ONLINE USED BOOKS SELLING

A PROJECT REPORT
for
Mini Project (KCA353)
Session (2023-24)

Submitted by

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MASTER OF COMPUTER APPLICATION

Under the Supervision of
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Submitted to

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CERTIFICATE

Certified that **Shivanshu Panwar (2200290140148)** has carried out the project work having "**Online Used Books Selling**" (**Mini Project-KCA353**) for **Master of Computer Application** from Dr. A.P.J. Abdul Kalam Technical University (AKTU) (formerly UPTU), Lucknow under my supervision. The project report embodies original work, and studies are carried out by the student himself/herself and the contents of the project report do not form the basis for the award of any other degree to the candidate or to anybody else from this or any other University/Institution.

Date:

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This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

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KIET Group of Institutions	**KIET Group of Institutions**

Online Used Books Selling

Shivanshu Panwar

ABSTRACT

The Online Used Books Selling Project is an e-commerce platform designed to facilitate the buying and selling of pre-owned books. The Project offers an ideal solution for anyone looking to monetize their old books. The main objective is to provide a second-hand book at convenient price. User can buy used book according to their needs. A Customer can create and sign in to his account, place items into a shopping cart. The admin will have additional functionalities i.e. admin can add, delete and update the book details, book categories etc.

This project aims to contribute to the evolution of online used bookselling by enhancing the user experience and addressing the needs and preferences of both buyers and sellers. Through practical implementation and rigorous evaluation, it seeks to create a platform that not only meets but exceeds user expectations, ultimately driving growth and success in the online used books market.

Through a combination of user surveys, usability testing, and data analysis, the project identifies specific areas for improvement and proposes actionable solutions. These solutions range from interface enhancements to the implementation of advanced recommendation algorithms, aimed at facilitating smoother transactions and fostering a sense of community among users.

ACKNOWLEDGEMENTS

Success in life is never attained single-handedly. My deepest gratitude goes to my project supervisor, **Ms. Komal Salgotra** for her guidance, help, and encouragement throughout my project work. Their enlightening ideas, comments, and suggestions.

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Shivanshu Panwar

(2200290140148)

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CHAPTER 1

INTRODUCTION

1.1 PROJECT DESCRIPTION

The Online Used Books Selling project offers a platform for selling and buying old books.
This project description provides an overview of the key features and functionalities of the Online Used Books Selling Project.

In this project Technology Used

i. **Front End Technology:**
   - HTML
   - CSS
   - JavaScript
   - Bootstrap

ii. **Back-End Technology:**
   - Java

iii. **Database:**
   - MySQL

This project has two modules
   - Admin Module
   - User Module

1.1.1 Admin Module

- Store Books: In this section, admin can see all details of books available in the store like Book id, Book name, Author name, Price, Quantity.
- Update Book details: In this section, admin can update Book id, Book name, Book author, Book price, Book quantity.
- Add Books: In this section, admin add new book with their book name, book author, book price, book quantity.
- Remove Books: In this section, admin remove book by using their book id.
- New Book Request: Admin Receives new book request through email with all details.

1.1.2 User Module

- New User Registration: In this section, user registration by using email id, set password, first name, last name, address, mobile no and accept all terms and condition then user registration process for using platform is completed.
- User Login: In this section, user login by using their email as username and password which is set during registration.
- Available Books: In this section, user check available books with their author's name and price.
- Shopping Cart: In this section, user buy book by giving their details related to payment.
- Cancel Order: In this section, user can also cancel book order which is not confirmed.

1.2 PROJECT SCOPE

The objective of this project is to develop a system that provides service of selling and buying old books. The goal is to support environment and education for all.

1.3 HARDWARE/SOFTWARE USED

1.3.1 Hardware Requirements:

Table 1.3.1 Hardware Requirements

Hardware Used	Configuration
PROCESSOR	I3 or Higher
RAM	4GB
HARD DISK	40 GB
OPERATING SYSTEM	Windows 10 or above

1.3.2 Software Requirements:

Table 1.3.2 Software Requirements

Database	MySQL Workbench 8.0 CE
Server	Apache Tomcat 4.0
IDE	Eclipse for Enterprise

CHAPTER 2

FEASIBILITY STUDY

A feasibility study is a high-level capsule version of the entire System analysis and Design Process. The study begins by classifying the problem definition. Feasibility is to determine if it's worth doing. Once an acceptance problem definition has been generated, the analyst develops a logical model of the system. A search for alternatives is analysed carefully. There are 3 parts in feasibility study.

2.1 TECHNICAL FEASIBILITY

Does the necessary technology exist to do what is been suggested Does the proposed equipment have the technical capacity for using the new system? Are there technical guarantees of accuracy, reliability and data security? The project is developed on RYZEN 7 with 16 GB RAM. The environment required in the development of system is any windows platform. The Front-end language used in the development is HTML, CSS, JavaScript and in backend Java and database is MySQL.

2.2 OPERATIONAL FEASIBILITY

Question that going to be asked are Will the system be used if it developed and implemented. If there was sufficient support for the project from the management and from the users. Have the users been involved in planning and development of the Project.

2.3 BEHAVIOURAL FEASIBILITY

The behavioural feasibility of an online used books selling project refers to its practically and viability from user perspective. It assesses whether the proposed

system aligns with the intended user's needs, expectations and behaviours.
The behavioural feasibility of an online used books selling project refers to the assessment of whether the proposed system can be accepted and effectively used by the users.

2.4 Economic Feasibility

a. **Cost Estimation:**
   Provide a detailed breakdown of the estimated costs for development, marketing, and ongoing maintenance. Consider factors such as development resources, technology licensing, and marketing strategies.
b. **Revenue Generation:**
   Analyse potential revenue streams, such as advertising, subscription models, or transaction fees, to ensure the project's financial sustainability.
c. **Return on Investment (ROI):**
   Estimate the ROI based on projected revenues and costs to determine the financial viability of the project.

CHAPTER 3

DESIGN

3.1 Use Case Diagram:

Use case diagram consists of actors, use cases and their relationships. These diagrams are especially important in organizing and modelling the behaviours of a system. A use case is a list of actions or event steps typically defining the interactions between a role of an actor and a system to achieve a goal. A use case is a useful technique for identifying, clarifying, and organizing system requirements. A use case is made up of a set of possible sequences of interactions between systems and users that defines the features to be implemented and the resolution of any errors that may be encountered. While a use case itself might drill into a lot of detail (such as, flow of events and scenarios) about every possibility, a use-case diagram can help provide a higher-level view of the system, providing the simplified and graphical representation of what the system must actually do.

