A Project Report on

"LIBRARY MANAGEMENT SYSTEM"

Submitted by partial fulfilment of the

BACHELOR IN COMPUTER APPLICATION

By

"Manish Kumar"

Enrollment No.- AJU/190684

Under the esteemed guidance of

"Miss. Divya Paikaray"

ARKA JAIN UNIVERSITY

JAMSHEDPUR, JHARKHAND

DEPT. OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

2019-22

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GUIDED BY-

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PRESENTED BY-

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<u>CERTIFICATE</u>

This is to certify that the project entitled **"LIBRARY MANAGEMENT SYSTEM"**, is bona-fide work of **Manish Kumar** bearing **AJU/190684** submitted in partial fulfilment of the requirements for the award of degree of BACHELOR IN COMPUTER APPLICATION from ARKA JAIN UNIVERSITY, JHARKHAND.

Internal Guide

HOD

University Seal

Date: 28/05/2022

IT DEVELOPER

IT ENGINEERS

Ref. No: ITD-IP-0322-013   Date: 08-03-2022

PROJECT INTERNSHIP LETTER

TO WHOM IT MAY CONCERN

This is to certify that Mr. **Manish Kumar**, a student of ARKA JAIN University, Jharkhand, Jamshedpur has successfully completed his Project Internship/Training (Virtual) with our organization as a **Full Stack Web Developer** during the period of November 2021 to February 2022.

The topic of the project was:

"Library Management System"

The Frontend and backend used for project development was HTML, CSS, JavaScript, BootStrap, PHP, MYSQL.

During this period of internship/training, he was found to be honest, creative & able to perform all his duties perfectly on the project.

We wish him all the best in all his future accomplishments.

For IT DEVELOPER

(Authorized Signatory)

ABSTRACT

Library management system is a project which aims in developing a computerized system to maintain all the daily work of library .This project has many features which are generally not available in normal library management systems like facility of user login and a facility of teachers login .It also has a facility of admin login through which the admin can monitor the whole system .It also has facility of an online notice board where teachers can student can put up information about workshops or seminars being held in our colleges or nearby colleges and librarian after proper verification from the concerned institution organizing the seminar can add it to the notice board .

This library management system is mainly use by librarian and library admin. Normal Librarian is able to manage the member maintenance module, book maintenance module and also the most important module in a library which is book transaction module. Besides that, library management system also allows user to manage the publisher as well as lost book module. On the other hand, other type of user which is admin level staff is able to handle the staff module and view the report module.

Library is a place where all kind of books are available. Online Library Management system is a web-based application. This system contains list of all the books and can be accessed by remote users concurrently from anywhere in the campus. But for that user must be registered user.

Client sends requests, on receiving the request the server processes it and extracts the data from database and sends the result back to the client. This system provides separate interface and login for librarian and students. Librarian can modify database.

Users can search for books and renewal books online. They can request for any book to the librarian from anywhere in the college. They can view the issue and return dates of any that they have borrowed book.

ACKNOWLEDGMENT

I would like to express my sincere gratitude to several individuals and organization for supporting me throughout the completion of my project.

First, I wish to express my sincere gratitude to my mentor **Miss Divya Paikaray** for her enthusiasm patience, insightful comments, helpful information, practical advices and unceasing ideas that have helped me tremendously at all times in my Project and writing of this thesis. Her immense knowledge, profound experience and professional expertise in Backend has enabled us to complete this project successfully. Without her support and guidance, this project would not have been possible.

I am also thankful to our respected **H.O.D Dr. Arvind Kumar Pandey** and all faculty members for loving inspiration and timely guidance. I also wish to express my sincere thanks to the Department of Computer science & Information technology of ARKA JAIN UNIVERSITY for accepting this project.

Thanks for all your encouragement!

DECLARATION

I hereby declare that the Project entitled **"LIBRARY MANAGEMENT SYSTEM"** done at ARKA JAIN UNIVERSITY has not been in any case duplicated to submit to any other university for the award of any degree. To the best of my knowledge other than me, no one has submitted to any other university.

