

A
Project Report
On..
Library management system

Developed By..
Hardik Parmar
Submitted to ..
Geetanjali College of computer science & commerce(BBA)
Saurashtra Univetsity
Rajkot
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Guided by..
Prof. Mital goswami

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Preface

The purpose of this library management system is to improve the user experience and their awarenesses.

The library management system Website project will be used to minimize the time and the resource by enhancing book renting and managing technique and seamless experience.

While the resources which minimized are workforce,money and paper etc.

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Project Profile

Project Title	The library management system
Objective	The library management system will provide user a better experience of renting book and manage books.
Hardware Requirements	Pentium 90 MHz or faster and 2GB RAM or higher
Software Requirements	Php version 8+, MongoDB latest version
Front-End	HTML,CSS,JAVASCRIPT,php
Back-End	Php , MongoDB
Database	MongoDB
Others	Ms-word 2022

Project Requirement

➤ Hardware Requirement

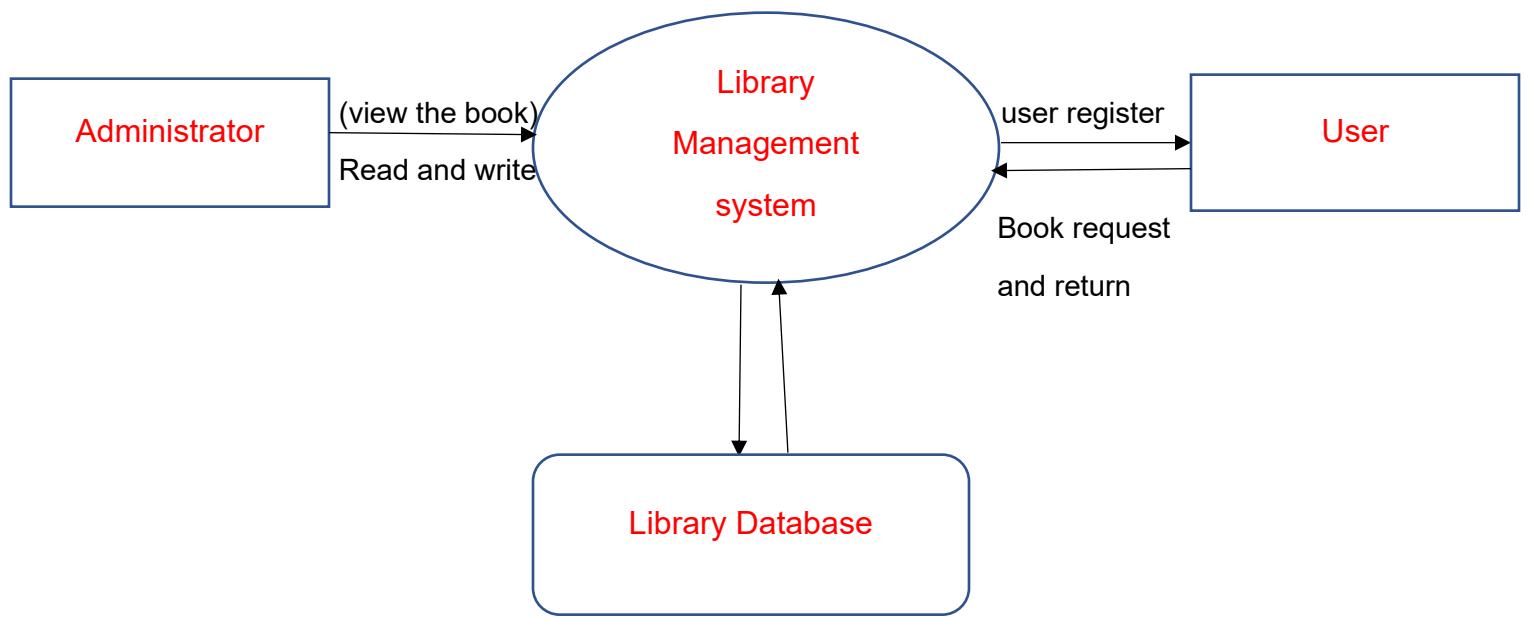
Hardware Name	Hardware
Processor	Pentium or AMD
storage	150MB or Higher
RAM	2GB or Higher

