

SHREE DEVI INSTITUTE OF TECHNOLOGY
VISVESVARAYA TECHNOLOGICAL UNIVERSITY

“Jnana Sangama”, Belagavi-590014, Karnataka, India



MINI PROJECT REPORT
ON
“ONLINE LIBRARY MANAGEMENT SYSTEM”

Submitted in partial fulfillment of the requirements for the 5th Semester
Database Management System
mini project of

BACHELOR OF ENGINEERING
IN
COMPUTER SCIENCE AND ENGINEERING

Submitted by

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REHAM RIYAZ

4SH20CS037
4SH20CS051

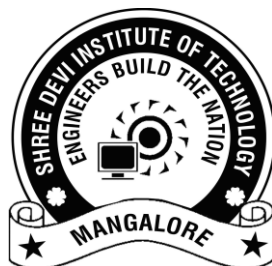
Under the Guidance of

Ms. AMULYA
Asst. Professor
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



CERTIFICATE

This is to certify that the project work entitles “**ONLINE LIBRARY MANAGEMENT SYSTEM**” is a bonafide work carried out **NABEEL SAYED ANWAR, REHAM RIYAZ** bearing USN **4SH20CS037, 4SH20CS051** respectively in partial fulfillment for the 5th semester data base application and mini project of **Bachelor of Engineering in Computer Science and Engineering** of **Visvesvaraya Technological University, Belagavi** during the year 2022-2023. It is certified that all correction/ suggestions indicated for Internal Assessment have been incorporated in their port. The project report has been approved as it satisfies the academic requirement in respect of the mini project work prescribed for the said degree of Bachelor of Engineering.

Signature of the Guide

Ms. Amulya

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Signature of the HOD

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HOD, Dept. of CSE

EXTERNAL VIVA

Name of the Examiners

1. -----

2.-----

Signature with date

**SHREE DEVI INSTITUTE OF TECHNOLOGY
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Department of Computer Science and Engineering



DECLARATION

We **NABEEL SAYED ANWAR, REHAM RIYAZ** bearing USN **4SH20CS037, 4SH20CS051** respectively, student of Fifth semester Bachelor of Engineering, Computer Science and Engineering, Shree Devi Institute of Technology, Mangaluru declare that the mini project work entitled “**ONLINE LIBRARY MANAGEMENT SYSTEM**” has been duly executed by us under the guidance of **Ms. Amulya**, Asst. Professor, Department of Information Science and Engineering, Shree Devi Institute of Technology, Mangaluru and submitted for the requirements for the 5th semester Data Base Management System with Mini project of **Bachelor of Engineering in Computer Science Engineering** during the year 2022-2023..

Date:

**NABEEL SAYED ANWAR [4SH20CS037]
REHAM RIYAZ [4SH20CS051]**

Place: Mangaluru

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NABEEL SAYED ANWAR

REHAM RIYAZ

ABSTRACT

Online library management system is a system which maintains the information about the books Present in the library, their authors, the members of library to whom books are issued, library staff and all. This is a very complex task. Owing to the advancement of technology, organization of an online library becomes much simple. The Online library management system 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.

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CHAPTER 1

INTRODUCTION

1.1 Introduction to DBMS

A database management system (DBMS) is system software for creating and managing databases. The DBMS provides users and programmers with a systematic way to create, retrieve, update and manage data. A DBMS makes it possible for end users to create, read, update and delete data in a database. The DBMS essentially serves as an interface between the database and end users or application programs, ensuring that data is consistently organized and remains easily accessible. The DBMS manages three important things: the data, the database engine that allows data to be accessed, locked and modified -- and the database schema, which defines the database's logical structure.

The DBMS is perhaps most useful for providing a centralized view of data that can be accessed by multiple users, from multiple locations, in a controlled manner. A DBMS can limit what data the end user sees, as well as how that end user can view the data, providing many views of a single database schema. End users and software programs are free from having to understand where the data is physically located or on what type of storage media it resides because the DBMS handles all requests.

