

Major Project Report

Library management system



By

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In the partial fulfillment of requirements for the award of degree in

Masters of Computer Application

(Batch from 2020-2022)

Under the Guidance of

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CERTIFICATE OF ACCEPTANCE

This is to certify that **Mr. Mohit Pradhan** bearing Registration No. **20IT103018** of School of Information Technology, SRM University Sikkim has worked on the project entitled "**Library management system**" under the supervision of **Mr. Abhimanyu Sharma**, Lecturer, School of Information Technology, SRM University Sikkim. The project was carried out from May 1st 2022 to August 9.

The project is hereby accepted by the School of Information Technology, SRM University Sikkim, in partial fulfillment of the requirements for the award of Degree in Master of Computer Application.



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DECLARATION

I hereby declare that the work recorded in this project report entitled “**Library management system**” in partial fulfillment for the requirements for the award of Degree in Master of Computer Application from SRM University Sikkim, is a faithful and bonafide work carried out under the supervision and guidance of **Mr. Abhimanyu Sharma** from May 1st to August 9. The results of this investigation reported in this project have so far not been reported for any other Degree / Diploma or other Technical forum.

The assistance and help received during the course of the investigation have been duly acknowledged.



Name: Mohit Pradhan

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BONAFIDE CERTIFICATE

Certified that this project report titled **LIBRARY MANAGEMENT SYSTEM** is the bonafide work of **Mohit Pradhan** (20IT103018) who carried out the his Project under my supervision. Certified further, that to the best of my knowledge the work reported herein is not part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion to this or any other candidate.

Submitted for the viva-voce examination held on 23/8/2022



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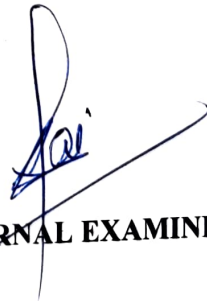
GUIDE



**ASSOCIATE DEAN
MANAGEMENT and IT**



INTERNAL EXAMINER



EXTERNAL EXAMINER

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ABSTRACT

Library Management System (LMS) 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 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 Library Management 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. With the advancement of technology, it is imperative to exalt all the systems into a user-friendly manner. The Library Management system acts as a tool to transform traditional libraries into digital libraries. In traditional libraries, the students/user has to search for books which are hassle process and there is no proper maintenance of database about issues/fines. The Admin have to work allotted for arranging, sorting books in the book sells. At the same time, they have to check and monitor the lend/borrow book details with its fine. LMS will assist the Admin to work easily. The LMS supports the admin to encounter all the issues concurrently. The users need not stand in a queue for a long period to return/borrow a book from the library. The single PC contains all the data's in it. The admin have to assess the system and provide an entry in it. Through LMS the admin can find the book in the bookshelves. The LMS is designed with the basic features such as Admin can add/view/update/delete book. Once he/she ingress into the system they can modify any data's in the database. The complete model is developed in PHP/MySQL language is used to build the application.

1. INTRODUCTION

1.1 General Introduction

From ancient times the knowledge is spread by people across the world in written form. First, the information is stored by carving words on copper using the sharp tool; by the time the papers are invented and using the ink and feather of bird the information is started to store on paper, which helped a lot for storing purpose. It's very difficult to store the data stored in books secured and safe; as we know the paper can be torn apart or they got stolen by someone or in worst scenario pages get eaten by bugs. So as we know from old times the libraries are managed manually by a group of people. The methods are really difficult as compare to today's digitized world, nowadays we can find anything on just one click, but we see at past methods they kept written records for each thing and that record goes on increasing as time pass. If the records got lost then there is no other for retrieving them back, so the loss is permanent. Digitization of library helps to keep allthe records secured and retrievable which saves the paperwork and made library records easy to store. This project not only helps to store the library records but it also provides access to the library management staffs and students to check the information related to the books like availability of books, issue and returning dates, fine related to the delay in returning the book and the information is accessed by both librarian and students so it will be transparent system.

The software to be implemented is on Digital Library Management System. Here there are 2 users. They are The Admin and the receptionist. The first process is the registration of the users who visits to the library. All the details will be entered in the software. Admin has the authority to add, delete modify the details of the book that are available. Admin also have authority to alert the users, before the due date. The user itself has to first register and then login by some required details asked by the system. If the book is not available, the user cannot issue the book, whereas, he/she can access online pdf of book only if book is not available.

1.2 PROJECT OBJECTIVES

- The main objective of the Library Management System is to manage the details of Member, Issues, Books, Student.
- It manages all the information about Student, Books, Author.
- The project is totally built at administrative end and thus only the administrator is guaranteed the access.
- The main purpose of our project is to provide a convenient digital interface between students and the library.
- This application has to good appearance and is very easy to operate.
- It is very simple and easy to access at PHP.

1.2 Literature review

The software to be implemented is on Digital Library Management System. Here there are 2 users. They are The Admin and the receptionist. The first process is the registration of the users who visits to the library. All the details will be entered in the software. Admin has the authority to add, delete modify the details of the book that are available. Admin also have authority to alert the users, before the due date. The user itself has to first register and then login by some required details asked by the system. If the book is not available, the user cannot issue the book, whereas, he/she can access online pdf of the book. The papers referred are listed below.

In this paper, the author highlights different aspects of open source software, such as, evaluation, case study, implementation, comparison etc. However, the purpose of the research article is to focus on the notion of survey of open source library management systems and find development activity. In order to bring rigor into argumentation, the study is exclusively concentrated on open source LMS related research articles and the articles listing, describing and critically analyzing open source library management systems. Library automation software or Integrated Library Management System (ILS) is an information management and retrieval system that can perform all the basic housekeeping operations of a library and act as a database of a library's holding

Information by the libraries the developments in computer and communication systems and their application in libraries revolutionized collection, storage, retrieval and the distribution of information by the libraries Lack of technical knowledge and support, shortage of skilled manpower to install and maintain the software are the major challenges in embracing OSS in the Indian libraries

In this paper, the author has talked about how present libraries are looked alike within the countless difficulties postured by a data universe on fast extension. The expanding desires and the clients' needs to get to quicker and less demanding the pertinent data is in a consistent connection to the institutional interest for the expanding of operational productivity. The integrated framework can be designed so as to meet each kind of library strategy or technique in this way permitting the formation of a sole working stream. The library integrated systems empower a wide range of libraries with open instruments and the important

help required in the working stream so as to adapt to individual and institutional requests both in exhibit and in future circumstances. They have taken an exceptionally improved form of library management framework that deals with the index of a library. It performs capacities, for example, overseeing book exchange and making client.

Paper details	METHODOLOGY	FINDINGS	RESEARCH GAP
<p>Publication: Implementation Status of Library Management Systems Author name: 1.ChintalapudiGeetha Lakshmi 2.MaddaVaralakshmi Paper name: Open Source Software for Library Automation: Opportunities and Challenges</p>	<p>The library integrated systems empower a wide range of libraries with open instruments and the important help required in the working stream so as to adapt to individual and institutional requests both in exhibit and in future circumstances.</p>	<p>They have taken an exceptionally improved form of library management framework that deals with the index of a library. It performs capacities, for example, overseeing book exchange and making client</p>	<p>Existing system is time consuming</p>

Paper details	METHODOLOGY	FINDINGS	RESEARCH GAP
<p>Publication: INTERNATIONAL JOURNAL OF LIBRARY AND INFORMATION SCIENCE (IJLIS)</p> <p>Author name: 1. Girish Kumar 2. T K</p> <p>Paper name: DESIGN AND IMPLEMENTATION OF LIBRARY AUTOMATION USING KOHA (Open Source Software)</p>	<p>Library automation software or Integrated Library Management System (ILS) is an information management and retrieval system that can perform all the basic housekeeping operations of a library and act as a database of a library's holding information by the libraries</p>	<p>The developments in computer and communication systems and their application in libraries revolutionized collection, storage, retrieval and the distribution of information by the libraries</p>	<p>Lack of technical knowledge and support, shortage of skilled manpower to install and maintain the software are the major challenges in embracing OSS in the Indian libraries</p>

Table 1: Literature Review

2. SYSTEM PROPOSAL

2.1 EXISTING SYSTEM

- In "Library Management Software's to handle the entire activity of a library.
- The student will find it simple in this digitized system rather than using the manual writing system. The software consist a database where all the details will be stored secured.
- The system is efficient and easy to understand, error less.

2.1.1 Disadvantages:

- Manually difficult to find
- Existing system is time consuming
- Can't identify book location automatically

2.2 PROPOSED SYSTEM

- In “Library Management Software ”is to handle the entire activity of a library. The software keeps track of all the information about the books in the library, their cost, their complete details and total number of books available in the Library.
- The user will find it easy in this automated system rather than using the manual writing system. The system contains a database where all the information will be stored safely. The system is user-friendly and error free.
- We are adding new feature in track the book location from the software as well checks the book is available in website if the book is available then user can easily download the book and user getting all details about the book.

2.2.1 Advantages:

- It is easy to find the book details and author details.
- Proposed system is take less time to process compare existing system.
- It is easy to get and return book easily.

