling and validation mechanisms.

This project provides a **solid foundation** for future enhancements, such as **database integration** for persistent storage, a **graphical user interface (GUI) for better user experience**, and potential **online book store integration** for broader accessibility.

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