Use cases define interactions between external actors and the system to attain particular goals. A use case diagram contains four main components:

Actor :

Actors are usually individuals involved with the system defined according to their roles. The actor can be a human or other external system.

Use Case:

A use case describes how actors uses a system to accomplish a particular goal. Use cases are typically initiated by a user to fulfil goals describing the activities and variants involved in attaining the goal.

Relationship:

The relationships between and among the actors and the use cases.

System Boundary:

The system boundary defines the system of interest in relation to the world around it.

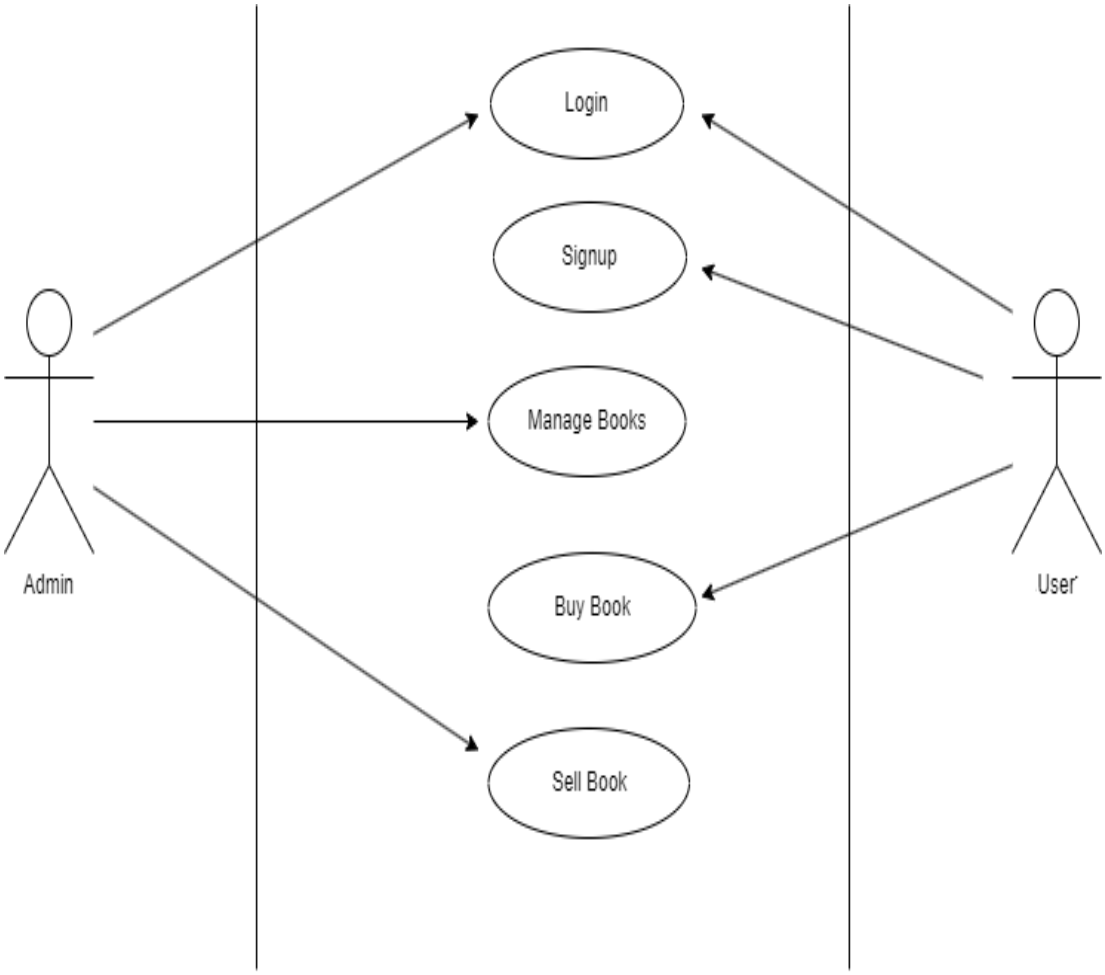


Fig 3.1 Use Case Diagram

3.2 Entity Relationship Diagram (E-R Diagram):

An Entity Relationship (ER) Diagram is a type of flowchart that illustrates how "entities" such as people, objects or concepts relate to each other within a system.