2.3 RELATED WORKS

As the economic growth increased the peoples are led to the higher aspiration to excel in education and work through better access to information and knowledge. Technologies for building user-centered digital library environments and making computer-user interactions more intelligent should be explored. Earnshaw discussed in his article about the old libraries and its drawbacks to keeping records. A book provided an irreducible deposit of information that could be read, reviewed, criticized, as well as providing the basis for the development of its ideas into further volumes. Information is no longer exclusively library-centric but is also network-centric. The center of gravity has moved from information provision to information access. Online search (via engines such as Google) is replacing physical search. Combining the best of both worlds i.e. the traditional library and the online search – to meet the developing requirements of users is a key challenge for the future. In this article, the author discussed the digital media consideration, the initial development in digital libraries and the long term preservation of digital data. As mentioned in this article digital library is a repository where a significant proportion of content is in the digital form. Which can be indexed and searchable via electronics means which is an advantage over the paper-based information. The difficulty and expense of preserving digital information is a potential impediment to digital library development. Preservation of traditional materials became more successful and systematic after libraries and archives integrated preservation into the overall planning and resource allocation. Digital preservation is largely experimental and replete with the risks associated with untested methods. Digital preservation strategies are shaped by the needs and

constraints of repositories with little consideration for the requirements of current and future users of digital scholarly resources. This article discusses the present state of digital preservation, articulates requirements of both users and custodians, and suggests research needs in storage media, migration, conversion, and overall management strategies. Additional research in these areas would help developers of digital libraries and other institutions with preservation responsibilities to integrate long-term preservation into program planning, administration, system architectures, and resource allocation.

2.4 FEASIBILITY STUDY

Economically Feasibility:

- The system being developed is economic with respect to School or Collage's point of view. It is cost effective in the sense that has eliminated the paper work completely.
- The system is also time effective because the calculations are automated which are made at the end of the month or as per the user requirement.
- The result obtained contains minimum errors and are highly accurate as the data is required.

Technical feasibility:

- The technical requirement for the system is economic and it does not use any other additional Hardware and software.

Behavioral Feasibility:

- The system working is quite easy to use and learn due to its simple but attractive interface. User requires no special training for operating the system.

