BOOK RE-USE

A PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF REQUIREMENT FOR THE AWARD OF THE DEGREE

MASTER OF COMPUTER APPLICATIONS (MCA)

OF

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

BY

GLENN GEORGE THOMAS Reg No: 22PMC124



MAKING COMPLETE

Marian College Kuttikanam Autonomous

Peermade, Kerala – 685 531 2023

BOOK RE-USE

A PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF REQUIREMENT FOR THE AWARD OF THE DEGREE

MASTER OF COMPUTER APPLICATIONS (MCA)

OF
MAHATMA GANDHI UNIVERSITY, KOTTAYAM
BY

GLENN GEORGE THOMAS Reg No: 22PMC124



MAKING COMPLETE

Marian College Kuttikanam Autonomous

Peermade, Kerala – 685 531 2023

A Project Report on

BOOK RE-USE

SUBMITTED IN PARTIAL FULFILMENT OF REQUIREMENT FOR THE AWARD OF THE DEGREE

MASTER OF COMPUTER APPLICATIONS (MCA)

OF

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

By

GLENN GEORGE THOMAS

Reg No: 22PMC124

Under the guidance of

Ms. Kochumol Abraham Assistant Professor PG Department of Computer Applications Marian College Kuttikkanam Autonomous



MAKING COMPLETE

Marian College Kuttikanam Autonomous

Peermade, Kerala – 685 531 2023

PG DEPARTMENT OF COMPUTER APPLICATIONS Marian College Kuttikkanam Autonomous

MAHATMA GANDHI UNIVERSITY, KOTTAYAM KUTTIKKANAM – 685 531, KERALA.

CERTIFICATE

This is to certify that the project work entitled

BOOK RE-USE

is a bonafide record of work done by

GLENN GEORGE THOMAS

Reg. No. 22PMC124

In partial fulfillment of the requirements for the award of Degree of

MASTER OF COMPUTER APPLICATIONS [MCA]

During the academic year 2022-2023

Ms. Kochumol Abraham	Mr Win Mathew John	
Assistant Professor	Head of the Department	
PG Department of Computer Applications	PG Department of Computer Applications	
Marian College Kuttikkanam Autonomous	Marian College Kuttikkanam Autonomous	

Examiner Examiner

ACKNOWLEDGEMENT

First of all, I thank the "God Almighty" for his immense grace and blessings in my life andat each stage of my project work

I express my sincere gratitude to **Prof. Dr. Ajimon George**, *Principal Marian College Autonomous Kuttikanam*, **Dr. Mendus Jacob**, *Director*, *PG Department of Computer Applications* for the support given throughout the project work.

I extend my gratitude to **Mr. Win Mathew John**, *HOD*, *Department of Computer Applications*, who is a constant source of inspiration and whose advice helped me to complete this project work successfully.

I express my deep sense of gratitude to my project guide **Ms. Kochumol Abraham**, *Assistant Professor*, *PG Department of Computer Applications*, for her profound guidance for the successful completion of this project work.

With great enthusiasm, I express my gratitude to all the faculty members of the PG Department of Computer Applications for their timely help and support.

Finally, I express my deep appreciation to all my friends and family members for the moral support and encouragement they have given to complete this project work successfully.

GLENN GEORGE THOMAS

ABSTRACT OF BOOK RE-USE

Book Re-Use is a website which is intended for those people who love reading books and also for those people who doesn't need the books for a long period of time. The book which is useless for us might be useful for others and both the buyer and seller will have to spend only less amount of money on the books that they need.

The seller can put his/her book's information, his/her contact information, location, and also the price of the book.

Similarly, the buyers can contact the sellers from the contact information provided in the application. When the book is sold, the seller can delete all the information about that book.

Therefore, this website will be helpful for all those people who are in their studying phase and for those book enthusiast who loves reading new books.

