UNIVERSITY OF MUMBAI



Master of Computer Application

Mini Project Report On

COLLEGE DIGITAL LIBRARY

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(SEMESTER - I)

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Under the Guidance of
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Faculty In-Charge

Acknowledgement

While preparing the project report, it has been our Endeavour to present the subject and the execution in simple and coherent manner to those who wish to refer it for enhancement or improving the existing features. The knowledge that we have gathered during the study of relevant literature for understanding our project, planning of details and suitable software platform by itself and acknowledgement to the industry zeal and technical competence of those many individuals who have contributed to it with profound gratitude, we wish to acknowledge them.

We sincerely thank Thakur Institute of Management Studies, Career Development and Research for training us in the MCA course. We express our deep gratitude to our honourable Director **Dr.Vinita Gaikwad** and also express our deep gratitude to our internal guide's **Prof. Shrishendu Maitra**.

Sr No	Modules	Detailed Contents	Page
1.	Introduction	 Introduction of Project(SRS) Problem Definition Objective of Project Scope of Project 	1
2.	System Study	Exiting SystemProposed System	4
3.	Analysis & Design	 Software/ Hardware Requirement Specification Software Requirement Hardware Requirement Gantt Chart Use case Diagram DFD/ Context Diagram 	5
4.	Testing & Validation	Test cases and Report	7
5.	User Manual	 Method of Implementation Forms and Output Screens 	9
6.	Conclusion	Project ConclusionFuture Scope	14
7.	References	• References	15

1. INTRODUCTION

a. INTRODUCTION TO THE PROJECT:

College Digital Library is a system which maintains the information about the books present in the library, their authors, and all. This is very difficult to organize manually. Maintenance of all this information manually is a very complex task. Owing to the advancement of technology, organization of an Online Library becomes much simple. The Digital Library has been designed to computerize and automate the operations performed over the information about the members, book issues and returns and all other operations. This computerization of library helps in many instances of its maintenances. It reduces the workload of management as most of the manual work done is reduced.

The project aims and objectives that will be achieved after completion of this project are discussed in this subchapter.

The aims and objectives are as follows:

- Online book reading.
- A search column to search availability of books.
- Facility to download required book.
- A portal to request the book.
- Class and subject wise books availability.

b. PROBLEM DEFINITION:

As existing in a pandemic, it is difficult for students to physically go to their institute and get books from the library of their respective choice. More over following Covid-19 guidelines, it is safer to be at home. In this situation, students are unable to go physically to library or find the subject related book online. Many students do not even know proper name of the book which makes it much more difficult.

Although, not only student but their teachers too have to struggle with providing notes, video lectures and other resources.

c. OBJECTIVE:

The objectives of proposed system is as follows:

- Online book reading.
- ❖ A search column to search availability of books.
- Facility to download required book.
- ❖ A portal to request the book.
- Class and subject wise books availability.
- Easy to understand due to user friendly GUI.
- Lecture Notes can be viewed too.
- Easy to use.
- Saves time and cost.

d. SCOPE OF THE PROJECT:

This project will be developing a digital college library system which will be running on a desktop devices. The scope of this project is defined as follow:

- User can search the book by using the search button.
- User (a student from the institute) can only login using the given account g-mail id and password.
- User can read book online in pdf mode.
- User can download book in pdf format.
- User can browse through the respective class and subject and view the book of the related topic and modules.
- User can also view the notes uploaded by their faculties.
- User can also find and read non-academic book.
- User can request any book and the same will be notified to admin via mail message.

2. SYSTEM STUDY:

a. Existing System:

Early days Libraries were managed manually. Students were able to issue any book. Students were provided with all the list of the books recommended by their respective faculties. Ever since, pandemic broke all are stuck inside and could not access the library resources. To overcome such issues teachers take extra effort to search soft copy of books and the upload the same to drive, and also trouble shoot problems faced by students in order to access those resources.

b. Proposed System:

To overcome the problems mentioned in the above block, the proposed system is being developed.