This project is done in partial fulfilment of the requirement for the award of degree of BACHELOR OF COMPUTER APPLICATION to be submitted as final semester project as part of our curriculum.

Signature

Manish Kumar

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Chapter 1

INTRODUCTION

1.1 Overview

A library management system is application that is designed to manage all the functions of a library. It helps librarian to maintain the database of new books and the books that are borrowed by members along with their due dates.

This system completely automates all your library's activities. The best way to maintain, organize, and handle countless books systematically is to implement a library management system software. A library management system is used to maintain library records. It tracks the records of the number of books in the library, how many books are issued, or how many books have been returned or renewed etc.

1.2 Project Aims and Objective

The project aims and objectives that will be achieved after completion of the system were carried out in this sub chapter. The succession of the system also will be evaluated through this sub chapter.
The project objectives are:

- To eliminate the paper-work in library
- To record every transaction in computerized system so that problem such as record file missing won't happen again
- To design a user-friendly graphical user interface which suit the users
- To complete the system according to project schedule
- To produce technical report that documents the phases, tasks and deliverables inthe project

1.3   Background of The Project

Library Management System is an application refer to other library system and it is suitableto use by small and medium size library. It is use by librarian and library admin to manage the library using a computerized system. The system was developed and designed to help librarian record every book transaction so that the problem such as file missing or record missing will not happen.

Book and member maintenance module also included in Library Management System. Admin can register or edit the member or book in the system. With this computerized maintenance, library will not lose the book record or member record which always happen when no computerized system brings used.

In addition, first type of report is rental and return report, admin can check the rental, return transaction which happen on particular day. Besides that, user can check the Top10 books which borrow by the member in a day, month or year based on category. Moreover, activity log report also provided by system so that admin can check what process has been carried out such as register new book, edit member information as well as login, logout information.

When user lost the book, user can use Lost Book Module to register the lost book and receive the fine which is double price of that book.
All these modules are able to help librarian to manage the library more convenience and efficiency compare to those libraries without computerized system.

1.4 Operation Environment

Hardware Configuration

Client Side: -

RAM	512MB
Hard Disk	5GB
Processor	2.10GHZ

Server Side: -

RAM	1GB
Hard Disk	8GB
Processor	2.89GHz

Software Requirements

Client Side: -

Web Browser	Google Chrome or any Compatible browser
Operating System	Windows or any equivalent OS

Server Side: -

Web Server	XAMPP
Frontend	HTML, CSS, JS, BOOTSTRAP
Backend	PHP, MYSQL
Web Browser	Google chrome or any compatible browser
Operating System	Windows or any equivalent OS

Chapter 2
SYSTEM ANALYSIS

2.1 System Requirement Specification

Product Description:

Library Management System is a computerized system which helps user(librarian) to manage the library daily activity in electronic format. It reduces the risk of paper work such as file lost, file damaged and time consuming.
It can help user to manage the transaction or record more effectively and time-saving.

Problem Statement:

The problem occurred before having computerized system includes:

- File lost - When computerized system is not implemented file is always lost because of human environment. Sometimes due to some human error there may be a loss of records.

- File damaged - When a computerized system is not their file is always lost due to some accident like spilling of water by some member on file accidentally. Besides some natural disaster like floods or fires may also damage the files.

- Difficult to search record - When there is no computerized system there is always a difficulty in searching of records if the records are large in number.

System Objective:

- Improvement in control and performance - The system is developed to cope up with the current issues and problems of library. The system can add user, validate user and is also bug free.

- Save cost - After computerized system is implemented less human force will be required to maintain the library thus reducing the overall cost.

- Save time - Librarian is able to search record by using few clicks of mouse and few search keywords thus saving his valuable time.

Feasibility Study

A feasibility analysis is undertaken to determine the possibility or probability of either improving the existing system or developing a completely new system. It helps to obtain an overview of the problem and to get rough assessment of whether feasible solution exist. There are three aspects in feasibility study portion of the preliminary investigation.