TABLE OF CONTENTS

Chapter			Page No
1	Introdu	ction	1-3
	1.1	Problem Statements	2
	1.2	Proposed System	2
	1.3	Features of the Proposed System	3
2	Functio	nal Requirements	4-5
3	Non-fur	nctional Requirements	6-7
4	Feature	es and Highlights	8-10
5	Technic	cal Aspects	11-14
		Django Framework, Third-Party Libraries	12
	5.1	Architecture of Project	13
	5.2	Class Diagram	14
6	Challen	nges Faced During the Project	15-16
7	Future	Enhancement	17-18
8	Conclus	sion	19-20
9	Referer	nces	21-22
Annexure			
Α	Screen	Shots	23-29

INTRODUCTION:

Book Re-Use is a website which is intended for those people who love reading books and also for those people who doesn't need the books for a long period of time. The book which is useless for us might be useful for others and both the buyer and seller will have to spend only less amount of money on the books that they need.

The seller can put his/her book's information, his/her contact information, location, and also the price of the book. Similarly, the buyers can contact the sellers from the contact information provided in the application. When the book is sold, the seller can delete all the information about that book.

1.1 PROBLEM STATEMENT

The Present system is facing difficulties in various circumstances, it is very time consuming and has slow loading time. The system is not user friendly because data's are not stored in proper format.

Limitations of existing system:

- Categories: The current system does not categorize the listed books into categories or Genre.
- **Data of Books :** The information or details of the books and its data's are not presented in a good structure or proper format.
- Not user friendly: The present system not user friendly and not in proper format.
- **Time Consuming:** The loading time of the system is very slow and time consuming.
- **No payment redirection :** The payments are not redirected the sellers.

1.2 PROPOSED SYSTEM

Book Re-Use is a website which is intended for those people who love reading books and also for those people who doesn't need the books for a long period of time. The book which is useless for us might be useful for others. Therefore, this website will be helpful for all those people who are in their studying phase and for those book enthusiast who loves reading new books.

This project aims in simplifying the process of buying and selling books through a user-friendly website at a very cheap price. This offers a platform where both the buyer and seller will have to spend only less amount of money on the books that they need for a short period of time.

Advantages of Proposed System:

- Easy and Efficient
- Cost-Effective
- Environment Friendly

1.3 FEATURES OF PROPOSED SYSTEM

- Automation improves the entire system.
- It provides a friendly graphical user interface which proves to be better when compared to the existing system.
- It gives appropriate access to the authorized users depending on their permissions.
- It effectively overcomes the delay in buying a book manually.
- System security, data security and reliability are some of the good features.
- The System has adequate scope for modification in future if it is necessary.

BOOK RE-USE
2. FUNCTIONAL REQUIREMENTS

FUNCTIONAL REQUIREMENTS

Book Re-Use consist of two modules:

- 1. User
- 2. Admin

USER

- Registration & Login: Can register and login.
- **Sell Books**: Authenticated users can sell books.
- **Buy Books**: An authenticated user can buy books.
- Manage Books: An authenticated user can update and delete their books.
- **Payment :** Can pay for the books they bought.
- **About Us :** Contains a short description of the website.

ADMIN

- **Dashboard**: In this section, admin can briefly view total books, total orders and total users.
- Manage Books: In this section, admin can manage books (Add/Del/update).
- Manage Users: Admin can manage the users who have access to the website.
- Manage Orders: Admin can manage the orders of the users.

BOOK RE-USE
3. NON-FUNCTIONAL REQUIREMENTS

NON-FUNCTIONAL REQUIREMENTS

a. Reliability

The reliability of the project depends on the reliability of the separate components. The main reliability of the system is the backup of the database which is continuously maintained and updated to reflect the most recent changes. The overall stability of the system depends on the stability of container and its underlying operating system.

b. Availability

The system should be available at all times, meaning the user can access it using a web browser, only restricted by the down time of the server on which the system runs. In case of a hardware failure or database corruption, a replacement page will be shown. Also, in case of a hardware failure or database corruption, backup of the database should be retrieved from the server and saved by the Organizer. Then the services will be restarted. It means 24 X 7 availability.

c. Maintainability

A commercial database is used for maintaining the database and the application server takes care of the site. In case of a failure, a re-initialization of the project will be done.

d. Security

Ensuring robust security measures is crucial for the successful implementation of the Book Re-Use project. As a non-functional requirement, security encompasses the protection of sensitive data, prevention of unauthorized access, and the maintenance of confidentiality, integrity, and availability of system resources. This project acknowledges the importance of incorporating strong security practices to safeguard user information and maintain the overall integrity of the system.