The proposed system contains following features:

- Student will be given their login details.
- Individually each member will have his account through which he can access the information he needs.
- ❖ Book details like authors, number of copies totally maintained by library, present available number of books, reference books, non-reference books etc. all this information can be made handy.
- Student can view the book online in pdf mode.
- Student can also download the book.
- Student can request the book to the admin.
- Student can use search feature and search book.

3. ANALYSIS & DESIGN

a. Software\Hardware Requirement Specification

I Software Requirement

1. Operating System: windows XP /7 or higher, Linux or mac.

2. Software: HTML, CSS, JavaScript and PHP.

II Hardware Requirement

1. Computer/Laptop.

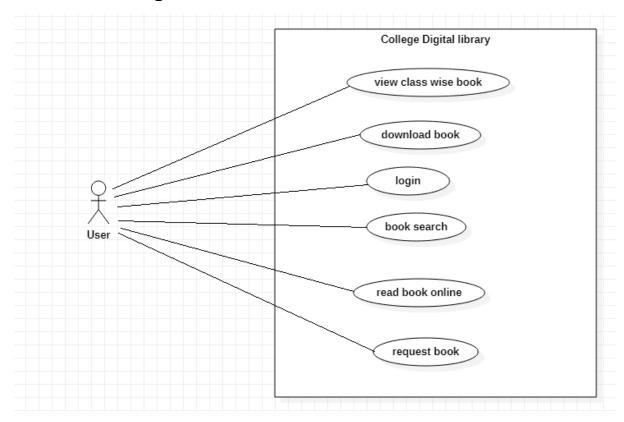
Processor: I3 or Higher.
 RAM: 512 MB or Higher.

4. Hard Disk: 16 GB or Higher.

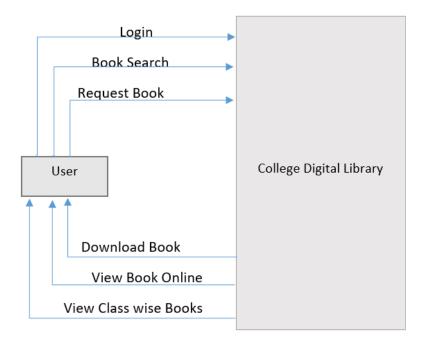
b. Gantt Chart:

NO	ACTIVITY	January			February				
		WEEKS							
		1	2	3	4	1	2	3	4
1	Topic Selection and Synopsis								
2	Analysis								
3	Design Project Flow								
4	Start Coding								
5	Trouble shooting and Error correction								
6	Testing and Documentation								

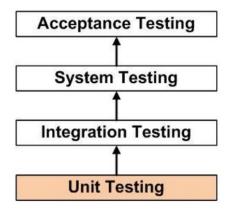
c. Use Case Diagram:



d. DFD/ Context Diagram:



4. TESTING & VALIDATION



i. Unit Testing

Unit testing is a level of software testing where individual units/ components of a software are tested. The purpose is to validate that each unit of the software performs as designed. Unit testing frameworks, drivers, stubs, and mock/ fake objects are used to assist in unit testing.

ii. Integration Testing

Integration Testing is a level of software testing where individual units are combined and tested as a group. The purpose of this level of testing is to expose faults in the interaction between integrated units. Test drivers and test stubs are used to assist in Integration Testing.

Integration testing is done by a specific integration tester or test team. Integration testing follows two approach known as 'Top Down' Approach and 'Bottom Up' approach.

iii. System Testing

System Testing is a level of software testing where a complete and integrated software is tested. System Testing (ST) is a black box testing technique performed to evaluate the complete system the system's compliance against specified requirements. In System testing, the functionalities of the system are tested from an end-to-end perspective.

System Testing is usually carried out by a team that is independent of the development team in order to measure the quality of the system unbiased. It includes both functional and Non Functional testing.

iv. Acceptance Testing

Acceptance Testing is the process of testing the modified parts of the code and the parts that might get affected due to the modifications to ensure that no new errors have been introduced in the software after the modifications have been made. Regression means return of something and in the software field, it refers to the return of a bug.