1) Operational feasibility
2) Technical feasibility
3) Economical feasibility

Operational feasibility: -

It is a measure of how well a proposed system solves the problems, and takes advantages of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development

Technical feasibility: -

This involves questions such as whether the technology needed for the system exists, how difficult it will be to build, and whether the firm has enough experience using that technology.

Economic feasibility: -

Economic analysis is the most frequently used method for evaluating the effectiveness of a new system. More commonly known as cost/benefit analysis, the procedure is to determine the benefits and savings that are expected from a candidate system and compare them with costs.

2.2   Software And Hardware Requirements

SOFTWARE REQUIREMENTS

- 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.

HARDWARE REQUIREMENTS

- Intel core i5 2nd generation is used as a processor because it is fast than other processors an provide reliable and stable and we can run our pc for long time. 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

2.3   Existing vs Proposed System

i. Existing system does not have any facility of teacher's login or student login whereas proposed system will have a facility of student login as well as teacher's login

ii. Existing system does not have a facility of online reservation of books whereas proposed system has a facility of online reservation of books

iii. Existing system does not have any facility of online notice board where description of workshops happening in our college as well as nearby colleges is being provided.

iv. Existing system does not have any option of lectures notes uploaded by teachers whereas proposed system will have this facility

v. Existing system does not have any facility to generate student reports as well book issue reports whereas proposed system provides librarian with a tool to generate reports

2.4 Software Tools Used

The whole Project is divided in two parts the front end and the back end.

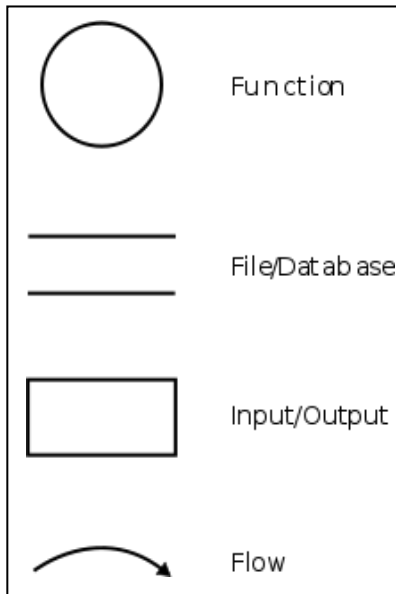**Front end** - The front end is designed using of html, CSS, Java script

- **HTML -** Hyper **Text Markup Language** is the main markup language for creating web pages and other information that can be displayed in a web browser.HTML is written in the form of HTML elements consisting of tags enclosed in angle brackets (like <html>), within the web page content. HTML tags most commonly come in pairs like <h1> and </h1>, although some tags represent empty elements and so are unpaired, for example <img>. The first tag in a pair is the start tag, and the second tag is the end tag (they are also called opening tags and closing tags). In between these tags web designers can add text, further tags, comments and other types of text-based content. HTML allows images and objects to be embedded and can be used to create interactive forms.

- **CSS -** Cascading **Style Sheets** (**CSS**) is a style sheet language used for describing the look and formatting of a document written in a markup language. While most often used to style web pages and interfaces written in HTML and XHTML, the language can be applied to any kind of XML document, including plain XML, SVG and XUL. CSS is a cornerstone specification of the web and almost all web pages use CSS style sheets to describe their presentation.CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colors, and fonts. CSS specifies a priority scheme to determine which style rules apply if more than one rule matches against a particular elements.

- **JAVA SCRIPT -** JavaScript (**JS**) is a dynamic computer programming language. It is most commonly used as part of web browsers, whose implementations allow client-side scripts to interact with the user, control the browser, communicate asynchronously, and alter the document content that is displayed. It is also being used in server-side programming, game development and the creation of desktop and mobile applications. JavaScript is a prototype-based scripting language with dynamic typing and has first-class functions. Its syntax was influenced by C. JavaScript copies many names and naming conventions from Java, but the two languages are otherwise unrelated and have very different semantics.

Back end - The back end is designed using PHP and MySQL which is used to design the databases.