The DBMS can offer both logical and physical data independence. That means it can protect users and applications from needing to know where data is stored or having to be concerned about changes to the physical structure of data (storage and hardware). As long as programs use the application programming interface (API) for the database that is provided by the DBMS, developers won't have to modify programs just because changes have been made to the database. One of the biggest advantages of using a DBMS is that it lets end users and application program access and use the same data while managing data integrity. Data is better protected and maintained when it can be shared using

a DBMS instead of creating new iterations of the same data stored in new files for every for every new application. The DBMS provides central store of data that can be accessed by the multiple user in the controlled manner

1.1 INTRODUCTION TO PROJECT

The application is implemented in PHP and consists of two main components:

- Admin and
- Customer side

Admin side consists of the features such as Creating Username & Password. **Online Library** Management System is an application which refers to library systems which are generally small or medium in size. It is used by librarian to manage the library using a computerized system where he/she can add new books, videos and Page sources. Books and student maintenance modules are also included in this system which would keep track of the students using the library and also a detailed description about the books a library contains. With this computerized system there will be no loss of book record or member record which generally happens when a non-computerized system is used. All these modules are able to help librarian to manage the library with more convenience and in a more efficient way as compared to library systems which are not computerized

1.2 Scope

The different areas where we can use this application are:

- Any education institute can make use of it for providing information about author, content of the available books.
- It can be used in offices and modifications can be easily done according to requirements.

1.3 OBJECTIVES OF THE PROJECT

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.
- Video tutorial for students.
- An Admin login page where admin can add books, videos or page sources.
- Open link for Learning Website

1.4 ADVANTAGES OF THE PROJECT

- Helps streamline day-to-day library operations
- Simple and easy to use
- Slashes down the operating costs
- Boosts learner engagement
- Creates a smart library
- Highly secure, scalable, and reliable library companion
- Single-click-membership
- Quick requests, book renewals, and circulations
- Instant cataloging and acquisition
- Digitized fee and due collection
- RFID biometric integration
- Book ahead of time
- Comprehensive vendor track records
- Effortless self-service capabilities
- Hassle-free mobile access
- Single-click-membership
- Quick requests, book renewals, and circulations
- Instant cataloging and acquisition
- Digitized fee and due collection
- RFID biometric integration
- Book ahead of time
- Comprehensive vendor track records
- Effortless self-service capabilities
- Hassle-free mobile access