Test Case:

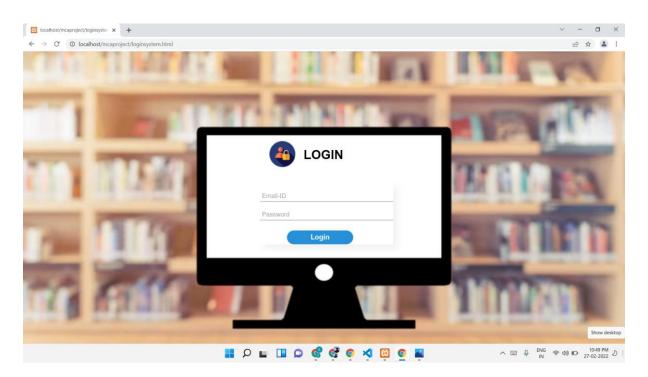
TEST CASE	TEST CASE	TEST	TEST	
NAME	DESCRIPTION	07500	EXPECTED	RESULTS
		STEPS	RESULTS	
	To verify email and password	Enter		
		incorrect		
		email	Error	HIGH
		Empty email		
		field	Error	HIGH
LOGIN		Empty		
		password		
		field	Error	HIGH
		Enter correct	Message	
		email &	"Login	HIGH
		password	successful"	
		Empty name		
		& roll no field	Error	HIGH
		Empty email		
DECLIEST	To request book	field	Error	HIGH
REQUEST BOOK		Empty book		
BOOK		name field	Error	HIGH
			Shows all the	
		All fields	related book	
		filled properly	results	HIGH