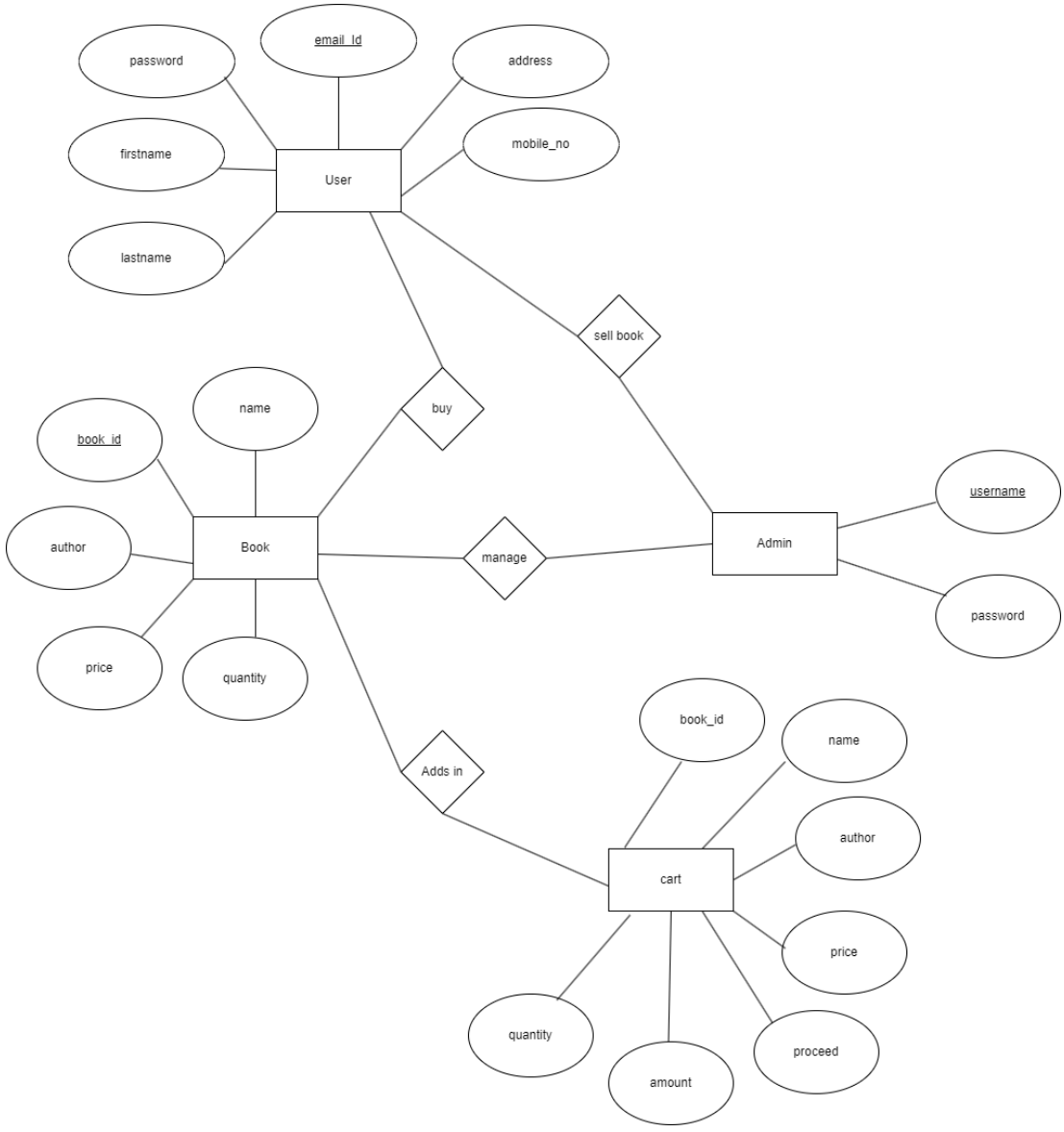


Fig 3.2 Entity Relationship Diagram

3.3 Database Design

The data in the system has to be stored and retrieved from database. Designing the database is part of system design. Data elements and data structures to be stored have been identified at analysis stage. They are structured and put together to design the data storage and retrieval system.
A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make database access easy, quick, inexpensive and flexible for the user. Relationships are established between the data items and unnecessary data items are removed. Normalization is done to get an internal consistency of data and to have minimum redundancy and maximum stability. This ensures minimizing data storage required, minimizing chances of data inconsistencies and optimizing for updates.
The MySQL Access database has been chosen for developing the relevant databases.

3.3.1 Table User:

This table store the admin login details:

Column	Type	Nullable
password	varchar(100)	YES
firstname	varchar(100)	YES
lastname	varchar(100)	YES
address	text	YES
phone	varchar(100)	YES
mailid	varchar(100)	YES
usertype	int	YES

Table 3.1 User Table

3..3.2 Table Book: This table store the books details:

Column	Type	Nullable	Indexes
barcode	varchar(100)	NO	PRIMARY
name	varchar(100)	YES	
author	varchar(100)	YES	
price	int	YES	
quantity	int	YES	

Table 3.2 Book Table

3.4 Data Flow Diagram

DFD is the abbreviation for Data Flow Diagram. The flow of data of a system or a process is represented by DFD. It also gives insight into the inputs and outputs of each entity and the process itself. DFD does not have control flow and no loops or decision rules are present. Specific operations depending on the type of data can be explained by a flowchart. It is a graphical tool, useful for communicating with users, managers, and other personnel. it is useful for analysing existing as well as proposed system.

3.4.1 DFD For Level-0:

The zero (0) level DFD of online book store is also known as context diagram of online book store. It represents the overview of whole book store system. It is designed as an abstract view, showing the entire system as a single process with its relationship to the external entities such as admin, customer etc.

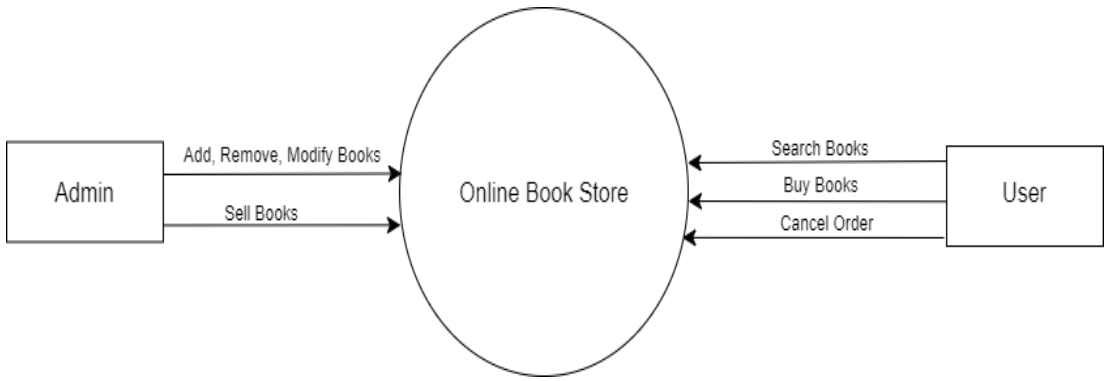


Fig 3.3 Level – 0 DFD

3.4.2 DFD For Level-1:

First Level DFD (1st Level) of Online Book Store shows how the system is divided into sub-systems (processes), each of which deals with one or more of the data flows to or from an external agent, and which together provide all of the functionality of the Online Book Store system as a whole. It also identifies internal data stores of Delivery, Book Stocks, Bills and shows the flow of data between the various parts of Book of the system. DFD Level 1 provides a more detailed breakout of pieces of the 1st level DFD. You will highlight the main functionalities of Book Store.