CHAPTER 2

SYSTEM DESIGN

2.1 SCHEMA DIAGRAM

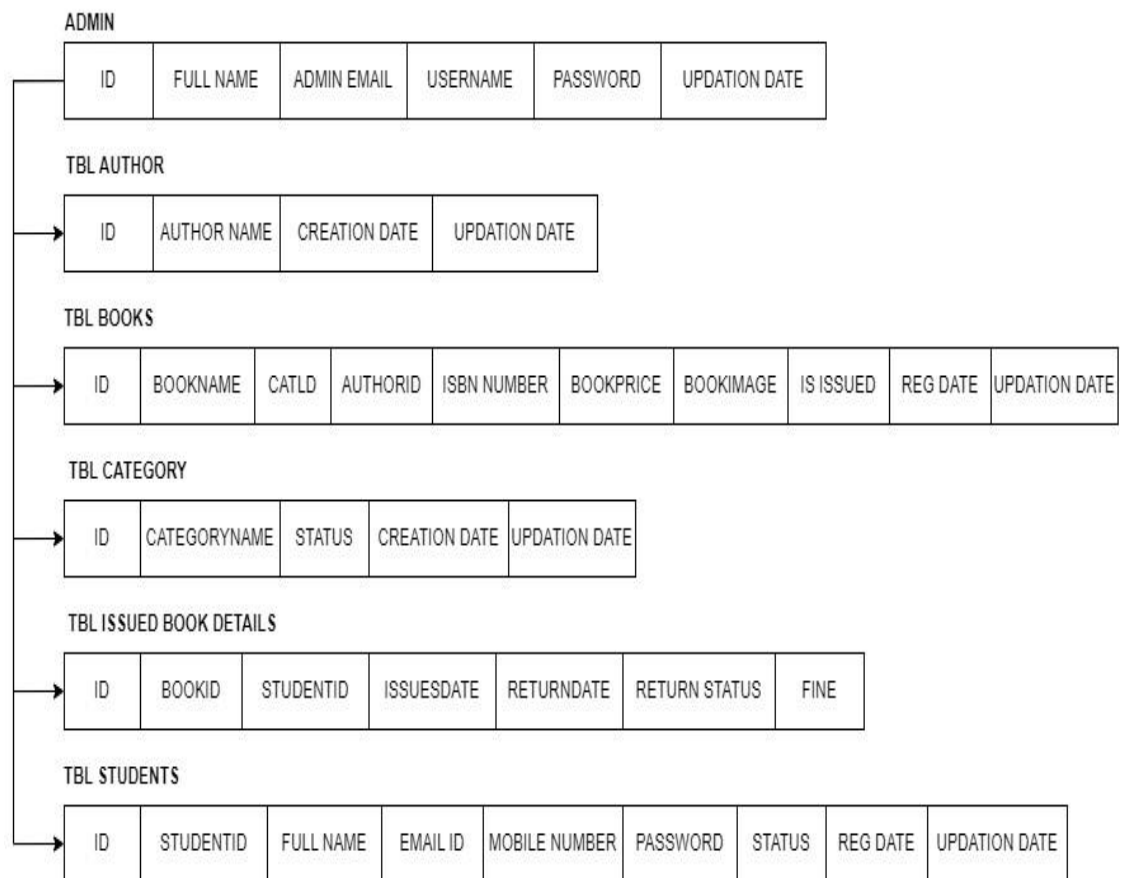


Fig 2.1.1: SCHEMA DIAGRAM

2.2 ER DIAGRAM

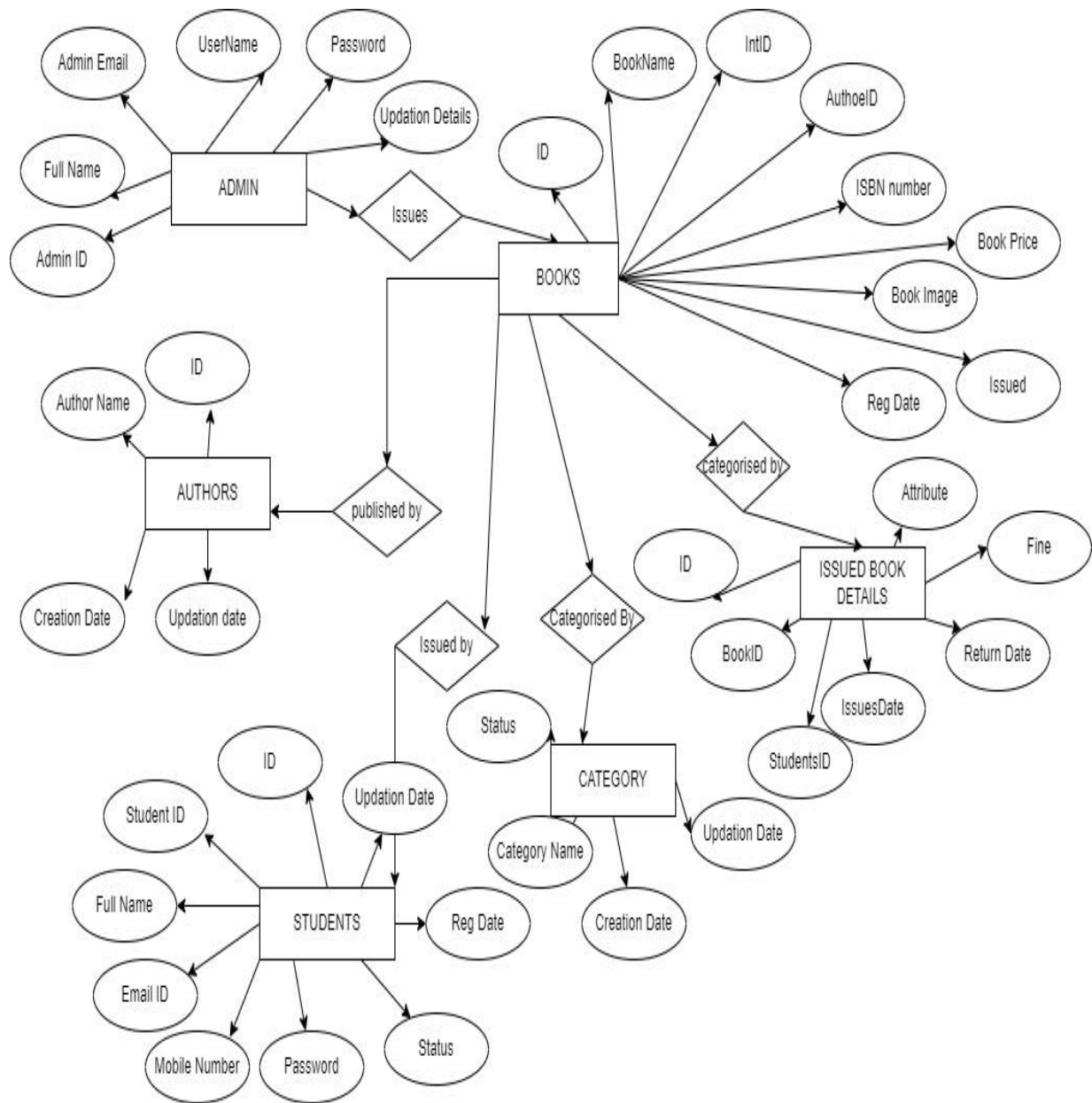


Fig 2.2.1: ER DIAGRAM

CHAPTER 3

IMPLEMENTATION

In this chapter the implementation details of the project have been specified.

3.1 HARDWARE SPECIFICATIONS:

- 40 GB hard disk space.
- GB RAM.
- Hi-Speed Network Connectivity. Intel core i5 2nd generation is used as a processor because it is fast than other processors and provide reliable and stable and we can run our pc for longtime. By using this processor we can keep on developing our project without any worries.
- Ram 1 gb is used as it will provide fast reading and writing capabilities and will in turn support in processing

3.2 SOFTWARE SPECIFICATIONS:

- Windows(x64) Operating System.
- Visual Studio Code.
- MySQL Server.
- Apache Server.
- Xampp.
- Operating system- Windows 7 is used as the operating system as it is Stable and supports more features and is more user friendly.
- Database MYSQL-MYSQL is used as database as it easy to maintain and retrieve records by simple queries which are in English language which are easy to

understand and easy to write.

- Development tools and Programming language- HTML is used to write the whole code and develop webpages with css, java script for styling work and php for sever side scripting.

3.2.1 LANGUAGE USED FOR IMPLEMENTATION

The languages used for implementation are as follows:

- Front end:
- Back end: MySQL

MySQL:

MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius daughter, and "SQL", the abbreviation for Structured Query Language. MySQL is a database, widely used for accessing querying, updating and managing data in databases.

3.2.1 PLATFORM USED FOR IMPLEMENTATION

WAMP OR

XAMPP:

XAMPP is a free and open source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTPServer, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages. XAMPP stands for Cross-Platform (X), Apache (A), MariaDB (M), PHP (P) and Perl (P). It is a simple, lightweight Apache distribution that

makes it extremely easy for developers to create a local web server for testing and deployment purposes. Everything needed to set up a web server – server application (Apache), database (MariaDB), and scripting language (PHP) – is included in an extractable file.