3. SYSTEM DESIGN

3.1 ARCHITECTURE DIAGRAM

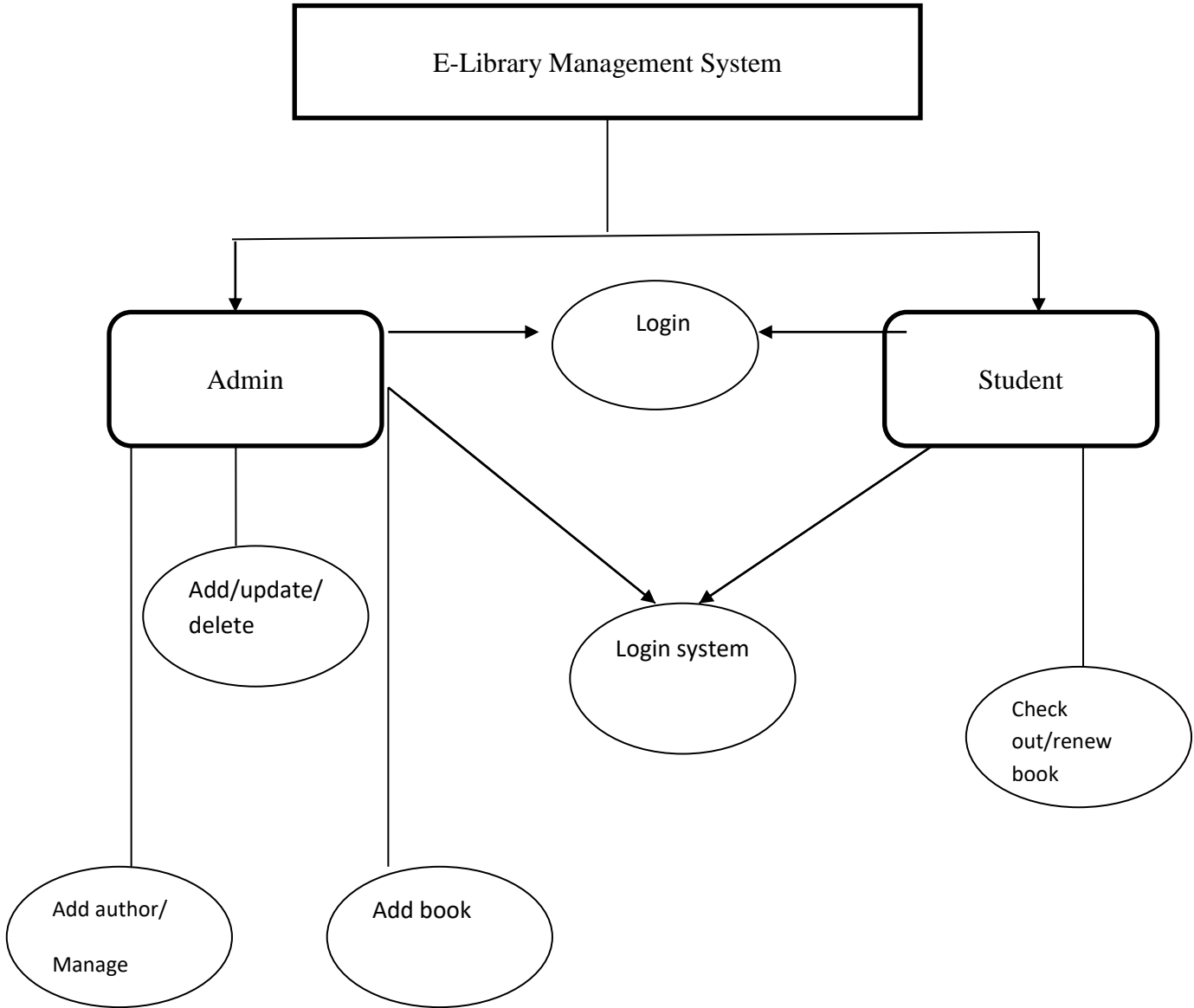


Fig 1: Architecture Diagram

3.2 FLOW DIAGRAM

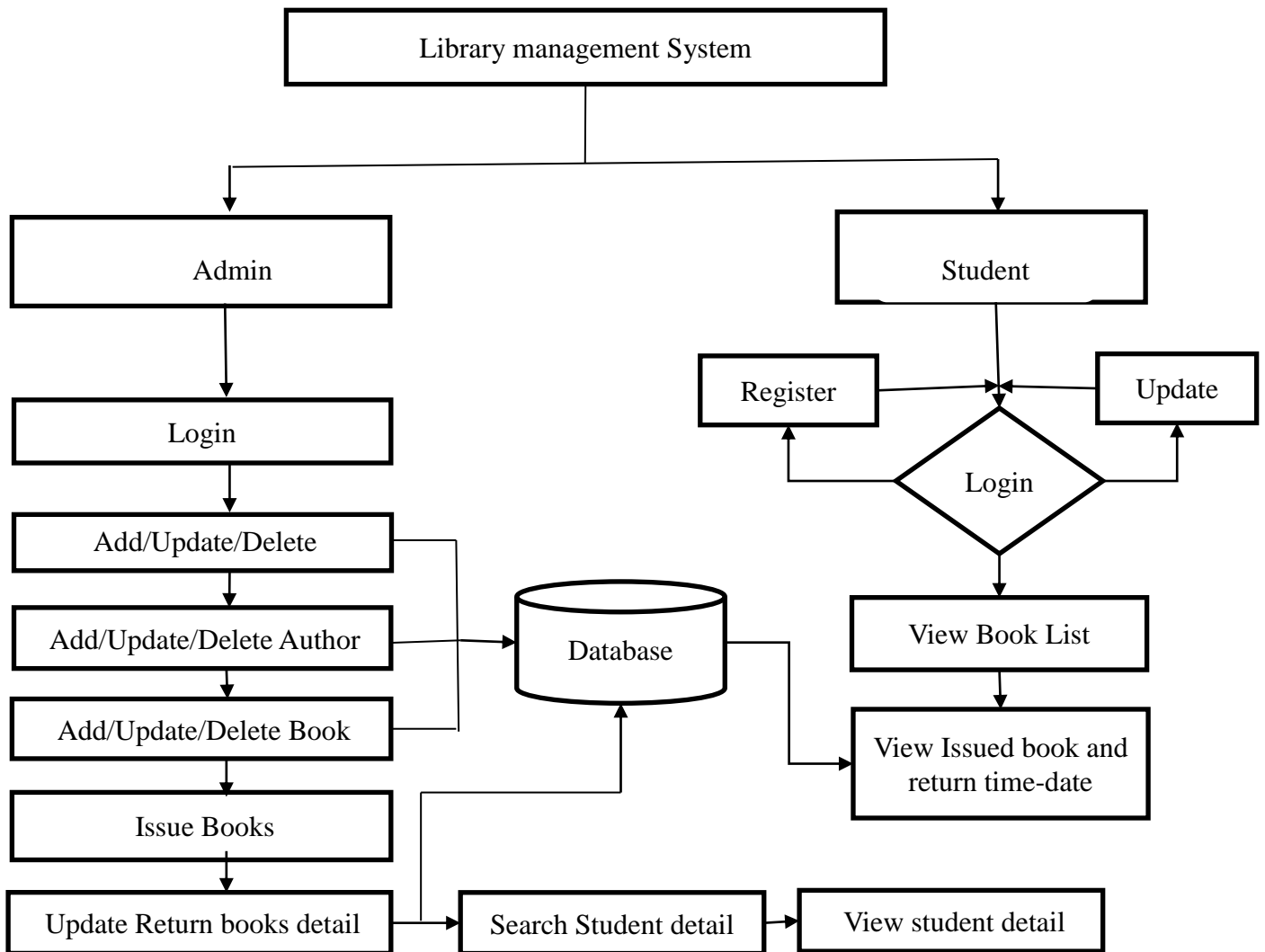


Fig 2: Flow Diagram

3.3 ER DIAGRAM

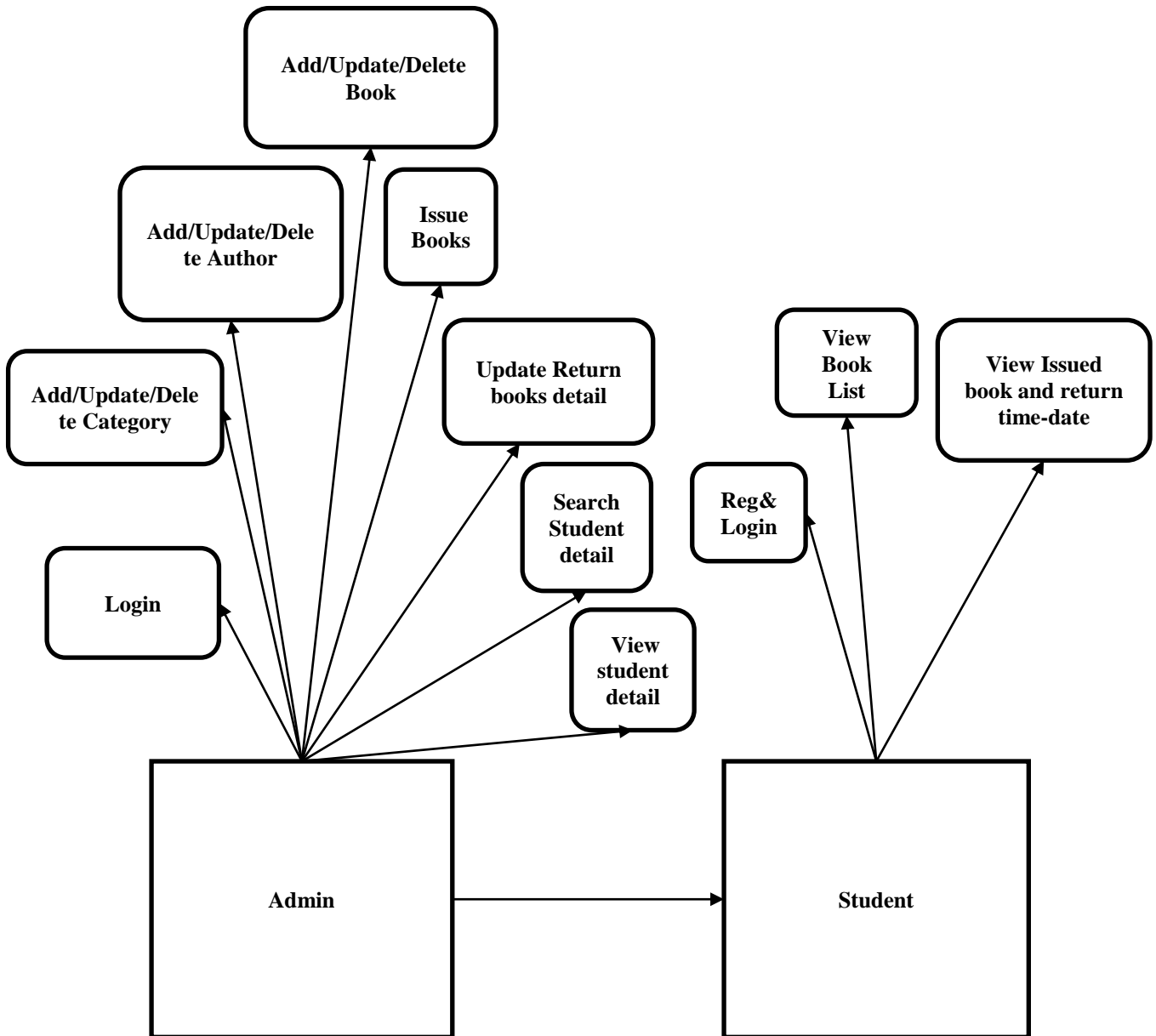


Fig 3:ER Diagram

3.4 DATA FLOW DIAGRAM

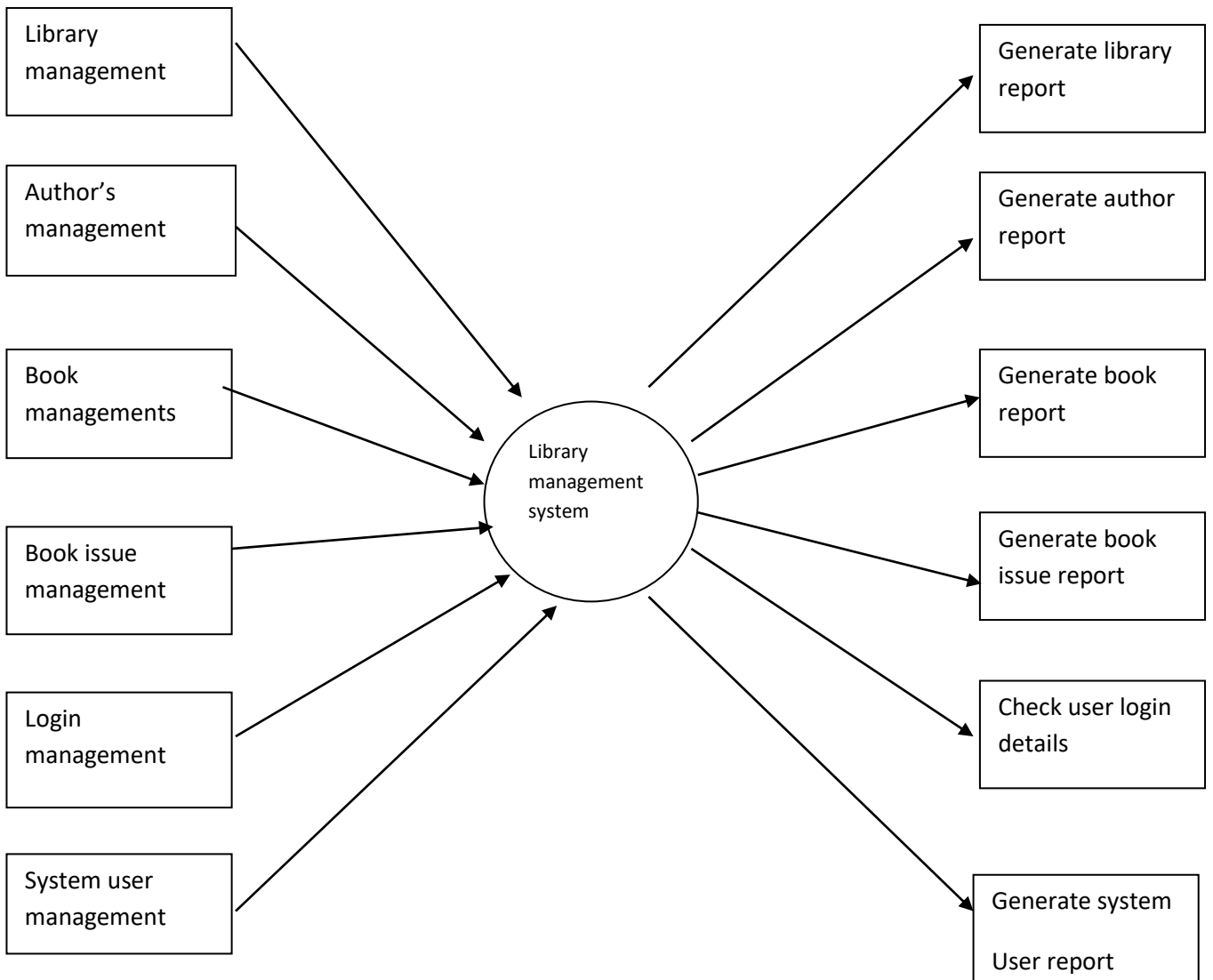


Fig 4: data flow Diagram

4 IMPLEMENTATION

4.1 MODULES

Library management systems have two modules,

1. ADMIN
2. STUDENT

ADMIN:

- Admin can maintain the whole process of this application.
- Admin can be monitor all of the book detail and student detail also.
- Admin can edit the book details. And they can search and view the student details.

STUDENT:

- Student can register them self and after registration they will get student ID.
- Student can view issued book and book return date-time.
- Student can also change own password. Student can also recover own password.

4.2 MODULES DESCRIPTION

ADMIN

1. Dashboard:

- Admin dashboard can view all the process of admin.
- It will display the admin details also.

2. Add/update/ delete category:

- Admin can add/update/delete the category details.
- Category means the book will be consider as many type like mathematics, science etc.

3. Add/update/ delete author:

- Admin can add new author detail.
- And also admin can update/delete the author detail.

4. Add/update/ delete books:

- Admin can add new Book detail.
- Admin can also update /delete the existing books detail.

5. Update issue a new book to student:

- Admin can update the issue book detail.
- And also update the details when student return book.

6. View student details:

- Admin can view the student detail.
- Admin can search the student detail using their student id.

7. Change own password:

- Admin can change their own password.
- And also they can change their details also.

STUDENT

1. Registration:

- Students they can register their details in this portal.
- After Successful registration they can get the student id.
- Student id is used to get the books from the library, and also it is an identification for every student.

2. Login:

- Once you registered, that you can login in this portal.
- Students can login use their mail id and password.

3. View Books:

- After the successful login, students can view the books list.
- And they can view the return book detail
- And also they can view the issue book details.