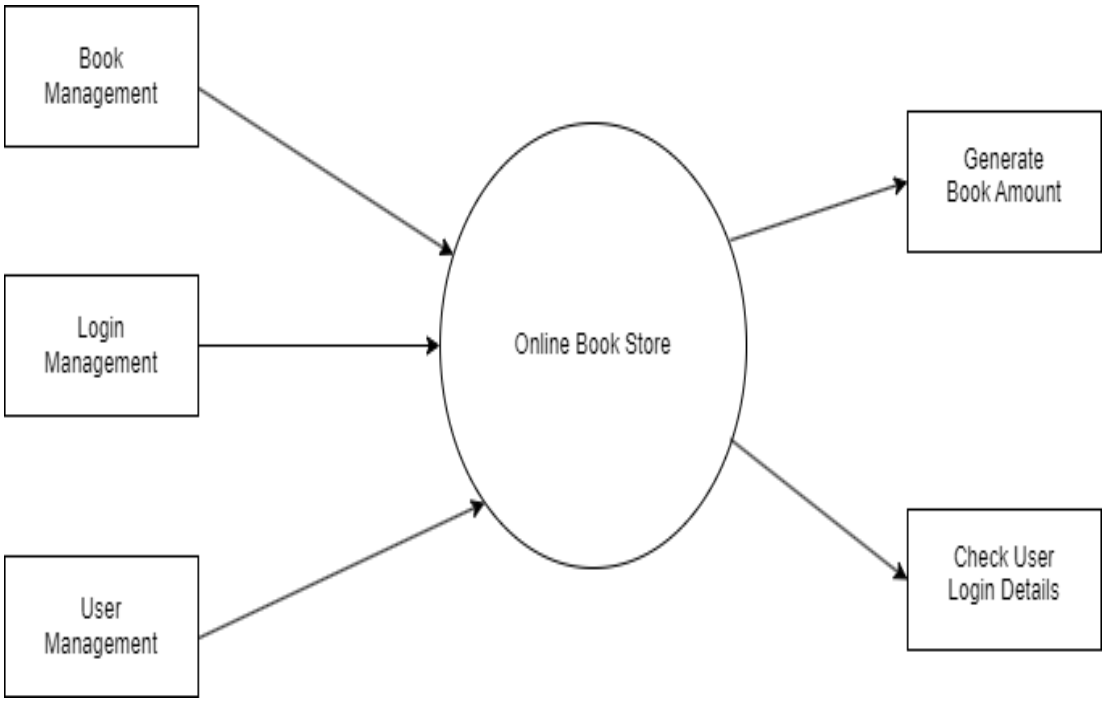


Fig 3.4 Level – 1 DFD

3.4.3 DFD For Level-2:

DFD Level 2 then goes one step deeper into parts of Level 1 of Book Store. It may require more functionalities of Book Store to reach the necessary level of detail about the Book Store functioning. First Level DFD (1st Level) of Online Book Store shows how the system is divided into sub-systems (processes). The 2nd Level DFD contains more details of Delivery, Book Stocks, Bills, Order Update, Order, Customer, Book.

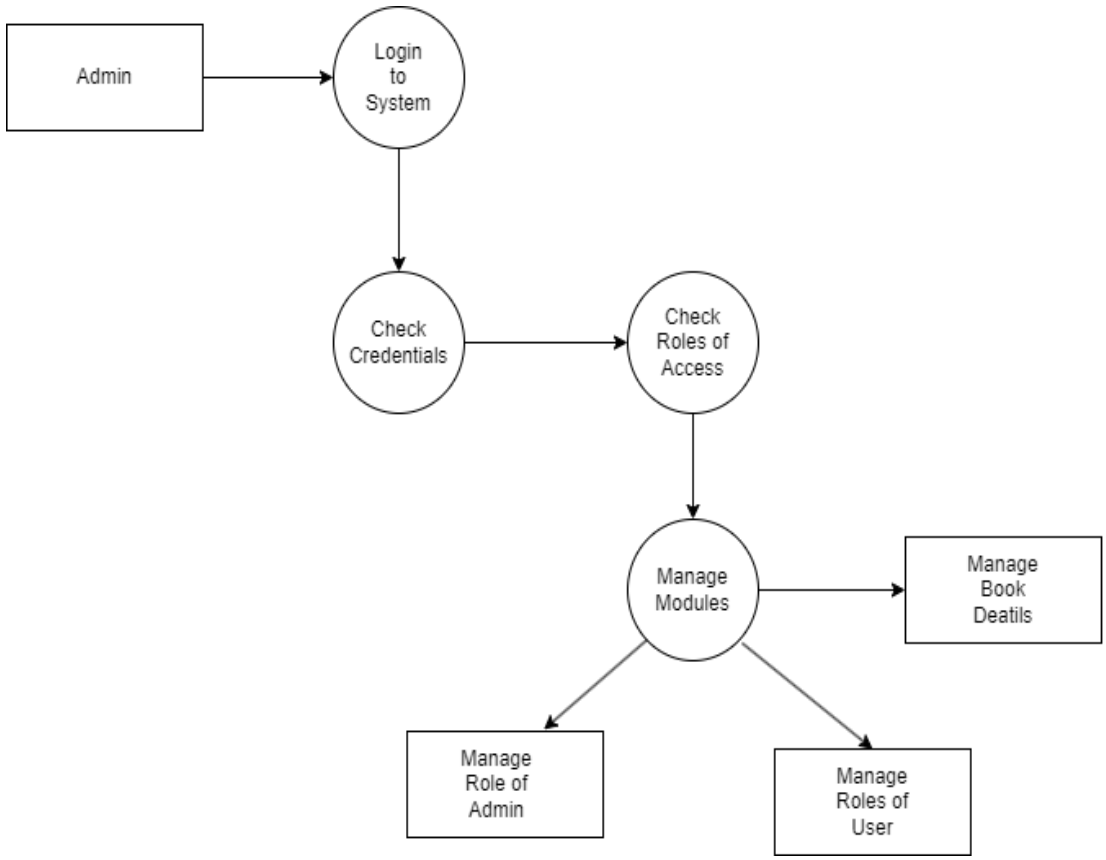


Fig 3.5 Level – 2 DFD

CHAPTER 4

TESTING

4.1 INTRODUCTION

The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault or weakness in a work product. It provides a way to check the functionalities of components, sub-assemblies, and/or a finished product it is the process of exercising software with the intent of ensuring that the software system meets its requirements and user expectations and does not fail in an unacceptable manner. There are various types of tests. Each test type addresses a specific testing requirement.

Let's find out possible test scenarios or cases for the online used books selling system. As you can see from the online used books selling project, two types of users.

- **Admin:** who is responsible for manage books on the portal.
- **Users:** who sell and buy books.

4.2 TYPES OF TESTING

4.2.1 Unit Testing

Unit testing focuses verification effort on the smallest unit of software design, the module. The unit testing, we have is white box oriented and some modules the steps are conducted in parallel.

a) Test Cases for User

- Check that all the mandatory fields are filled on the user profile page.
- Check if there is any option for changing the password.

- Check user can log in after entering valid credentials. He should be able to see books.
- Check whether a user can choose the book id.

b) Test Cases for Admin

- Check for the admin that should be an option for adding a new book.
- Check after clicking on the book name. The admin should be able to update book under the update section.
- Check to create a new book. To enter the book name, the admin must fill in some mandatory fields like book quantity and book price.

4.2.2 Integration Testing

Testing is done for each module. After testing all the modules, the modules are integrated and testing of the final system is done with the test data, specially designed to show that the system will operate successfully in all its aspects conditions. Thus, the system testing is a confirmation that all is correct and an opportunity to show the user that the system works. The purpose of integration testing is to verify functional, performance and reliability requirements placed on major design items. These "design items", i.e. assemblages (or groups of units), are exercised through their interfaces using black box testing, success and error cases being simulated via appropriate parameter and data inputs. Simulated usage of shared data areas and inter-process communication is tested, and individual subsystems are exercised through their input interface.