Technology Requirements

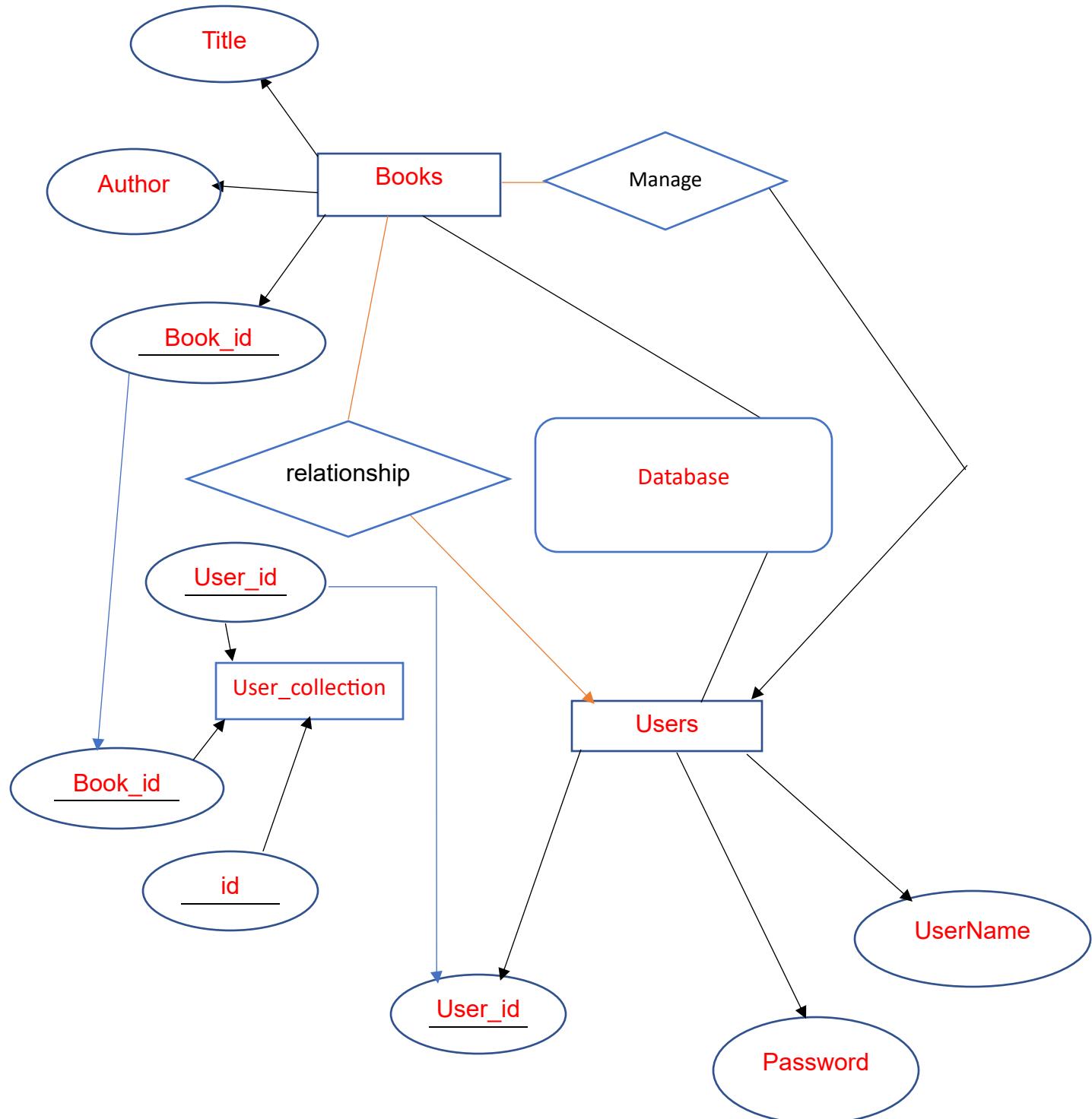
➤ Software Requirements

No.	Software Used
1	Php , MongoDB
2	Windows OS (Windows 10/11)
3	Visual Studio Code

Data Flow Diagram



ER Diagram



Data Dictionary

➤ User/Admin Login

Sr no.	Field Name	Data Type	Size	Constrains
1	_id	ObjectId	-	-
2	Username	Varchar	255	-
3	Password	Varchar	8	-
4	Role	String	255	-

➤ Books

Sr no.	Field Name	Data Type	Size	Constrains
1	Book_id	ObjectId	-	Primary Key, Foreign Key
2	Title	Varchar	255	-
3	Author	Varchar	255	-
4	Year	Number	255	-
5	Available	Boolean	-	-

➤ User_collection

Sr no.	Field Name	Data Type	Size	Constrains
1	Id	ObjectId	-	Primary Key
2	User_id	ObjectId	-	Foreign Key
3	Book_id	ObjectId	-	Foreign Key