4. View profile:

- Students can view their own profile.
- Students can also change their own password.

5 SYSTEM REQUIREMENTS

5.1 HARDWARE REQUIREMENTS:

- PROCESSOR : PENTIUM IV
- CLOCK SPEED : 2.7 GHZ
- RAM CAPACITY : 1 GB
- HARD DISK DRIVE : 250 GB
- MONITOR : 15 VGA Color.

5.2 SOFTWARE REQUIREMENTS:

- Operating System : Windows XP
- Language : Php
- Version : JDK 1.5
- Frontend : Php
- Backend : MySQL
- Server : (XAMPP Server)

5.3 SOFTWARE DESCRIPTION

INTRODUCTION TO PHP:

PHP is the latest incarnation of PHP (PHP: Hypertext Pre-processor)-a programming, language devised by Ramus Lerdorf in 1994 for building dynamic, interactive Websites. Since then, it's been evolving into a full-fledged language in its own right, thanks to the hard work of all the people who contribute to its development.

A sure sign that PHP is maturing (OOP) principles and improved support for XML the zend engine (the part that interprets and executes PHP code) now enables PHP5 developers to implement, among a host of other things, graceful application-wide error handling..

Cross platform: most PHP code can be processed without alternation on computers running many different operating systems. For Example, a PHP script that runs on Linux generally also runs well on windows.

HTML-embedded: PHP code can be written in files containing a mixture of PHP instruction and HTML code.

Server-side: The PHP programs are run on server-specially a web server.

Web scripting language: PHP programs run via a web browser.

This means you will write programs that mix PHP code and HTML, run them on a web server, and access them from a web browser that displays the result of your PHP processing by showing you the HTML returned by the web server. In other words, you can make your programs available for other people to access across the web, simply by placing them on a public web server.

You are probably already familiar with HTML (hypertext markup language)-it's the main language used to create web pages, combining plain text with special tags that tell browsers how to treat that text. HTML is used to describe how different elements in a web page should be displayed, how pages should be linked, where to put image, and so on.

In other words, PHP can be used to write the sort of sites that those who regularly use the web are likely to encounter every day. From search engines to information portals to e-commerce sites, most major web sites incorporate some or all of these sorts of programming. Among other things in the course of this book, you will use PHP to build.

INTRODUCTION TO JAVASCRIPT:

An explanation of exactly what JavaScript is has to begin with Java. Java is a new kind of Web programming language developed by Sun Microsystems. A Java program, or applet, can be loaded by an HTML page and executed by the Java Interpreter, which is embedded into the browser.

Java is a complex language, similar to C++. Java is object-oriented and has a wide variety of capabilities; it's also a bit confusing and requires an extensive development cycle. That's where JavaScript comes in.

JavaScript is one of a new breed of Web languages called scripting languages. These are simple languages that can be used to add extra features to an otherwise dull and dreary Web page. While Java is intended for programmers, scripting languages make it easy for nonprogrammers to improve a Web page.

JavaScript was originally developed by Netscape Corporation for use in its browser, Netscape Navigator. It includes a convenient syntax, flexible

variable types, and easy access to the browser's features. It can run on the browser without being compiled; the source code can be placed directly into a Web page.

The Advantages of JavaScript

An Interpreted Language: JavaScript is an interpreted language, which requires no compilation steps. This provides an easy development process. The syntax is completely interpreted by the browser just as it interpreted HTML tags.

Embedded Within HTML: JavaScript does not require any special or separate editor for programs to be written, edited, or compiled. It can be written in any text editor like Notepad, along with appropriate HTML tags, and saved as filename.html. HTML files with embedded JavaScript commands can then be read and interpreted by any browser that has JavaScript enabled.

Minimal Syntax-Easy to Learn: By learning just a few commands and simple rules of syntax, complete applications can be built using JavaScript.

Quick Development: Because JavaScript does not require time-consuming compilations, scripts can be developed in a short period of time. This is enhanced by the fact many GUI interface features, such as alerts, prompts, confirm boxes, and other GUI elements, are handled by client-side JavaScript, the browser, and HTML code.

Design for Simple, Small Programs: It is well suited to implement simple, small programs (for example, a unit conversion calculator between miles and kilometres or pounds and kilograms). Such programs can be easily written and executed at an acceptable speed using JavaScript. In addition, they can be easily interpreted into a web page.

Performance: JavaScript can be written such that the HTML files are fairly compact and quite small. This minimizes storage requirements on the web server and download time for the client.

Additionally, because JavaScript are usually include in the same file as the HTML code for a web page, they require fewer separate network accesses.

Procedural Capabilities: Every programming language needs to support facilities such as Condition checking, Looping and Branching .JavaScript provides syntax, which can be used to add such procedural capabilities to web page (filename.html) coding.

Designed for Programming User Events: JavaScript supports Object/Events based programming JavaScript recognizes when a form **Button** is pressed. This event can have suitable JavaScript code attached, which will executed when the **Button Pressed** event occurs.

JavaScript can be used to implement context sensitive help. Whenever an HTML form's **Mouse** cursor **Mouse Over** a button or a link on the page a helpful and informative message can be displayed in the status bar at the bottom of the browser window.

Easy Debugging and Testing : Being an interprets language ,scripts in JavaScript are tested line by line, and the errors are also listed as they are encountered ,i.e. an appropriate error message along with the line number is listed for every error that is encountered. It is thus easy to locate errors, make changes, and test it again without the overhead and delay of compiling.

Platform Independence / Architecture Neutral: JavaScript is a programming language that is completely independent of the hardware on which it works. It is a language that is understood by any JavaScript enabled browser .Thus

,JavaScript application work on any machine that has an appropriate JavaScript enabled browser can be anywhere on the network.

INTRODUCTION TO SQL:

SQL is a fast, easy-to-use RDBMS used for databases on many Web sites. Speed was the developers' main focus from the beginning. In the interest of speed, they made the decision to offer fewer features than their major competitors (for instance, Oracle and Sybase). However, even though SQL is less full featured than its commercial competitors, it has all the features needed by the large majority of database developers. It's easier to install and use than its commercial competitors, and the difference in price is strongly in MySQL's favor.

SQL is developed, marketed, and supported by SQL AB, which is a Swedish company. The company licenses its two ways:

- **Open source software:** SQL is available via the GNU GPL (General Public License) for no charge. Anyone who can meet the requirements of the GPL can use the software for free. If you're using MySQL as a database on a Web site (the subject of this book), you can use MySQL for free, even if you're making money with your Web site.
- **Commercial license:** SQL is available with a commercial license for those who prefer it to the GPL. If a developer wants to use MySQL as part of a new software product and wants to sell the new product, rather than release it under the GPL, the developer needs to purchase a commercial license. The fee is very reasonable.

Finding technical support for SQL is not a problem. You can join one of several e-mail discussion lists offered on the SQL Web site at www.mysql.com. You can even search the e-mail list archives, which contain a large knowledge base

of MySQL questions and answers. If you're more comfortable getting commercial support, MySQL AB offers technical support contracts — five support levels, ranging from direct e-mail support to phone support, at five price levels.

Advantages of SQL:

MySQL is a popular database with Web developers. Its speed and small size make it ideal for a Web site. Add to that the fact that its open source, which means free, and you have the foundation of its popularity. Here is a rundown of some of its advantages:

- **It's fast.** The main goal of the folks who developed MySQL was speed. Consequently, the software was designed from the beginning with speed in mind.
- **It's inexpensive.** MySQL is free under the open source GPL license, and the fee for a commercial license is very reasonable.
- **It's easy to use.** You can build and interact with a MySQL database by using a few simple statements in the SQL language, which is the standard language for communicating with RDBMSs.
- **It can run on many operating systems.** MySQL runs on a wide variety of operating systems — Windows, Linux, Mac OS, most varieties of UNIX (including Solaris, AIX, and DEC UNIX), FreeBSD, OS/2, Irix, and others.
- **Technical support is widely available.** A large base of users provides free support via mailing lists. The MySQL developers also participate in the e-mail lists. You can also purchase technical support from MySQL AB for a very small fee.

- **It's secure.** MySQL's flexible system of authorization allows some or all database privileges (for example, the privilege to create a database or delete data) to specific users or groups of users. Passwords are encrypted.

- **It supports large databases.** MySQL handles databases up to 50 million rows or more. The default file size limit for a table is 4GB, but you can increase this (if your operating system can handle it) to a theoretical limit of 8 million terabytes (TB).

- **It's customizable.** The open source GPL license allows programmers to modify the MySQL software to fit their own specific environments.

5.4 TESTING OF PRODUCT

System Testing

The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault or weakness in a work product. It provides a way to check the functionality of components, sub-assemblies, assemblies and/or a finished product. It is the process of exercising software with the intent of ensuring that the Software system meets its requirements and user expectations and does not fail in an unacceptable manner. There are various types of test. Each test type addresses a specific testing requirement.

TYPES OF TESTS

Unit testing

Unit testing involves the design of test cases that validate that the internal program logic is functioning properly, and that program inputs produce valid outputs. All decision branches and internal code flow should be validated. It is the testing of individual software units of the application .it is done after the

completion of an individual unit before integration. This is a structural testing, that relies on knowledge of its construction and is invasive. Unit tests perform basic tests at component level and test a specific business process, application, and/or system configuration. Unit tests ensure that each unique path of a business process performs accurately to the documented specifications and contains clearly defined inputs and expected results.

Functional test

Functional tests provide systematic demonstrations that functions tested are available as specified by the business and technical requirements, system documentation, and user manuals.