XAMPP is also cross-platform, which means it works equally well on Linux, Mac and Windows. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server extremely easy as well.

phpMyAdmin:

phpMyAdmin is a free and open source administration tool for MySQL and MariaDB. As a portable web application written primarily in PHP, it has become one of the most popular MySQL administration tools, especially for web hosting service

3.3 OUTPUT TESTING

While executing php mysql connection code we were not able to make the connection of backend mysql to front end php. So to solve this problem we had to create a new mysql user with password. After this the connection was successful.


The connection was successful but the data entered in front end was not storing in backend, since all the attributes data types in backend were not set to varchar.

Therefore, we modified the php code and mysql query accordingly


CHAPTER 4

RESULTS

4.1 SNAPSHOTS

**Online Library
Management System**

HOME USER LOGIN USER SIGNUP ADMIN LOGIN



USER LOGIN FORM

LOGIN FORM

Enter Email id

Password

[Forgot Password](#)

[LOGIN](#) | [Not Register Yet](#)

FIG 4.1.1 USER LOGIN PAGE

The screenshot shows the 'Online Library Management System' header with a logo and navigation links: HOME, USER LOGIN, USER SIGNUP, and ADMIN LOGIN. Below the header, the 'USER SIGNUP' section is active. It contains a 'SIGNUP FORM' with the following fields: 'Enter Full Name', 'Mobile Number:', 'Enter Email', 'Enter Password', and 'Confirm Password'. A red 'Register Now' button is at the bottom of the form.

Fig 4.1.2: SNAPSHOT OF USER SIGNUP PAGE

The screenshot shows the 'Online Library Management System' header with a logo and navigation links: HOME, USER LOGIN, USER SIGNUP, and ADMIN LOGIN. Below the header, the 'ADMIN LOGIN FORM' section is active. It contains a 'LOGIN FORM' with the following fields: 'Enter Username' and 'Password'. A blue 'LOGIN' button is at the bottom of the form.