Test Cases for System

- Check If a user enters the address section of the browser and hits enter, the application should be open.
- Check the application is loading properly.
- Ensure all the portal's images, logos, and text are visible.
- Check the application login functionality.

Check that only users with valid credentials can log into the application.

CHAPTER 5

CONCLUSION & FUTURE SCOPE

5.1 Conclusion

In conclusion, the Online Used Books Selling project serves as an invaluable tool in the realm of education, offering a comprehensive and user-friendly platform to aid students in their preparation journey and book readers in their books reading.

As we move forward, the project can serve as a foundation for further innovations in the educational technology supporting the ongoing efforts to make learning more accessible.

Future Scope

The Online Used Books Selling project holds immense potential for future expansion and enhancement.

The online used books selling project has demonstrated the feasibility and effectiveness of creating a platform for buying and selling pre-owned books over the internet. Throughout the development and implementation process, several key accomplishments have been achieved:

1. **Market Accessibility**: The platform has provided a convenient avenue for book enthusiasts to access a wide range of used books from the comfort of their homes.
2. **User Experience**: Efforts were made to enhance the user experience by implementing features such as search functionality and user reviews.

3. **Seller Empowerment**: The project has empowered individuals to sell their used books easily, contributing to the circular economy and promoting sustainability.
4. **Community Building**: By fostering interactions between buyers and sellers, the platform has facilitated the formation of a community of book lovers sharing their passion for reading.

While the project has achieved significant milestones, there are several avenues for future expansion and improvement:

1. **Mobile Application Development**: Developing a dedicated mobile application can enhance accessibility and convenience for users, allowing them to browse and purchase books on the go.
2. **Personalization Features**: Implementing personalized recommendations based on user preferences and browsing history can improve user engagement and satisfaction.
3. **Integration with social media**: Integrating the platform with social media platforms can facilitate sharing of book recommendations and reviews, expanding the reach of the community.
4. **Expanded Product Categories**: Diversifying the product offerings beyond books, such as including audiobooks, e-books, and related merchandise, can attract a broader audience.
5. **Global Expansion**: Exploring opportunities to expand the platform to international markets can tap into a larger customer base and provide access to rare and unique books from around the world.
6. **Enhanced Security Measures**: Continuously updating and enhancing security measures to protect user data and transactions from potential cyber threats is essential to maintain trust and credibility.

By pursuing these avenues for future development and innovation, the online used books selling project can continue to grow and evolve, providing valuable services to book enthusiasts while staying ahead in the competitive e-commerce landscape