Screen Shots

➤ Admin Login Page

Admin Login

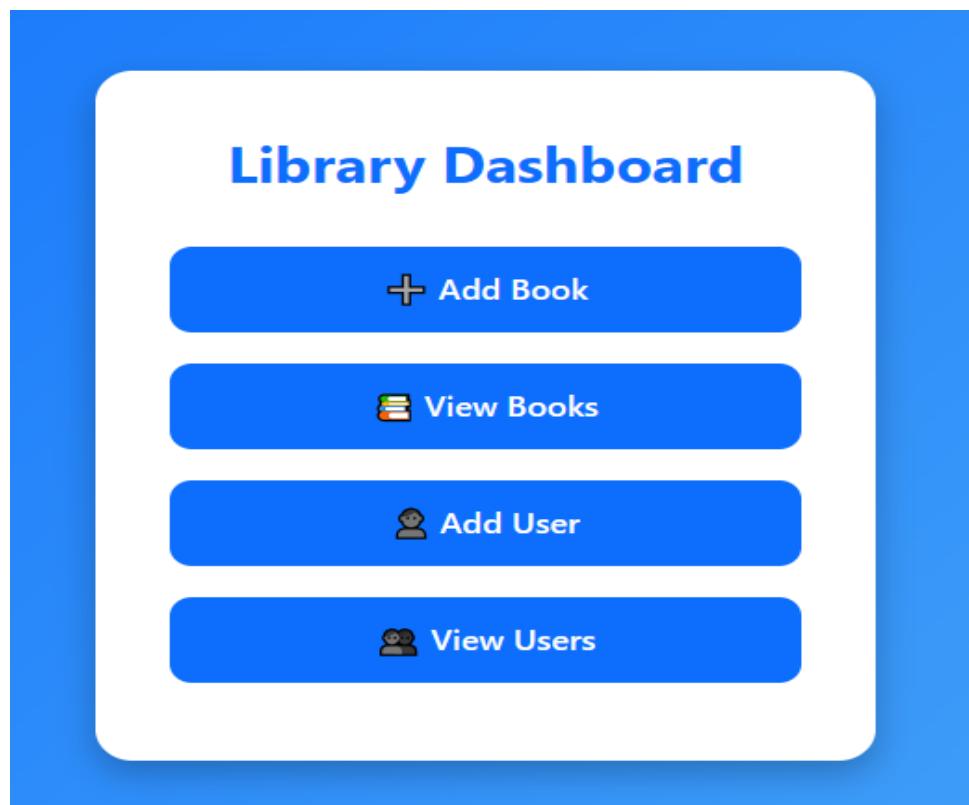
Email

Password

Login

- In this page admin can enter the main page using correct username and password. It is an authentication for all admin.

➤ Admin panel



- This is the main dashboard of admin panel in this page admin can add book, user and also can view books and users.

➤ **Add book page**

Add New Book

Title

Author

Publication Year

Add Book

- In this page admin can add book. Admin needs to fullfill all the fields to add book.

➤ **Add user page**

Add New User

Name

Email

Password

Add User

- In this page admin can add user.

➤ **View Books**

Books Management			
Title	Author	Year	Actions
wings of fires	Dr. A.P.J. abdul kalam	2002	<button>Edit</button> <button>Delete</button>
harry potter and philosopher's stone	j.k. rowling	1999	<button>Edit</button> <button>Delete</button>
a lost paradise	dalton	1598	<button>Edit</button> <button>Delete</button>

- in this page admin can view, update and delete books.

➤ View users

Registered Users			
Name	Email	Created At	Actions
Admin User	admin@gmail.com	2025-01-01T00:00:00+00:00	<button>Delete</button>
hardik	hardik123@gmail.com	2025-11-27T06:05:31+00:00	<button>Delete</button>

- In this page admin can view the current user and also can delete them.

➤ Home page

Welcome, Admin User!

 Logout

 [Browse Books](#)

 [My Rentals](#)

 [My Profile](#)

Search Books

Search by title, author, or year...

[Search](#)

Title	Author	Year	Status	Action
wings of fires	Dr. A.P.J. abdul kalam	2002	AVAILABLE	Rent
harry potter and philosopher's stone	j.k. rowling	1999	AVAILABLE	Rent
a lost paradise	dalton	1598	RENTED	Unavailable

- This is the main home page of our website.
- You can see all books here and rent them.

➤ User Login Page

User Login

Email

Password

- This is the login page when user can simply enter the username and password and can login into the website.

➤ User Profile Page

My Profile

Name: Admin User
Email: admin@gmail.com

[Edit Profile](#)

My Rented Books

No rentals found.

- In this page user can see his profile and change name and email address.

➤ **User rental page**

My Rentals

Book	Rented At	Due Date	Status	Action
You have no rentals yet.				

- In this page user can see his rental books and also sees the last date to submit the book.

➤ Rental confirmation page

[Home](#) / [Dashboard](#) / Rent Book



wings of fires

by Dr. A.P.J. abdul kalam

Year: 2002



Status: AVAILABLE

Rental Details

Rent Duration (days)

30 days (1 month)

Due Date

Wednesday, February 18, 2026

Confirm Rental

- This page is confirmational page for the book rent.
- Here you can set the duration of the rent.

Future Enhancements

Our software “Library Management System” which provides complete information about Users like Student and admin.

We will add more content on them in future. In our web-based application right now, only Books and Users with their information available but in future we will add Online Lectures, Links, etc.

We will also provide more images in GUI related to our software in future. We will try to find out more about this topic and add in future. We will try to make this application more attractive so that visitor cannot get bored while using it.

Limitations

➤ **User Limitations:**

- **Concurrent Users:**

The system may struggle with performance if too many users access it simultaneously, leading to slow response times or crashes.

- **User Authentication:**

Limited user authentication methods may expose the system to unauthorized access.

- **Functionality Limitations:**

- **Search Functionality:**

Basic search capabilities may not support advanced queries, such as filtering by multiple criteria.

- **Reporting:**

Limited reporting features may restrict users from generating customized reports on user activity or inventory status.

Bibliography

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- <https://stackoverflow.com/questions/tagged/php>
- <https://www.javatpoint.com/mongodb>