5. USER MANUAL

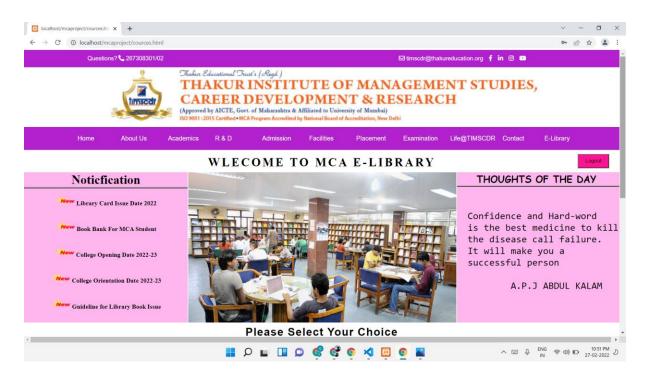
a) Home page

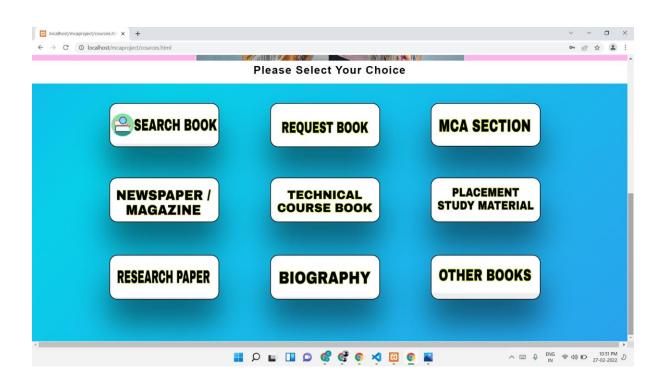


b) Login Page

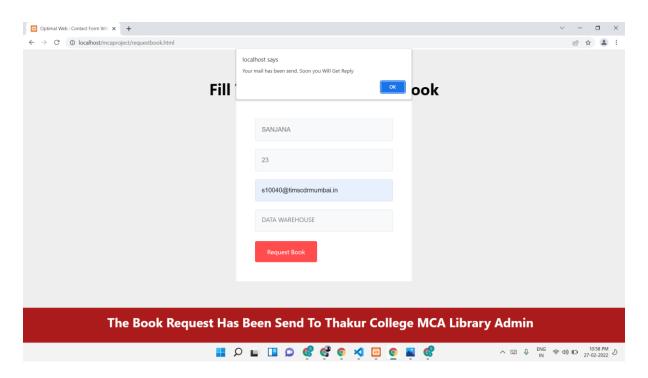


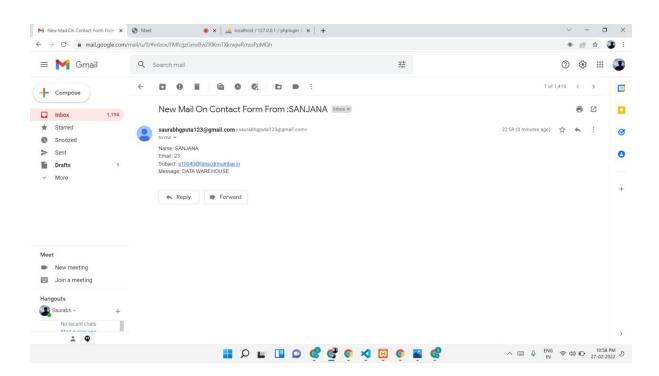
c) Library Page



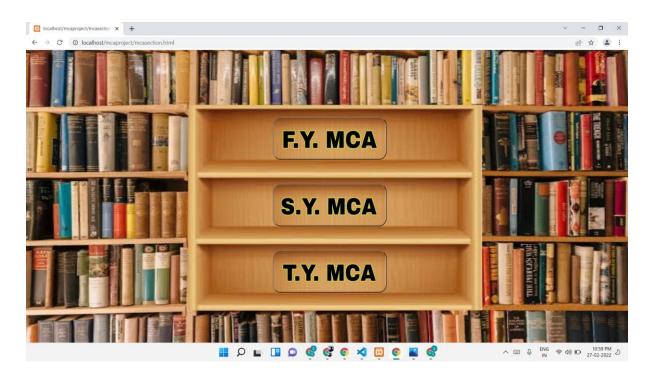


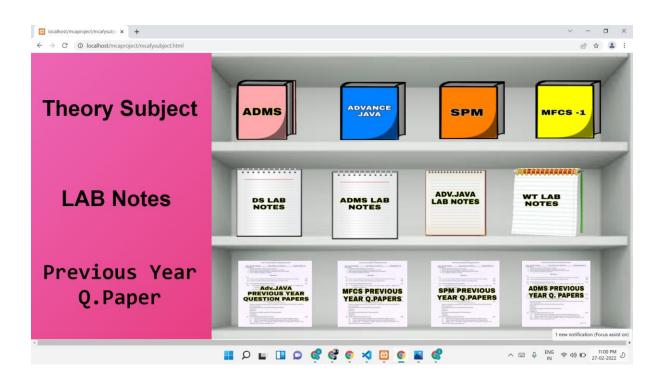
d) Request book



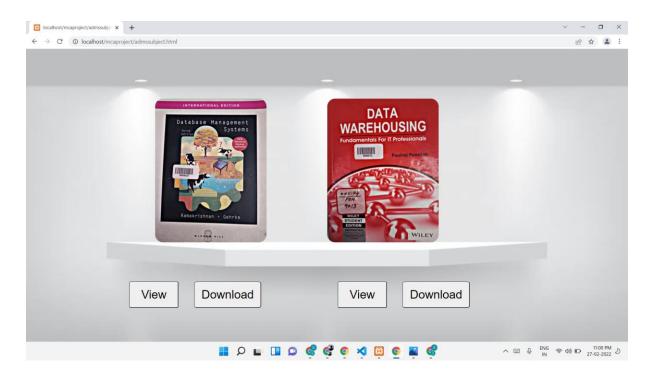


e) Class and Subject Wise Book List Page





f) Book View and Download Page



6. CONCLUSION:-

a. Project Conclusion:

- In this application, a Digital College Library System is proposed which will majorly reduce the problem related to the manual library system.
- This will help many students who cannot go to their colleges for some genuine reasons.
- This application is easily accessible and easy to use.
- It enables the user to place a request for any book.
- The system can also be used to view book and download the same in pdf format.
- The system is designed such a way that a user can browse through the category or can directly search the book by entering the book name, author name in the search method provided to them.
- The project can be implemented by any institute or workplace.

b. Future Scope:

There is a future scope of this facility that many more features such as online lectures video tutorials can be added by teachers as well as online assignments submission facility, a feature Of group chat where students can discuss various issues of engineering can be added to this project thus making it more interactive more user friendly and project which fulfills each users need in the best way possible.

7. REFERENCES

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