- **PHP - PHP** is a server-side scripting language designed for web development but also used as a general-purpose programming language. PHP is now installed on more than 244 million websites and 2.1 million web servers. Originally created by Rasmus Lerdorf in 1995, the reference implementation of PHP is now produced by The PHP Group. While PHP originally stood for Personal Home Page, it now stands for PHP: Hypertext Pre-processor, a recursive backronym. PHP code is interpreted by a web server with a PHP processor module, which generates the resulting web page: PHP commands can be embedded directly into an HTML source document rather than calling an external file to process data. It has also evolved to include a command-line interface capability and can be used in standalone graphical applications. PHP is free software released under the PHP License. PHP can be deployed on most web servers and also as a standalone shell on almost every operating system and platform, free of charge.

- **MYSQL - MySQL** is the world's second most widely used open-source relational database management system (RDBMS). It is named after co-founder Michael Widenius daughter, My. The SQL phrase stands for Structured Query Language. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation. MySQL is a popular choice of database for use in web applications, and is a central component of the widely used LAMP open-source web application software stack (and other 'AMP' stacks). LAMP is an acronym for "Linux, Apache, MySQL, Perl/PHP/Python." Free-software-open-source projects that require a full-featured database management system often use MySQL. For commercial use, several paid editions are available, and offer additional functionality. Applications which use MySQL databases include: TYPO3, MODx, Joomla, WordPress, phpBB, MyBB, Drupal and other software. MySQL is also used in many high-profile, large-scale websites, including Wikipedia, Google (though not for searches), Facebook, Twitter, Flickr, and YouTube

2.5 Data Flow Diagram (DFD)

- A data-flow diagram is a way of representing a flow of data through a process or a system.