Book Re-Use is a website which is intended for those people who love reading books and also for those people who doesn't need the books for a long period of time at a very low price. Here are some key features that such a system could include:

• User Registration:

The user will be able to register themselves with the in-built Django users using UserCreationForm. The users have to provide their Username and Password during registration. After the registration is completed, the users are redirected to the Login page.

• Login:

After the registration, the authenticated users can log-in using the credentials like Username and Password. The authenticated Users are redirected to the User Home-Page.

• Sell Books:

An authenticated user can list any available books that they want to sell in this website. The user can provide details like Title of the book, the authors name, description of the book, image of the book and price of the book and the sellers details like Sellers name, contact and email.

• Buy Books:

An authenticated user can buy any available books that is listed for sale from this website. The user can see the details like Title of the book, the authors name, description of the book, image of the book and price of the book while buying the book.

• Manage Books:

An authenticate user can update and delete the books that he/she has listed for sales. The user can update and delete only the books that the are trying the sell.

• Payment:

The payment processes through a dummy payment gateway when an authenticated user wants to buy any book that is listed for sale.

• About Us:

This page provides the users with a short description about the functionalities and different features of the website.

• Admin Dashboard:

This Django Administrative page provides the admins an interface to manage different functionalities and different features of the website. And give various user permissions.

• Admin Manage Books:

The Django admin can manage the books in the system. The admin can add, update and delete books from the system.

• Admin Manage Users:

The Django admin can manage the users of the system. The admin can add and delete users from the system.

BOOK RE-USE
5. TECHNICAL ASPECTS

Django Framework:

The Django web framework is a free, open-source framework that can speed up the development of a web application. This framework is used because it provides the necessary tools and libraries to develop web application efficiently.

Third-Party Libraries:

The Third-Party applications and libraries in Django are pre-built components or packages developed by the community or other companies that you can use to extend the functionalities of the Django projects.

The Third-Party libraries used in this project are:

• Django Jazzmin:

Jazzmin is intended as a drop-in app to jazz up your Django admin site, with plenty of things you can easily customize, including a built-in UI customizer.

• Django Crispy-Forms:

Django-crispy-forms defines another powerful class called Layout, which allows you to change the way the form fields are rendered. This allows you to set the order of the fields, wrap them in divs or other structures, add html, set ids, classes or attributes to whatever you want, etc.

• Django Pillow:

Pillow is a free, open-source library for the Python programming language that provides support for opening, manipulating, and saving many different image-file formats. Pillow offers all types of image processing capabilities like image transformation, rotation, resizing, statistics of the image, etc.

5.1 ARCHITECTURE OF THE PROJECT:

The architecture of the BOOK RE-USE project follows a layered and modular design, incorporating key components and their interactions to provide an efficient expense management system.

1. Presentation Layer:

• User Interface:

Design a user-friendly interface using HTML, CSS, and JavaScript. Implementing forms for user registration, login, and booking slots. Using frameworks like Bootstrap or Materialize CSS for responsive and visually appealing designs.

Views and Forms :

It comprises the pages and forms that allow users to sell books and buy them, make payments and view list of books.

2. Application Layer:

• accounts:

This module has the functionality of the handling the user accounts.

• books:

This module handles the core functionality of the system, maintaining and managing the books, and lists and also the payment.