FIG 4.1.3 ADMIN LOGIN FORM

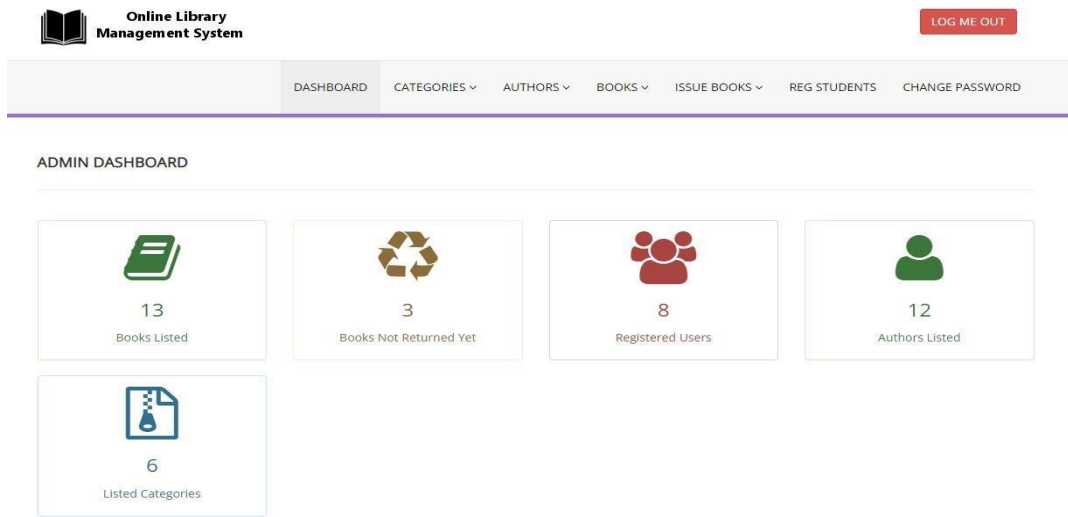


FIG4.1.4 ADMIN DASHBOARD

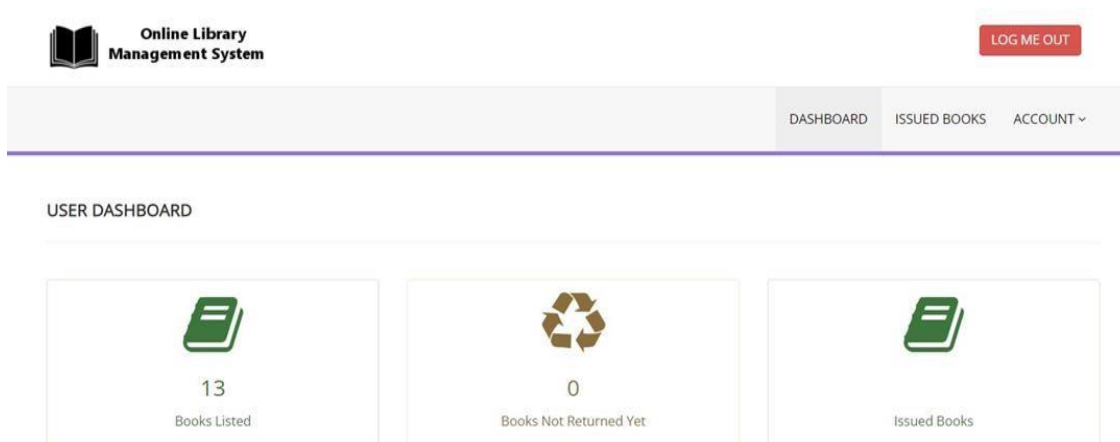



FIG 4.1.5 ADMIN BOOK ISSUE

**Online Library Management System**

LOG ME OUT

DASHBOARDCATEGORIES ▾AUTHORS ▾BOOKS ▾ISSUE BOOKS ▾REG STUDENTSCHANGE PASSWORD

MANAGE AUTHORS

ADD AUTHOR

MANAGE AUTHORS

Authors Listing

10 records per page


Search:

#	Author	Creation Date	Updation Date	Action
1	Anuj kumar	2022-01-22 12:53:03	2022-01-22 12:53:03	Edit Delete
2	Chetan Bhagatt	2022-01-22 12:53:03	2022-01-22 12:53:03	Edit Delete
3	Anita Desai	2022-01-22 12:53:03	2022-01-22 21:53:41	Edit Delete
4	HC Verma	2022-01-22 12:53:03	2022-01-22 21:53:45	Edit Delete
5	R.D. Sharma	2022-01-22 12:53:03	2022-01-22 21:53:47	Edit Delete
6	fwdfwrer	2022-01-22 12:53:03	2022-01-22 21:53:55	Edit Delete
7	Dr. Andy Williams	2022-01-22 12:45:32		Edit Delete
8	Kyle Hill	2022-01-22 12:46:34		Edit Delete
9	Robert T. Kiyosaki	2022-01-22 12:48:38		Edit Delete
10	Kelly Barnhill	2022-01-22 12:51:54		Edit Delete

Showing 1 to 10 of 12 entries

Previous12Next

FIG 4.1.6 ADMIN MANAGE AUTHORS

 Online Library Management System

LOG ME OUT

DASHBOARD CATEGORIES ▾ AUTHORS ▾ BOOKS ▾ ISSUE BOOKS ▾ REG STUDENTS CHANGE PASSWORD

MANAGE CATEGORIES

ADD CATEGORY

MANAGE CATEGORIES

Categories Listing

10 ▾ records per page


Search:

#	Category	Status	Creation Date	Updation Date	Action
1	Romantic	Active	2022-01-22 12:53:03	2022-01-22 12:53:03	Edit Delete
2	Technology	Active	2022-01-22 12:53:03	2022-01-22 12:53:03	Edit Delete
3	Science	Active	2022-01-22 12:53:03	2022-01-22 21:54:37	Edit Delete
4	Management	Active	2022-01-22 12:53:03	2022-01-22 21:54:35	Edit Delete
5	General	Active	2022-01-22 12:53:03	2022-01-22 21:54:40	Edit Delete
6	Programming	Active	2022-01-22 12:53:03	2022-01-22 21:54:42	Edit Delete