- The DFD also provides information about the outputs and inputs of each entity and the process itself.
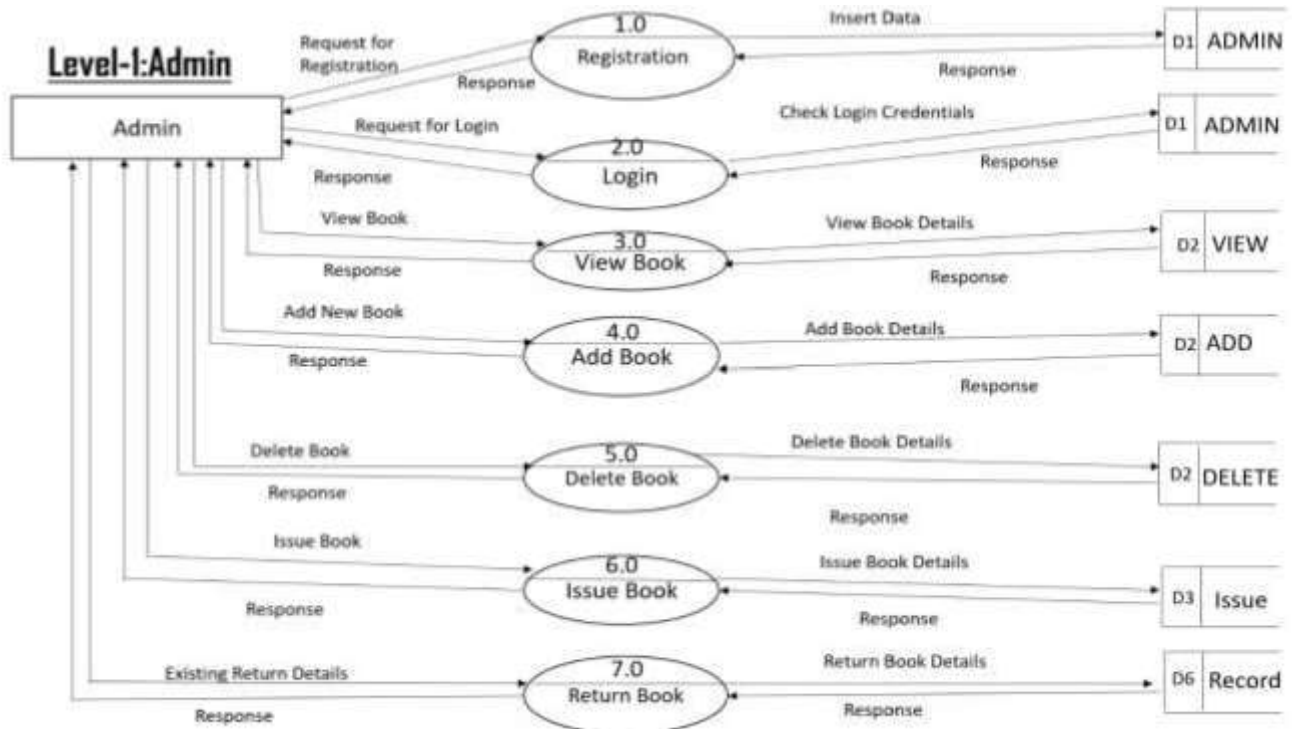