CHAPTER 6

PROJECT SCREENSHOT

6.1 ADMIN SCREEN LAYOUT

6.1.1 Admin Login

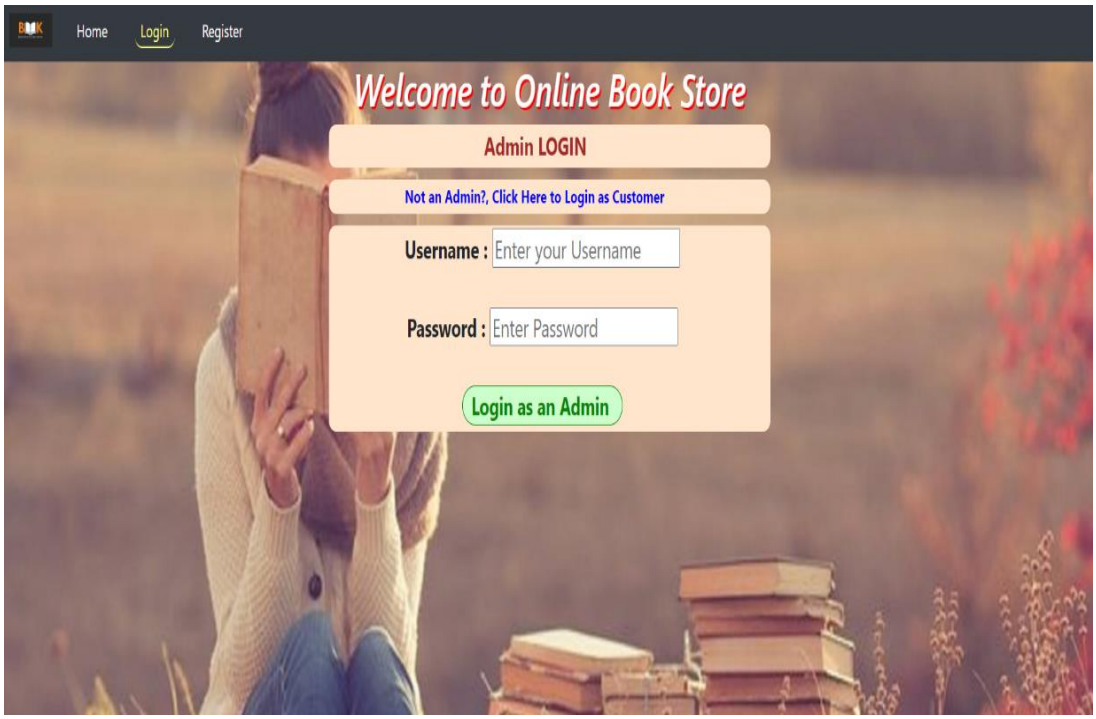


Fig: 6.1 Admin Login

6.1.2 Admin Dashboard

Fig: 6.2 Admin Dashboard

6.1.3 View Store Books Details

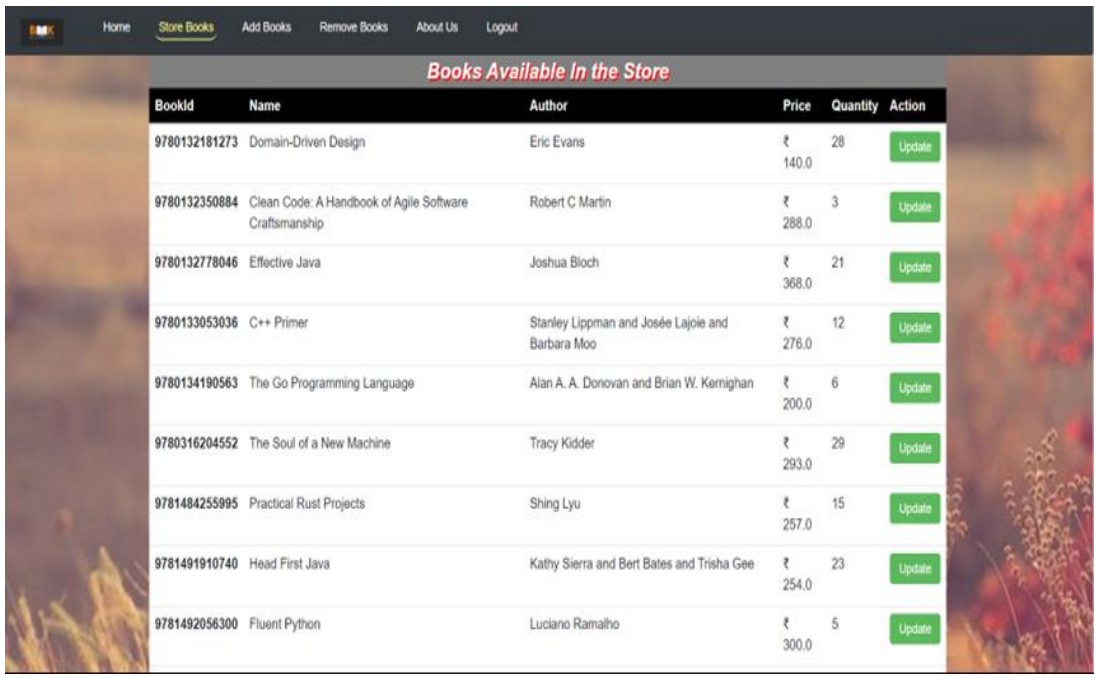
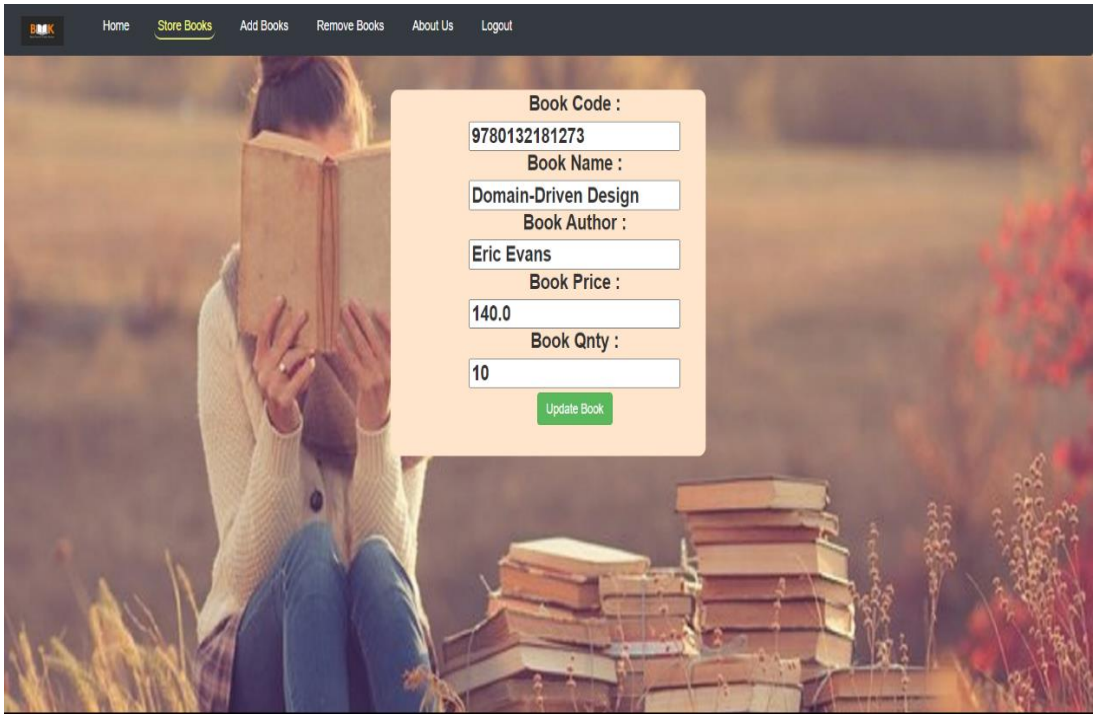