Functional testing is centered on the following items:

- Valid Input : identified classes of valid input must be accepted.
- Invalid Input : identified classes of invalid input must be rejected.
- Functions : identified functions must be exercised.
- Output : identified classes of application outputs.

System Test

System testing ensures that the entire integrated software system meets requirement. It tests a configuration to ensure known and predictable results. An example of system testing is the configuration oriented system integration test. System testing is based on process descriptions and flows, emphasizing pre-driven process links and integration points.

White Box Testing

White Box Testing is a testing in which in which the software tester has knowledge of the inner workings, structure and language of the software, or at least its purpose. It is purpose. It is used to test areas that cannot be reached from a black box level.

Black Box Testing

Black Box Testing is testing the software without any knowledge of the inner workings, structure or language of the module being tested. Black box tests, as most other kinds of tests, must be written from a definitive source document, such as specification or requirements document, such as specification or requirements document.

Test objectives

- All field entries must work properly.
- Pages must be activated from the identified link.
- The entry screen, messages and responses must not be delayed.

Integration Testing

Software integration testing is the incremental integration testing of two or more integrated software components on a single platform to produce failures caused by interface defects. The task of the integration test is to check that components or software applications, e.g. components in a software system or – one step up – software applications at the company level – interact without error.

Acceptance Testing

User Acceptance Testing is a critical phase of any project and requires significant participation by the end user. It also ensures that the system meets the functional requirements.

Test Results:

All the test cases mentioned above passed successfully. No defects encountered.

6 CONCLUSION AND FUTURE ENHANCEMENT

6.1 CONCLUSION

Library Management System our project allows the admin to store all the book details and the user/student/borrowers details. The system is strong enough to withstand the operations under the conditions where the database is maintained and cleared over a certain time of span. The implementation of the system in the organization will reduce the manual efforts, time, and it is also a smart way of storing the library data.

6.2 FUTURE ENHANCEMENT

In our future goal is to make the entire process online where a student can search books, staff can generate reports and do book transactions. It also has a facility for student login where the student can log in and can see the status of books issued as well as request for a book or give some suggestions. It has a facility of teacher's login where teachers can add lecture notes and also give necessary suggestions to the library and also add info about workshops or events happening in our college or nearby college in the online notice board.

7 SAMPLE CODING & SAMPLE SCREENSHOTS

SAMPLE CODE:

Index.php

```
<?php

session_start();

error_reporting(0);

include('includes/config.php');

if($_SESSION['login']!="){

$_SESSION['login']="";

}

if(isset($_POST['login']))

{

$email=$_POST['emailid'];

$password=md5($_POST['password']);

$sql ="SELECT EmailId,Password,StudentId,Status FROM tblstudents
WHERE EmailId=:email and Password=:password";

$query= $dbh ->prepare($sql);

$query->bindParam(':email', $email, PDO::PARAM_STR);

$query->bindParam(':password', $password, PDO::PARAM_STR);

$query->execute();
```

```

$results=$query->fetchAll(PDO::FETCH_OBJ);

if($query->rowCount() > 0)
{
foreach ($results as $result) {

    $_SESSION['stdid']=$result->StudentId;

    if($result->Status==1)

    {

        $_SESSION['login']=$_POST['emailid'];

        echo "<script type='text/javascript'>document.location ='dashboard.php';
        </script>";

    } else {

        echo "<script>alert('Your Account Has been blocked .Please contact
        admin');</script>";

    }

}

}

}

else{

```

```
echo "<script>alert('Invalid Details');</script>";

}

}

?>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">

<head>

<meta charset="utf-8" />

<meta name="viewport" content="width=device-width, initial-scale=1,
maximum-scale=1" />

<meta name="description" content="" />

<meta name="author" content="" />

<title>Online Library Management System | </title>

<!-- BOOTSTRAP CORE STYLE -->

<link href="assets/css/bootstrap.css" rel="stylesheet" />

<!-- FONT AWESOME STYLE -->

<link href="assets/css/font-awesome.css" rel="stylesheet" />

<!-- CUSTOM STYLE -->

<link href="assets/css/style.css" rel="stylesheet" />

<!-- GOOGLE FONT -->
```

```
<link href='http://fonts.googleapis.com/css?family=Open+Sans' rel='stylesheet'  
type='text/css' />
```

```
</head>
```

```
<body>
```

LOGIN FORM

```
</div>
```

```
<div class="panel-body">
```

```
<form role="form" method="post">
```

```
<div class="form-group">
```

```
<label>Enter Email id</label>
```

```
<input class="form-control" type="text" name="emailid" required  
autocomplete="off" />
```

```
</div>
```

```
<div class="form-group">
```

```
<label>Password</label>
```

```
<input class="form-control" type="password" name="password" required  
autocomplete="off" />
```

```
<p class="help-block"><a href="user-forgot-password.php">Forgot  
Password</a></p>
```

```
</div>

<button type="submit" name="login" class="btn btn-info">LOGIN </button> |
<a href="signup.php">Not Register Yet</a>

</form>

</div>

</div>

</div>

</div>

</div>

<!-- LOGIN PABNEL END-->

</div>

</div>

<!-- CONTENT-WRAPPER SECTION END-->

<?php include('includes/footer.php');?>

<!-- FOOTER SECTION END-->

<scriptsrc="assets/js/jquery-1.10.2.js"></script>

<!-- BOOTSTRAP SCRIPTS -->

<scriptsrc="assets/js/bootstrap.js"></script>

<!-- CUSTOM SCRIPTS -->

<scriptsrc="assets/js/custom.js"></script>

</body>
```

```
</html>
```

Signup.php:

```
<?php  
session_start();  
  
include('includes/config.php');  
  
error_reporting(0);  
  
if(isset($_POST['signup']))  
  
{
```

My-profile.php:

```
<?php  
session_start();  
  
include('includes/config.php');  
  
error_reporting(0);  
  
if(strlen($_SESSION['login']==0)  
  
{  
  
header('location:index.php');  
  
}  
  
else{  
  
if(isset($_POST['update']))
```



```

{

$sid=$_SESSION['stdid'];

$name=$_POST['fullanme'];

$mobileno=$_POST['mobileno'];

$sql="update tblstudents set FullName=:fname,MobileNumber=:mobileno
where StudentId=:sid";

$query = $dbh->prepare($sql);

$query->bindParam(':sid',$sid,PDO::PARAM_STR);

$query->bindParam(':fname',$name,PDO::PARAM_STR);

$query->bindParam(':mobileno',$mobileno,PDO::PARAM_STR);

$query->execute();

echo '<script>alert("Your profile has been updated")</script>';

}

?>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">

<head>

```

```
<meta charset="utf-8" />

<meta name="viewport" content="width=device-width, initial-scale=1,
maximum-scale=1" />

<meta name="description" content="" />

<meta name="author" content="" />

<!--[if IE]>

<meta http-equiv="X-UA-Compatible" content="IE=edge,chrome=1">

<![endif]-->

<title>Online Library Management System | Student Signup</title>

<!-- BOOTSTRAP CORE STYLE -->

<link href="assets/css/bootstrap.css" rel="stylesheet" />

<!-- FONT AWESOME STYLE -->

<link href="assets/css/font-awesome.css" rel="stylesheet" />

<!-- CUSTOM STYLE -->

<link href="assets/css/style.css" rel="stylesheet" />

<!-- GOOGLE FONT -->

<link href='http://fonts.googleapis.com/css?family=Open+Sans' rel='stylesheet'
type='text/css' />

</head>

<body>
```

```
<!-------MENU SECTION START-->

<?php include('includes/header.php');?>

<!-- MENU SECTION END-->

<div class="content-wrapper">

<div class="container">

<div class="row pad-botm">

<div class="col-md-12">

<h4 class="header-line">My Profile</h4>

</div>

</div>

</div>

<div class="row">

<div class="col-md-9 col-md-offset-1">

<div class="panel panel-danger">

<div class="panel-heading">

    My Profile

</div>

<div class="panel-body">
```

```

<form name="signup" method="post">

<?php

$sid=$_SESSION['stdid'];

$sql="SELECT
StudentId,FullName,EmailId,MobileNumber,RegDate,UpdationDate,Status
from tblstudents where StudentId=:sid ";

$query = $dbh ->prepare($sql);

$query->bindParam(':sid', $sid, PDO::PARAM_STR);

$query->execute();

$results=$query->fetchAll(PDO::FETCH_OBJ);

$cnt=1;

if($query->rowCount() > 0)

{

foreach($results as $result)

{

?>

<div class="form-group">

<label>Student ID :</label>

<?php echo htmlentities($result->StudentId);?>

</div>