3. Data Layer:

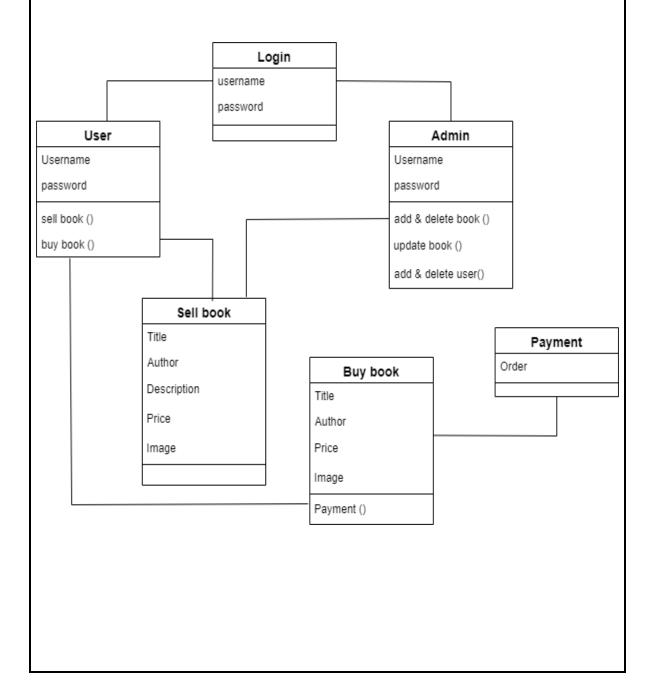
• Database:

Selecting a database management system like SQLite to store user information, book information and other relevant data.

5.2 DATABASE:

• Class Diagram:

Class diagrams are the blueprints of your system or subsystem. You can use class diagrams to model the objects that make up the system, to display the relationships between the objects, and to describe what those objects do and the services that they provide.



CHALLENGES FACED DURING DEVELOPMENT:

Identifying and managing the requirements of the project was a difficult task. Gathering necessary requirements, identifying the required was a bit hectic. Another challenge was to plan the process flow of the project. The time constraint was also a major challenge that I faced during the development of the website. While coming to the coding part I had difficulties in using the Django user for registering the users as it was new to me.

The next major challenge which I faced was during the integration of crispy-forms in my project. Even though it made my work easy by helping me from the hectic task of creating html pages, I did require some time to learn about the working of it. I also faced problems using the third-party library Pillow, there was a lot of errors that came up while trying to add images into the website.

There are some future enhancements that can be done to the Book Re-Use system, that specifically focusing on :

1. Delivery Tracking:

Implementing an automated delivery tracking system which would enhance communication and establishes more interaction with users. Once a booking is confirmed, the system can generate a unique tracking ID when a buyer buys a book and automatically send an email to the user containing the tracking ID and other relevant details. This would provide users a platform which allows the users to track the delivery progress of the books that are bought.

2. User Interface:

Improving the user interface (UI) and user experience (UX) of the system can enhance usability and engagement. The interface should be visually appealing and provide easy navigation for the users to manage the system.

3. User profiles:

Implementing user profiles would allow users to create accounts, save their details, and manage their profiles.

4. Multi-platform accessibility:

Expanding the system's accessibility across multiple platforms such as web, mobile, and tablet devices which would ensure that the users can access and manage these system from their preferred devices.

5. Payment:

The system can be enhanced to redirect the payment of the book to the specific sellers of that particular book.

6. Request Books:

The system can be enhanced so that the users can request for any books that is not available in the books list. The requests for the books can be displayed as a notification alert in the Home-page.

BOOK RE-USE
8. CONCLUSION

Book Re-Use is a website which is intended for those people who love reading books and also for those people who doesn't need the books for a long period of time. The book which is useless for us might be useful for others and both the buyer and seller will have to spend only less amount of money on the books that they need. Therefore, this website will be helpful for all those people who are in their studying phase and for those book enthusiast who loves reading new books.

GitHub Repository link of the Project:

https://github.com/Glenngt/BOOKREUSE.git

WEB REFERENCE:

- https://docs.djangoproject.com/en/4.2/
- https://getbootstrap.com/docs/5.0/getting-started/introduction/
- https://django-crispy-forms.readthedocs.io/
- https://pypi.org/project/Pillow/
- https://django-jazzmin.readthedocs.io/
- https://openai.com/

BOOK RE-USE
10. ANNEXURE

A. SCREENSHOTS

• Home Page



Newly Arrived Books