Fig: 6.3 Store Books Details

6.1.4 Update Book



Fig; 6.4 Update Book

6.1.5 Add Book

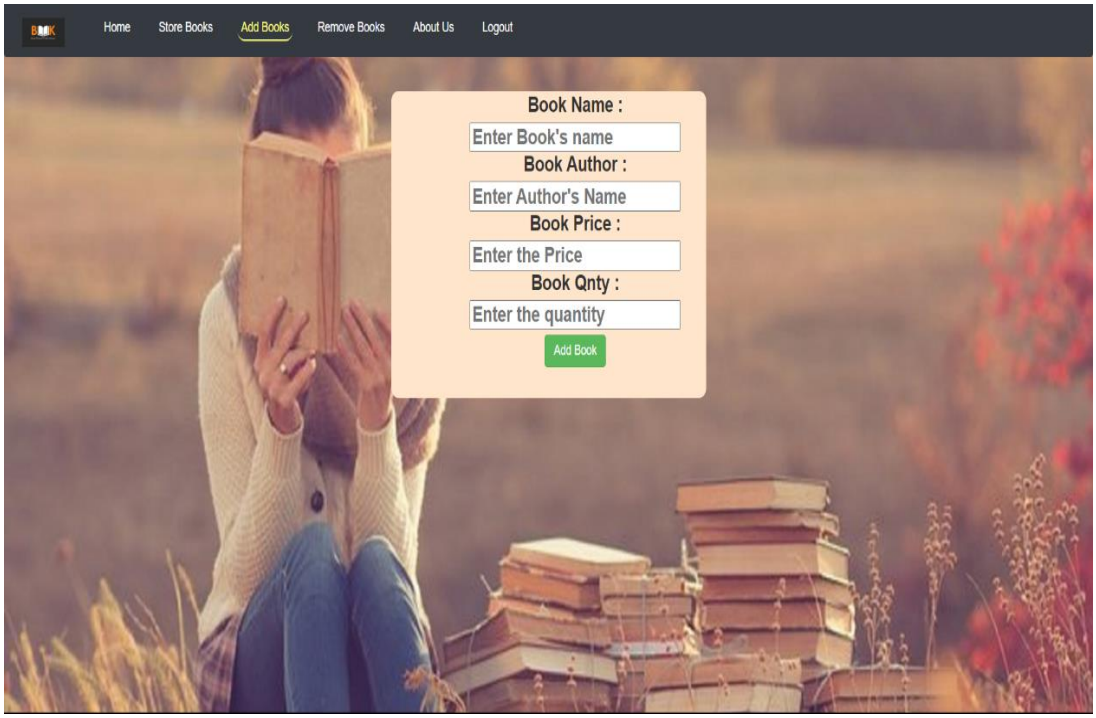


Fig: 6.5 Add Book

6.1.6 Remove Book

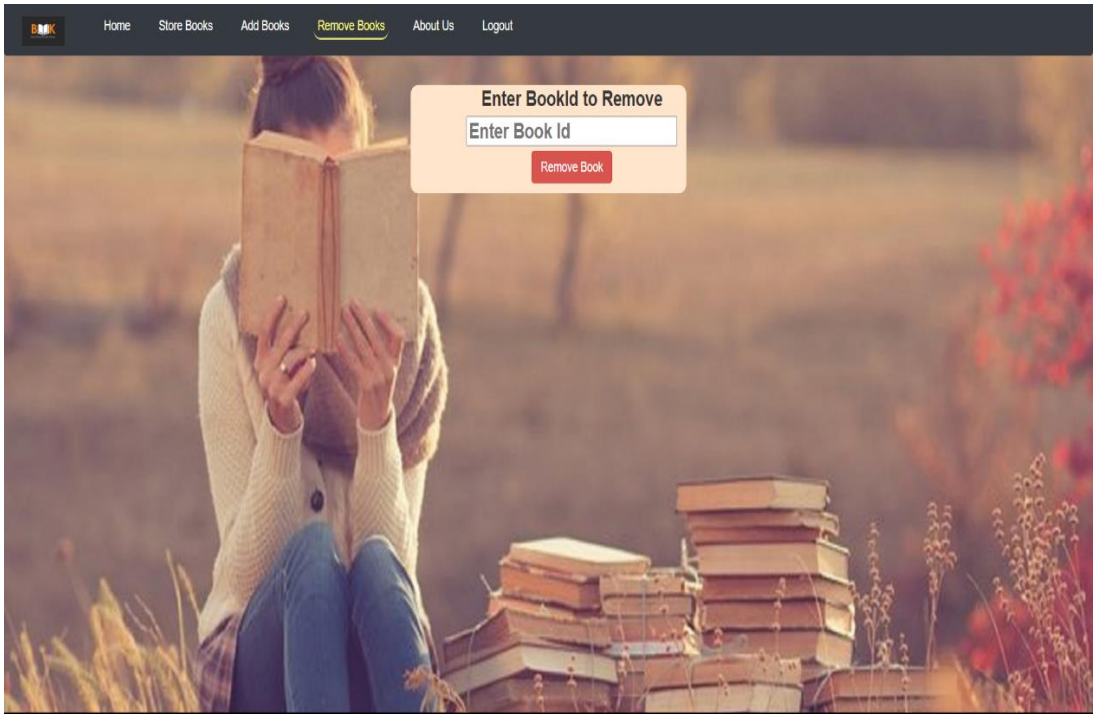


Fig: 6.6 Remove Book

6.2 USER SCREEN LAYOUT

6.2.1 User Login

Fig: 6.7 User Login

6.2.2 Available books

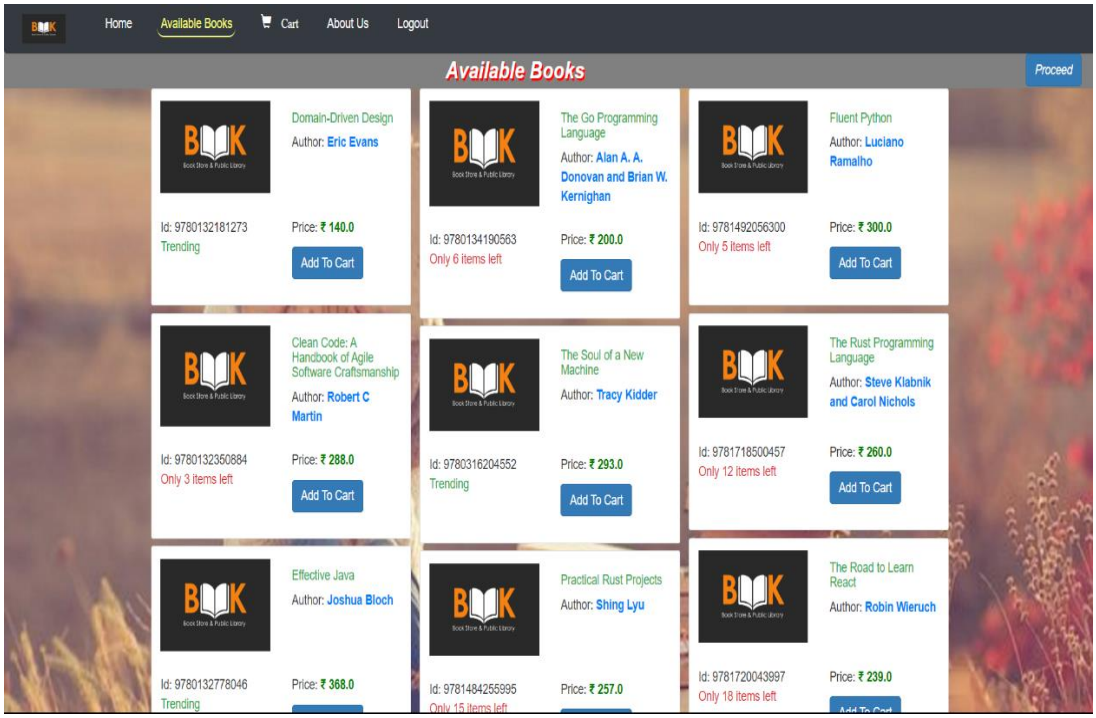