Showing 1 to 6 of 6 entries

Previous 1 Next

FIG 4.1.7.ADMIN MANAGE CATEGORIES

 Online Library Management System

LOG ME OUT

DASHBOARD CATEGORIES ▾ AUTHORS ▾ BOOKS ▾ ISSUE BOOKS ▾ REG STUDENTS CHANGE PASSWORD

MANAGE REG STUDENTS

Reg Students

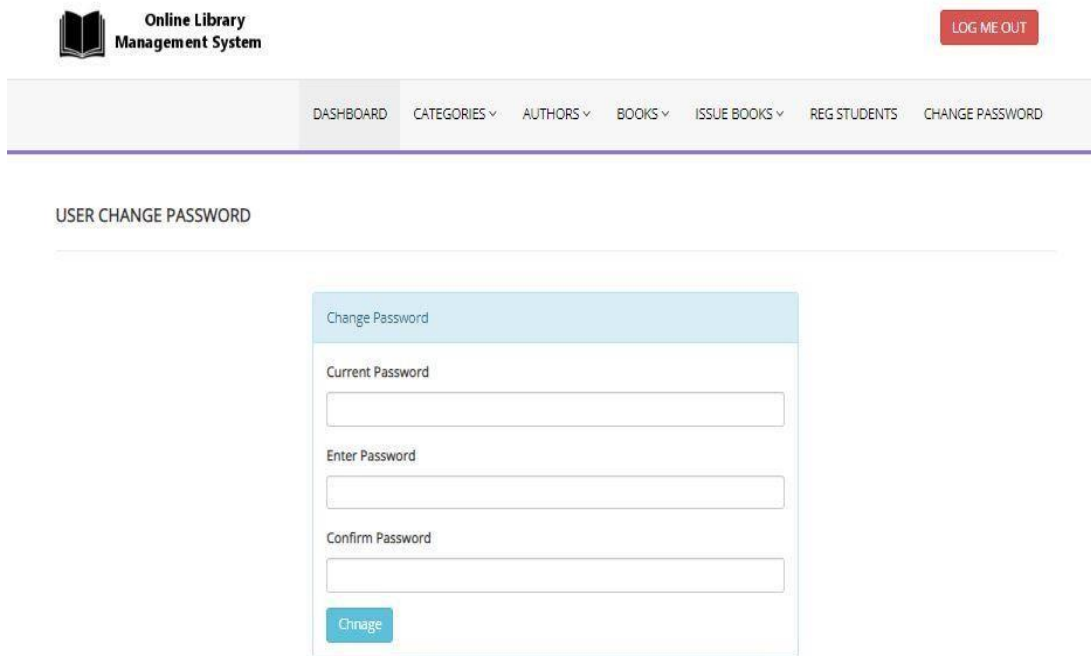
10 records per page Search:

#	Student ID	Student Name	Email id	Mobile Number	Reg Date	Status	Action
1	SID002	Anuj kumar	anujk@gmail.com	9865472555	2022-01-02 12:53:03	Active	Inactive Details
2	SID005	sdfsd	csfsd@dfsfs.com	8569710025	2022-01-02 12:53:03	Active	Inactive Details
3	SID009	test	test@gmail.com	2359874527	2022-01-02 12:53:03	Active	Inactive Details
4	SID010	Amit	amit@gmail.com	8585856224	2022-01-02 12:53:03	Active	Inactive Details
5	SID011	Sarita Pandey	sarita@gmail.com	4672423754	2022-01-02 12:53:03	Active	Inactive Details
6	SID012	John Doe	john@test.com	1234569870	2022-01-22 13:46:18	Active	Inactive Details
7	SID013	Nabeel Sayyed	nabeelsayyed24@gmail.com	8105596390	2023-01-18 13:47:49	Active	Inactive Details
8	SID014	Amulya Maam	amulyamaam@gmail.com	0987654321	2023-01-20 16:18:27	Active	Inactive Details