```

```
<div class="form-group">

<label>RegDate :</label>

<?php echo htmlentities($result->RegDate);?>

</div>

<?php if($result->UpdationDate!=""){ ?>

<div class="form-group">

<label>Last UpdationDate :</label>

<?php echo htmlentities($result->UpdationDate);?>

</div>

<?php } ?>
```

```
<div class="form-group">

<label>Profile Status :</label>

<?php if($result->Status==1){ ?>

<span style="color: green">Active</span>

<?php } else { ?>

<span style="color: red">Blocked</span>

<?php }?>

</div>
```

```
<div class="form-group">
<label>Enter Full Name</label>
<input class="form-control" type="text" name="fullanme" value="<?php echo
htmlentities($result->FullName);?>" autocomplete="off" required />
</div>
```

```
<div class="form-group">
<label>Mobile Number :</label>
<input class="form-control" type="text" name="mobilen" maxlength="10"
value="<?php echo htmlentities($result->MobileNumber);?>"
autocomplete="off" required />
</div>
```

```
<div class="form-group">
<label>Enter Email</label>
<input class="form-control" type="email" name="email" id="emailid"
value="<?php echo htmlentities($result->EmailId);?>" autocomplete="off"
required readonly />
</div>
```

```
<?php }} ?>
```

```
<button type="submit" name="update" class="btn btn-primary"
id="submit">Update Now </button>
```

```
</form>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
<!-- CONTENT-WRAPPER SECTION END-->
```

```
<?php include('includes/footer.php');?>
```

```
<scriptsrc="assets/js/jquery-1.10.2.js"></script>
```

```
<!-- BOOTSTRAP SCRIPTS -->
```

```
<scriptsrc="assets/js/bootstrap.js"></script>
```

```
<!-- CUSTOM SCRIPTS -->
```

```
<scriptsrc="assets/js/custom.js"></script>
```

```
</body>
```

```
</html>
```

```
<?php } ?>
```

Adminlogin.php:

```
<?php
```

```
session_start();
```

```
error_reporting(0);
```

```
include('includes/config.php');
```

```
if($_SESSION['alogin']!=""){
```

```
$_SESSION['alogin']="";
```

```
}
```

```
if(isset($_POST['login']))
```

```
{
```

```
$username=$_POST['username'];
```

```
$password=md5($_POST['password']);
```

```
$sql ="SELECT UserName,Password FROM admin WHERE
```

```
UserName=:username and Password=:password";
```

```
$query= $dbh ->prepare($sql);
```

```
$query->bindParam(':username', $username, PDO::PARAM_STR);
```

```
$query->bindParam(':password', $password, PDO::PARAM_STR);
```

```
$query->execute();
```

```
$results=$query->fetchAll(PDO::FETCH_OBJ);
```

```
if($query->rowCount() > 0)
```



```
{
$_SESSION['alogin']=$_POST['username'];

echo "<script type='text/javascript'>document.location ='admin/dashboard.php';
</script>";

} else{

echo "<script>alert('Invalid Details');</script>";

}

}

?>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">

<head>

<meta charset="utf-8" />

<meta name="viewport" content="width=device-width, initial-scale=1,
maximum-scale=1" />

<meta name="description" content="" />

<meta name="author" content="" />

<title>Online Library Management System</title>

<!-- BOOTSTRAP CORE STYLE -->

<link href="assets/css/bootstrap.css" rel="stylesheet" />

<!-- FONT AWESOME STYLE -->
```

```
<link href="assets/css/font-awesome.css" rel="stylesheet" />

<!-- CUSTOM STYLE -->

<link href="assets/css/style.css" rel="stylesheet" />

<!-- GOOGLE FONT -->

<link href='http://fonts.googleapis.com/css?family=Open+Sans' rel='stylesheet'
type='text/css' />

</head>

<body>

<!-------MENU SECTION START-->

<?php include('includes/header.php');?>

<!-- MENU SECTION END-->

<div class="content-wrapper">

<div class="container">

<div class="row pad-botm">

<div class="col-md-12">

<h4 class="header-line">ADMIN LOGIN FORM</h4>

</div>

</div>

<!--LOGIN PANEL START-->
```

```
<div class="row">

<div class="col-md-6 col-sm-6 col-xs-12 col-md-offset-3" >

<div class="panel panel-info">

<div class="panel-heading">
```

Listed-books.php:

```
<?php

session_start();

error_reporting(0);

include('includes/config.php');

if(strlen($_SESSION['login'])==0)

    {

header('location:index.php');

    }
```

Manage-authors.php:

```
<?php

session_start();

error_reporting(0);

include('includes/config.php');

if(strlen($_SESSION['alogin'])==0)
```

```

    {
header('location:index.php');
    }
else{
if(isset($_GET['del']))
    {
$id=$_GET['del'];

$sql = "delete from tblauthors WHERE id=:id";

$query = $dbh->prepare($sql);

$query ->bindParam(':id',$id, PDO::PARAM_STR);

$query ->execute();

$_SESSION['delmsg']="Author deleted";

header('location:manage-authors.php');

    }

```

Authors Listing

</div>

<div class="panel-body">

```
<div class="table-responsive">

<table class="table table-striped table-bordered table-hover" id="dataTables-
example">

<thead>

<tr>

<th>#</th>

<th>Author</th>

<th>Creation Date</th>

<th>Updation Date</th>

<th>Action</th>

</tr>

</thead>

<tbody>

<?php $sql = "SELECT * from tblauthors";

$query = $dbh ->prepare($sql);

$query->execute();

$results=$query->fetchAll(PDO::FETCH_OBJ);

$cnt=1;
```

Add-category.php:

```
<?php
```

```
session_start();

error_reporting(0);

include('includes/config.php');

if(strlen($_SESSION['alogin'])==0)
    {

header('location:index.php');

    }

else{

if(isset($_POST['create']))
    {
```

SCREENSHOT:

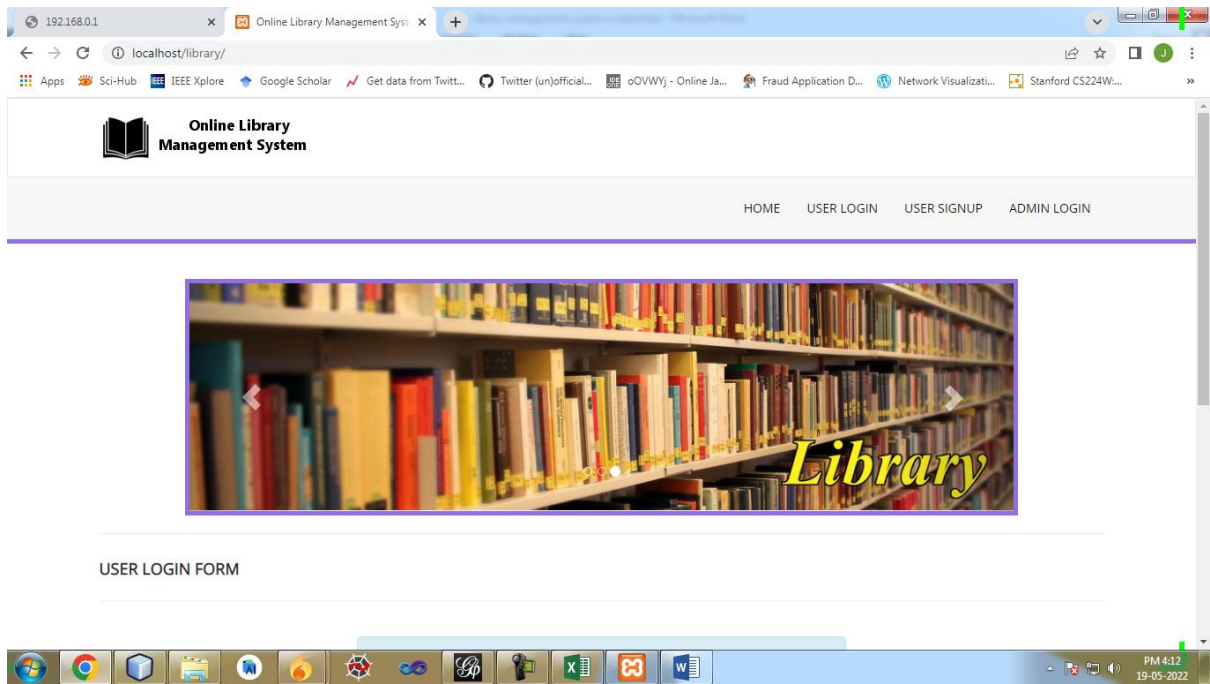


Fig 5 : user login form

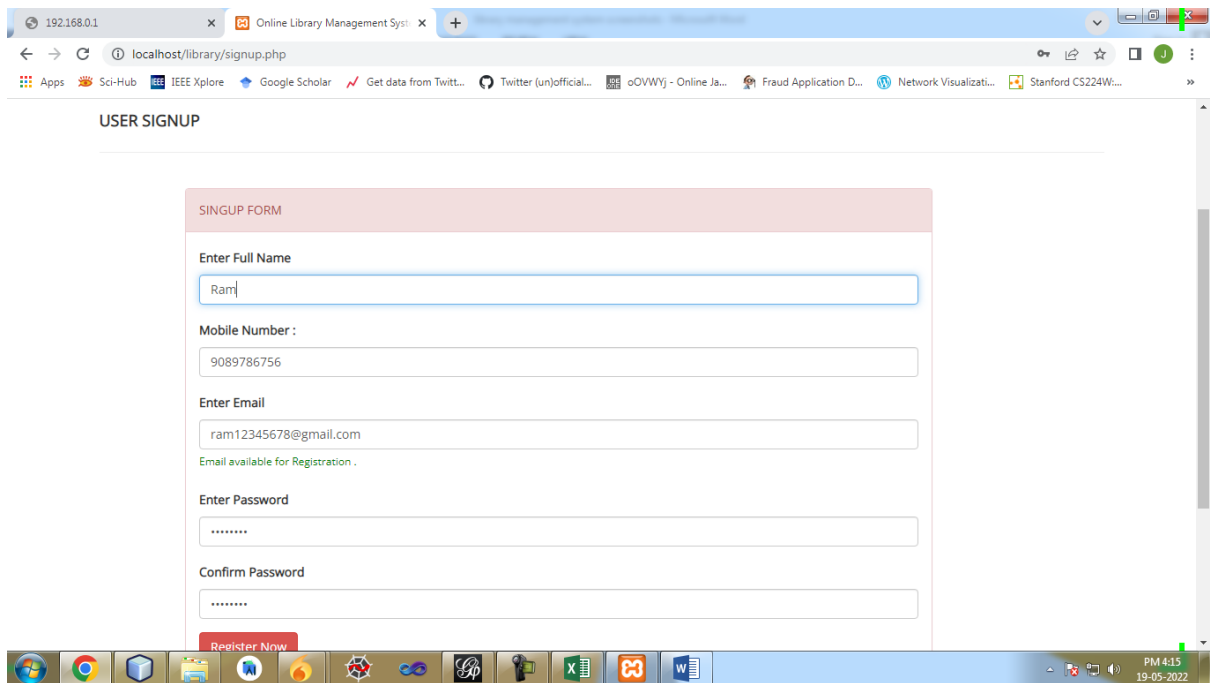


Fig 6: user signup

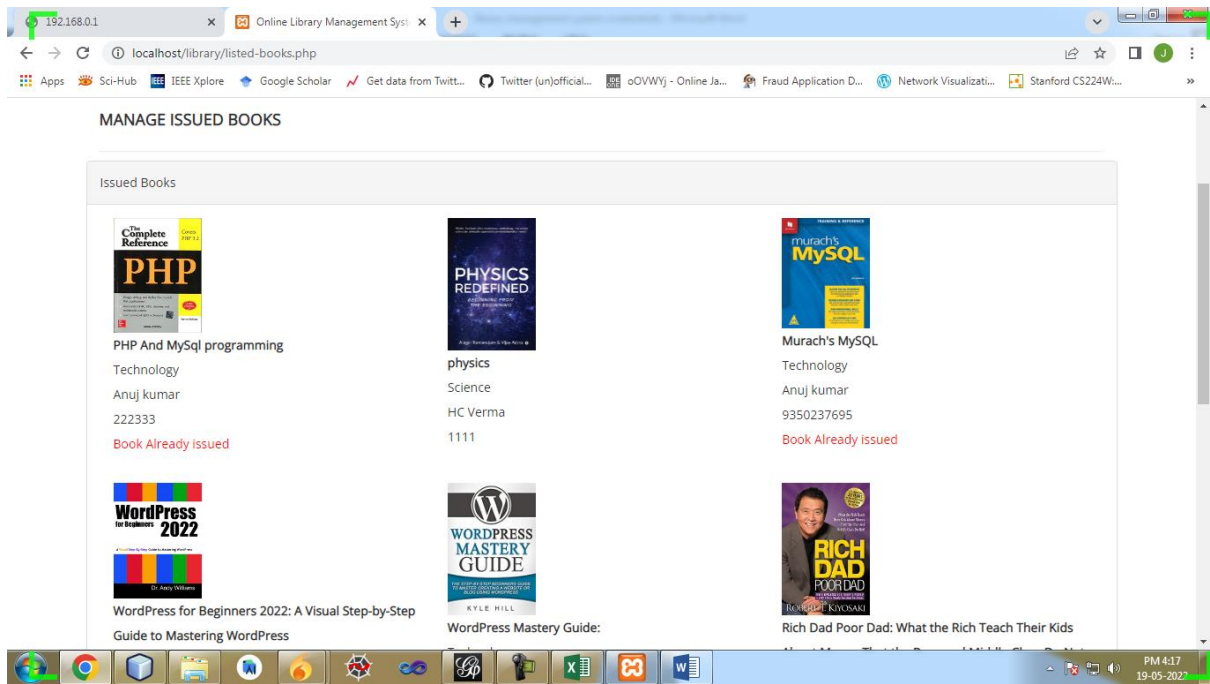


Fig 7: manage issued book

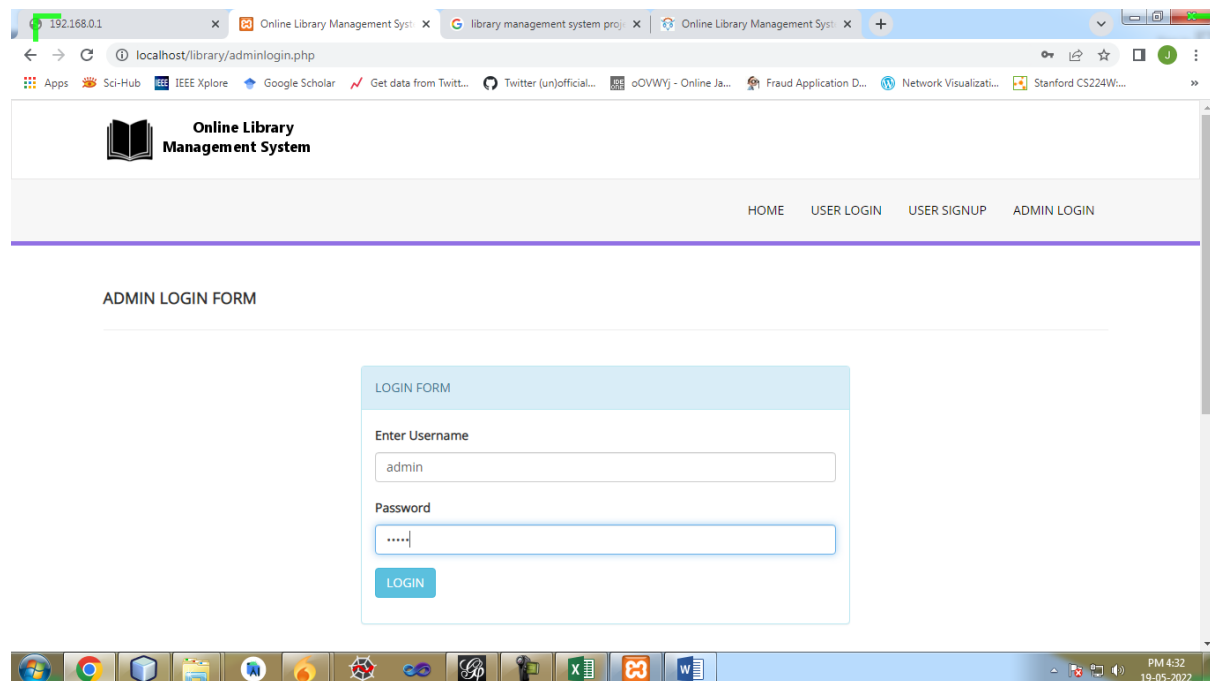


Fig 8: admin login form

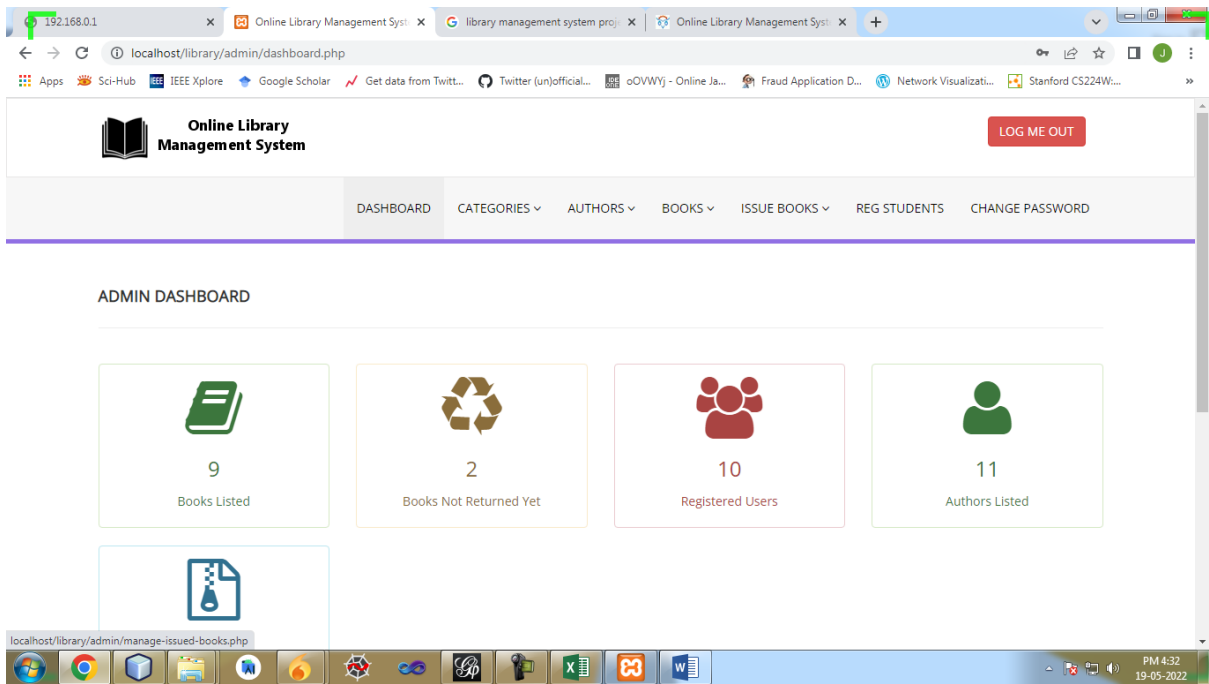


Fig 9: admin dashboard

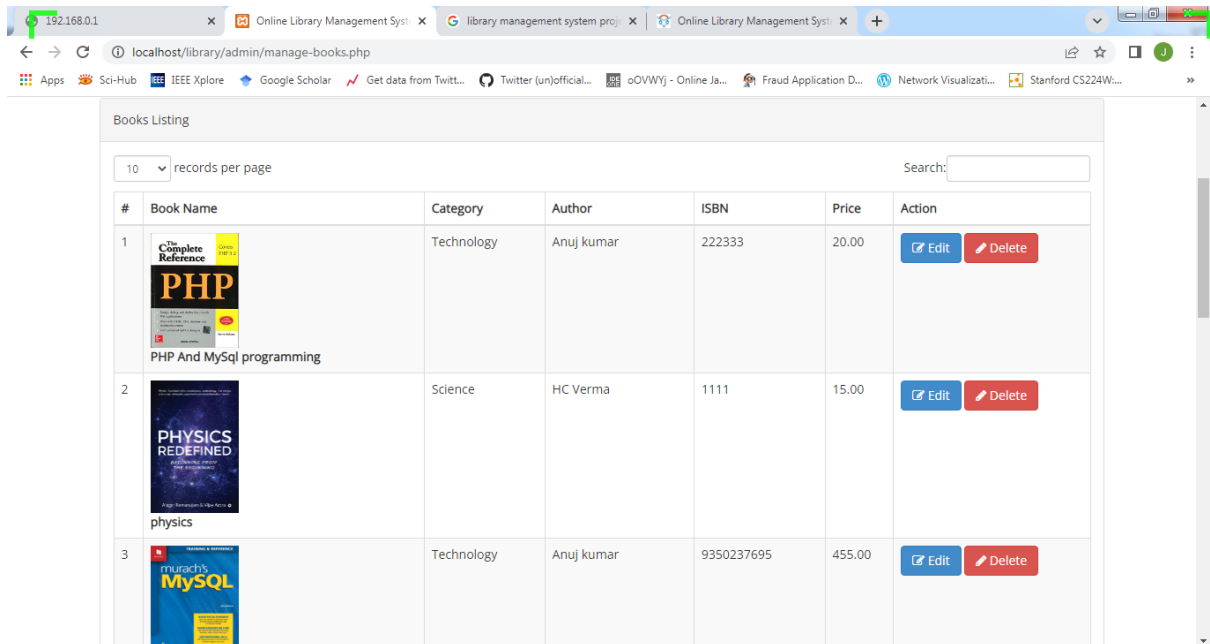


Fig 10: books listing

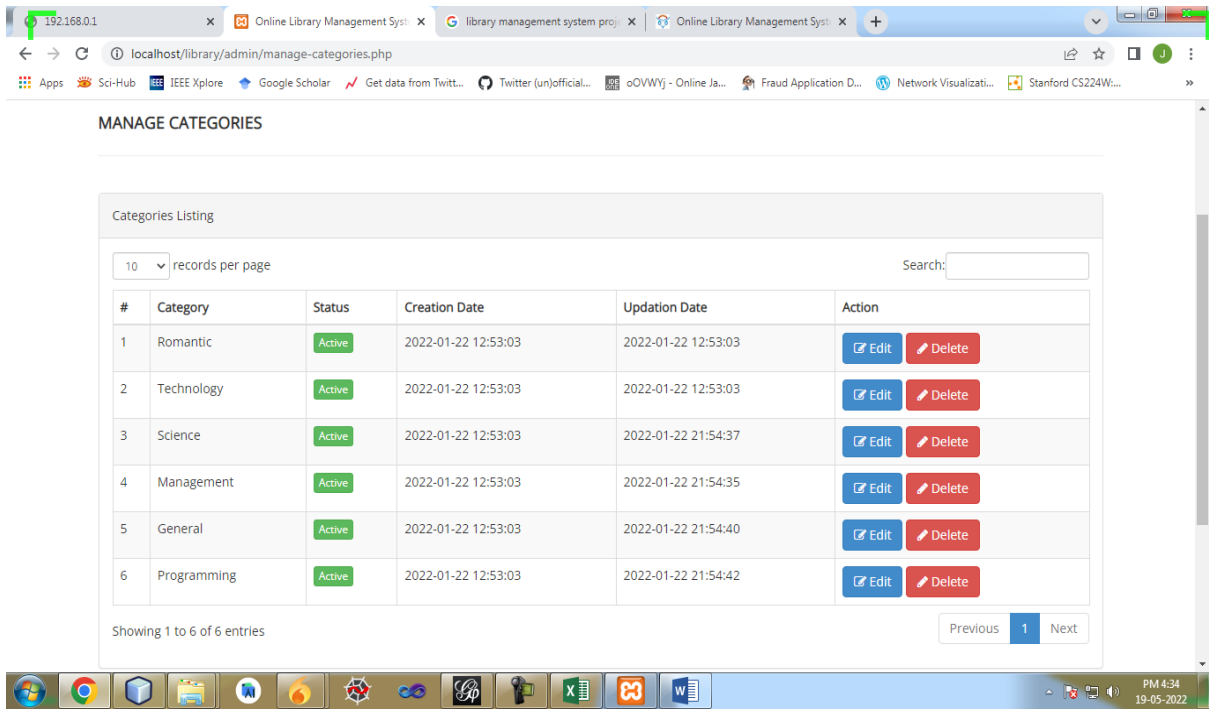


Fig 11: manage categories

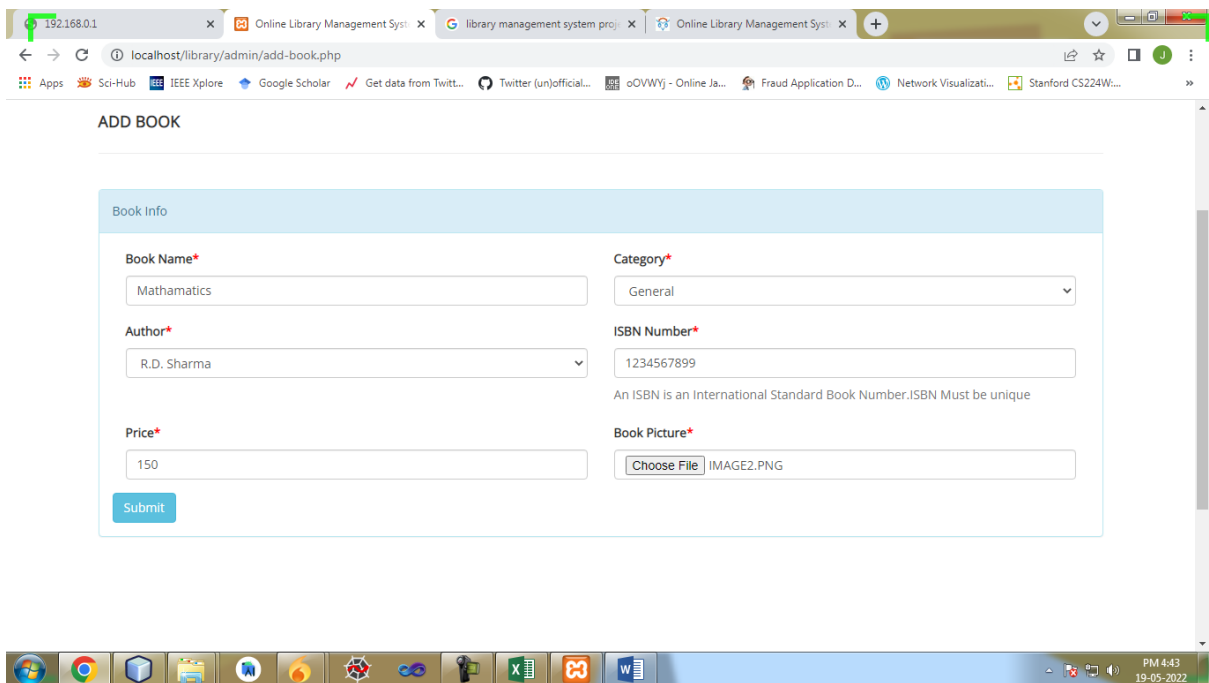


Fig 12: add book

192.168.0.1 x Online Library Management S x library management system pr x Online Library Management S x localhost / 127.0.0.1 / library / x

localhost/library/admin/manage-issued-books.php

Apps Sci-Hub IEEE Xplore Google Scholar Get data from Twitt... Twitter (un)official... oOVWYj - Online Ja... Fraud Application D... Network Visualizati... Stanford CS224W...

MANAGE ISSUED BOOKS

Issued Books

10 records per page Search:

#	Student Name	Book Name	ISBN	Issued Date	Return Date	Action
1	John Doe	C++: The Complete Reference, 4th Edition	007053246X	2022-01-22 13:48:08	2022-01-22 13:48:22	Edit
2	John Doe	PHP And MySql programming	222333	2022-01-22 13:47:15	Not Return Yet	Edit
3	test	ASP.NET Core 5 for Beginners	GBSJ36344563	2022-01-22 13:45:02	2022-01-22 13:45:23	Edit
4	test	C++: The Complete Reference, 4th Edition	007053246X	2022-01-22 13:08:09	2022-01-22 13:08:54	Edit
5	Anuj kumar	PHP And MySql programming	222333	2022-01-22 11:29:17	2022-01-22 11:48:08	Edit
6	Sarita Pandey	Murach's MySQL	9350237695	2022-01-22 11:15:57	Not Return Yet	Edit

Showing 1 to 6 of 6 entries

Previous 1 Next

Windows taskbar: PM 4:48 19-05-2022

Fig 13: manage issued book

8 REFERENCES

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<http://www.avantibrarysystems.com/microlcs.html> (accessed 25 November 2013)
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