Fig: 6.8 Available Books

6.2.3 Shopping Cart

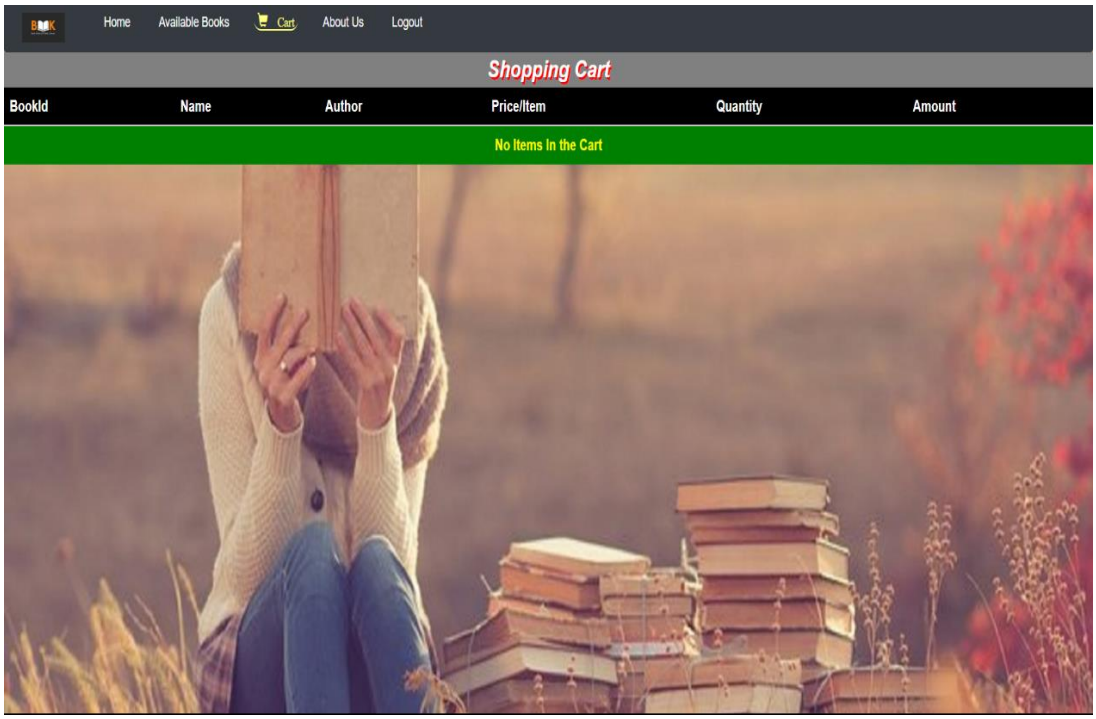


Fig: 6.9 Shopping Cart

6.2.4 After Selecting Book

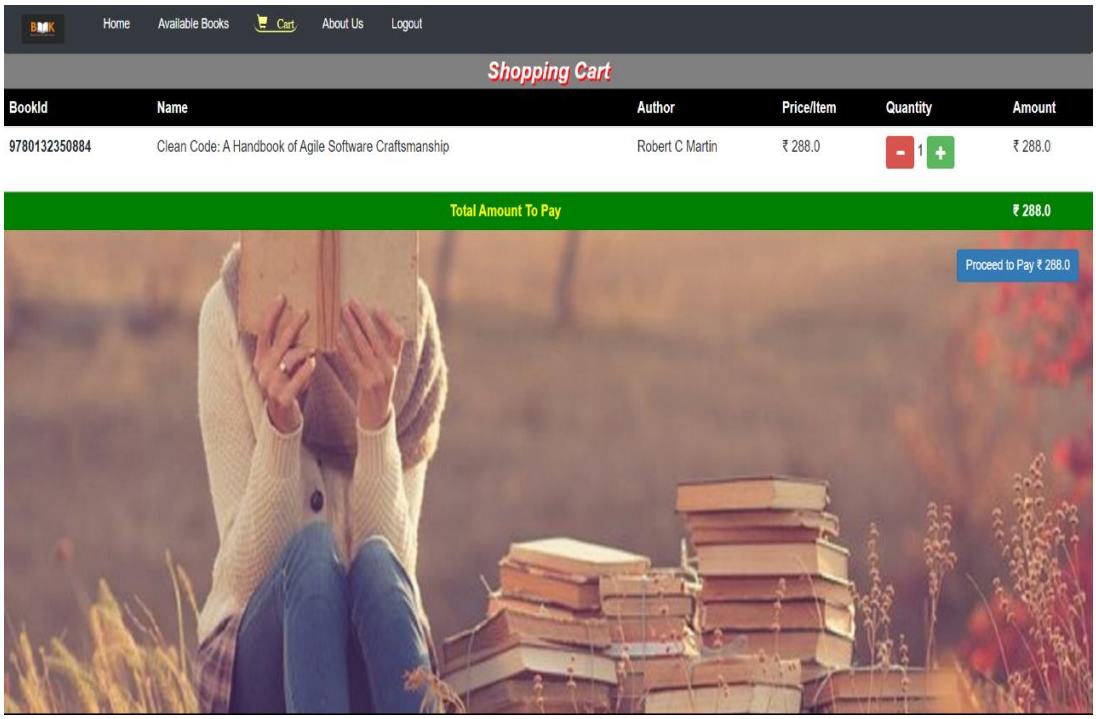


Fig: 6.10 After Selecting Book

6.2.5 About Us

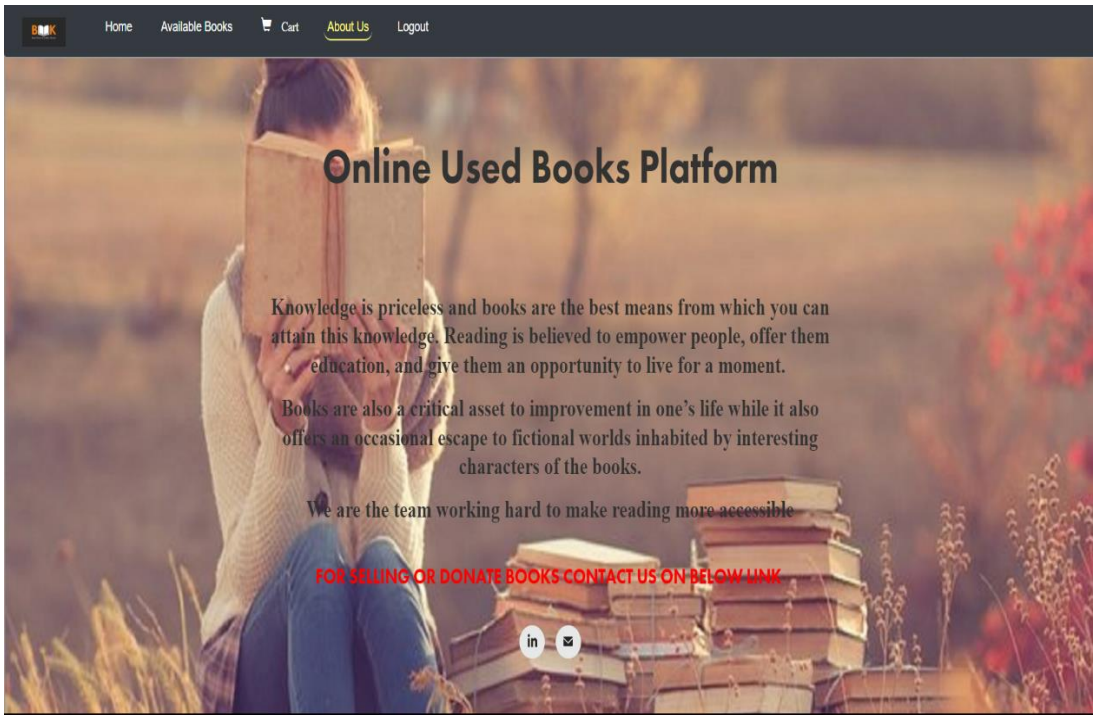


Fig: 6.11 About Us

CHAPTER 7

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