



# THE TECHFEST 1.0

## 2K23

**NAME OF THE PROJECT:** LIBRARY MANAGEMENT SYSTEM USING DJANGO

**BATCH:** BCA & B.Sc CS(H)

**RESOURCE PERSON:** Mr. Bhabani Shankar Sahoo

**MEMBERS:** Chandan Swain

Saswat Suman Dwibedy

Ananta Kishore Swain



## **Introduction :**

- Information technology has revolutionized the life of human beings and has made lives easier by the various kind of applications .
- This project is concerned with developing a Library Management System for Agape Youth Library in order to make library management system more efficient and easy to handle.
- It has the ability to display the display of the books available in various departments , the transaction of the books and about the book holders.

## **Objectives:**

- Automated Book Management
- User Management
- Borrowing and Returning Books
- Reservation and Renewal
- Search and Filtering
- Reporting and Analytics
- Notifications and Reminders
- Integration with External Systems
- User-Friendly Interface
- Security

## **Algorithm design:**

- User Authentication and Authorization
- Book Management
- User Management
- Search and Filtering
- Notifications
- Integration with External Systems
- User Interface
- Security Measures
- Error Handling

## **Technology used:**

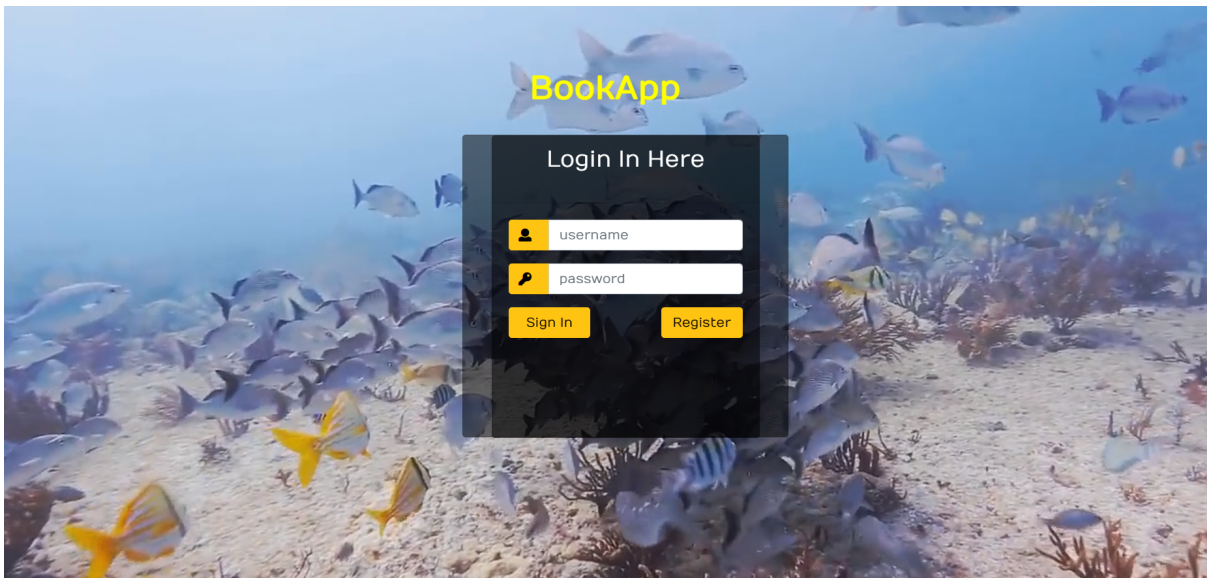
- **Django framework:-**

- Object-Relational Mapping (ORM)
- Admin Interface
- URL Routing
- Template Engine
- Middleware
- Authentication and Authorization
- Security Features
- Testing Framework
- Internationalization and Localization
- RESTful API Support
- Third-Party Packages

**Working methods:**

- The working methods of a Library Management System (LMS) using Django involve the interaction of various components to perform tasks related to book management, user authentication, borrowing and returning books, reservation, and more.

**Project Screen shots:**



BookApp Dashboard




Search for...

Admin Dashboard

Logged As asutosh

- Group Chat
- Add Book
- Recent Added Books
- Manage Books
- Delete Request
- User Feedback
- Manage User

Manage Books

Book ID	Book Cover	Book Title	View	Edit	Delete
18		c programming	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Delete</a>
15		java	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Delete</a>
14		Computer Organization	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Delete</a>

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BookApp Dashboard

Search for...

Admin Dashboard

Logged As asutosh

- Group Chat
- Add Book
- Recent Added Books
- Manage Books
- Delete Request
- User Feedback
- Manage User

Staff Members /

List Of Users [Add User](#)

No	Username	User Role	Email	View	Edit	Delete
1	saswat10	Librarian	saswatsumandwibedy17@gmail.com	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Delete</a>
2	saswat17	Librarian	saswatsumandwibedy17@gmail.com	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Delete</a>
3	sinu07	Librarian	swainc305@gmail.com	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Delete</a>
4	ananta	Librarian	ananta@ananta	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Delete</a>

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## Future Scope:

- Integration with Machine Learning and AI
- Enhanced User Interfaces
- Data Analytics and Business Intelligence
- Blockchain for Security and Authentication
- Mobile Application Development
- Cloud Integration
- Voice User Interface (VUI)
- Augmented Reality (AR) and Virtual Reality (VR)
- Social Integration

- Accessibility and Inclusivity
- Microservices Architecture
- Gamification Elements

### **Conclusion:**

- This Django Python project showcases the framework's ability to simplify complex web development tasks.
- In Simple words Django is a powerful backend framework that make it easier to built robust and scalable web applications. It provides built in features for common task reach library and offers flexibility to adapt various project need.

### **Bibliography/References:**

- <https://youtu.be/HnBluva-Gx4?si=C8Rv2hdusJCo0Whh>
- <https://youtu.be/ojg1EzbdU00?si=sgpHFO-geYzh5afw>
- <https://youtu.be/iSDil5kO3MM?si=9rtdvRXjIKBu9yGD>