Showing 1 to 8 of 8 entries

Previous 1 Next

FIG 4.1.8.ADMIN MANAGE REGISTERED STUDENT



The screenshot displays the 'Online Library Management System' interface. At the top left is a logo of an open book next to the text 'Online Library Management System'. At the top right is a red button labeled 'LOG ME OUT'. Below these is a navigation bar with the following links: DASHBOARD, CATEGORIES ▾, AUTHORS ▾, BOOKS ▾, ISSUE BOOKS ▾, REG STUDENTS, and CHANGE PASSWORD. The 'CHANGE PASSWORD' link is highlighted. Below the navigation bar, the page title 'USER CHANGE PASSWORD' is displayed. The main content area features a 'Change Password' form with a light blue header. The form contains three input fields: 'Current Password', 'Enter Password', and 'Confirm Password'. At the bottom of the form is a blue button labeled 'Change'.











FIG 4.1.9. USER CHANGE PASSWORD

DASHBOARD CATEGORIES + AUTHORS + BOOKS + ISSUE BOOKS + REG STUDENTS CHANGE PASSWORD

MANAGE BOOKS

Books Listing


ID records per page Search

#	Book Name	Category	Author	ISBN	Price	Action
1	 PHP And MySQL programming	Technology	Araj Kumar	222333	33.00	Edit Delete
2	 physics	Science	HC Verma	1111	15.00	Edit Delete
3	 Murach's MySQL	Technology	Araj Kumar	9350237605	455.00	Edit Delete
4	 WordPress for Beginners 2022: A Visual Step-by-Step Guide to Mastering WordPress	Technology	Dr. Andy Williams	9315503300	100.00	Edit Delete
5	 WordPress Mastery Guide:	Technology	Ryle Hill	9054094749	33.00	Edit Delete
6	 Rich Dad Poor Dad: What the Rich Teach Their Kids About Money That the Poor and Middle Class Do Not	General	Robert T. Kiyosaki	907CTM8293	120.00	Edit Delete
7	 The Girl Who Drank the Moon	General	Kelly Barnhill	1848126476	200.00	Edit Delete
8	 C++: The Complete Reference, 4th Edition	Technology	Herbert Schildt	007053240X	142.00	Edit Delete
9	 ASP.NET Core 5 for Beginners	Programming	Ryle Hill	98936344563	422.00	Edit Delete
10	 Harry Potter and the Prisoner of Azkaban	General	J. K. Rowling	9780750006073	396.00	Edit Delete

Showing 1 to 10 of 13 entries

Previous 1 2 Next

FIG 4.1.10. ADMIN MANAGE BOOKS

 Online Library Management System

LOG ME OUT

DASHBOARDISSUED BOOKSACCOUNT ▾

MANAGE ISSUED BOOKS

Issued Books

10 ▾ records per page


Search:

#	Book Name	ISBN	Issued Date	Return Date	Fine in(USD)
1	unix concepts and applications 4th edition	0070611084	2023-01-23 10:57:18	2023-01-26 21:05:38	0

Showing 1 to 1 of 1 entries

Previous1Next

FIG 4.1.11 USER. MANAGE ISSUED BOOKS

 Online Library Management System

LOG ME OUT

DASHBOARDISSUED BOOKSACCOUNT ▾

MY PROFILE

My Profile

Student ID : SID013

Reg Date : 2023-01-18 13:47:49

Profile Status : Active

Enter Full Name

Nabeel Sayyed

Mobile Number :

8105596390

Enter Email

nabeelsayyed24@gmail.com

Update Now

FIG 4.1.12. USER PROFIL

CHAPTER 5

CONCLUSION

While developing the system a conscious effort has been made to create and develop a software package, making use of available tools, techniques and resources – that would generate a proper System While making the system, an eye has been kept on making it as user-friendly, as cost-effective and as flexible as possible. As such one may hope that the system will be acceptable to any user and will adequately meet his/her needs. As in case of any system development processes where there are a number of shortcomings, there have been some shortcomings in the development of this system also. The project is still under modification.

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