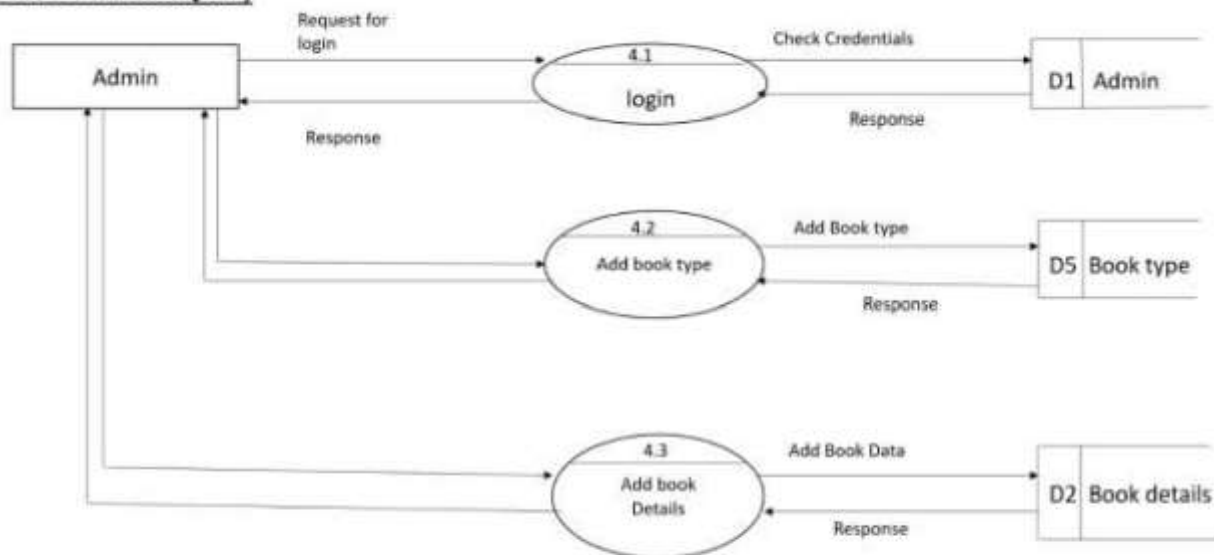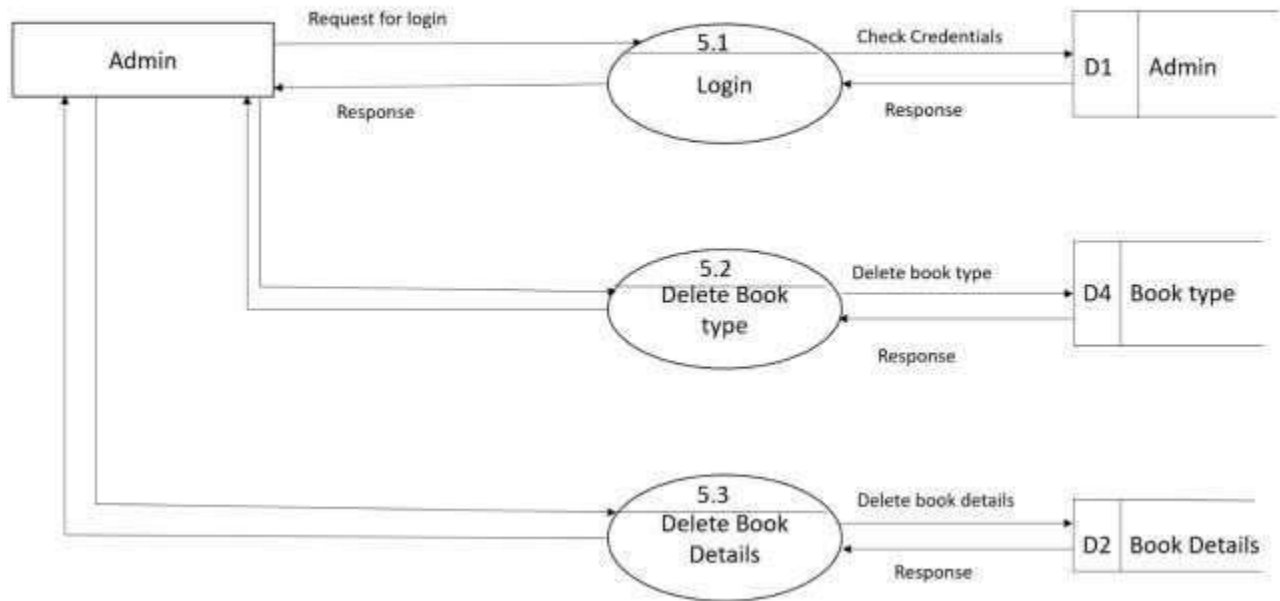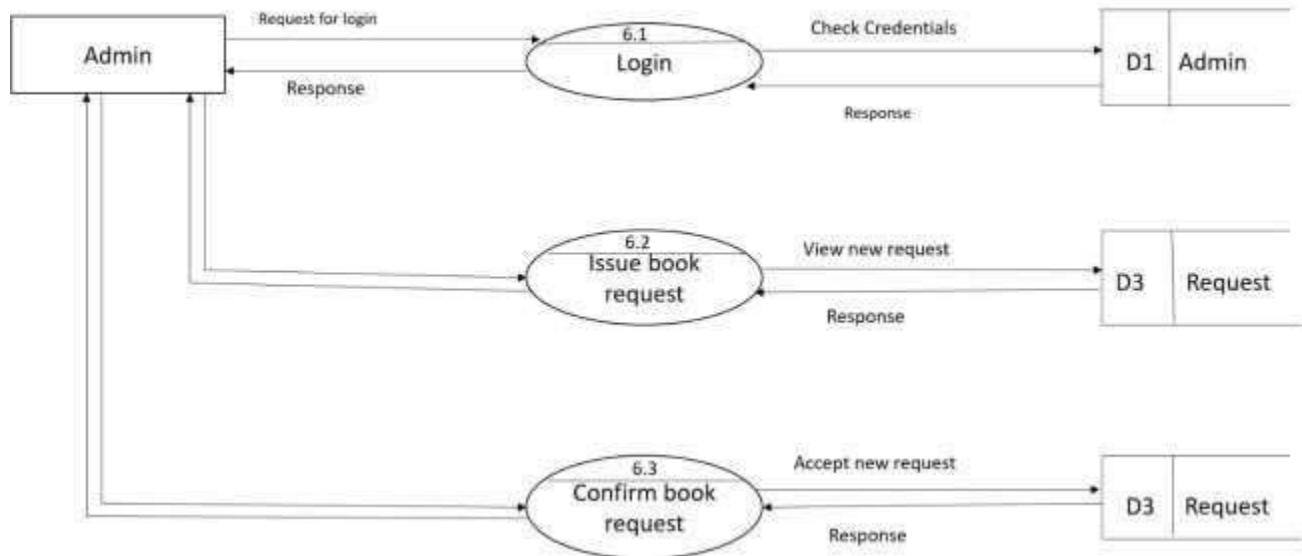

0-Level

0- level DFD

Level-1: Admin

Level-1:Admin
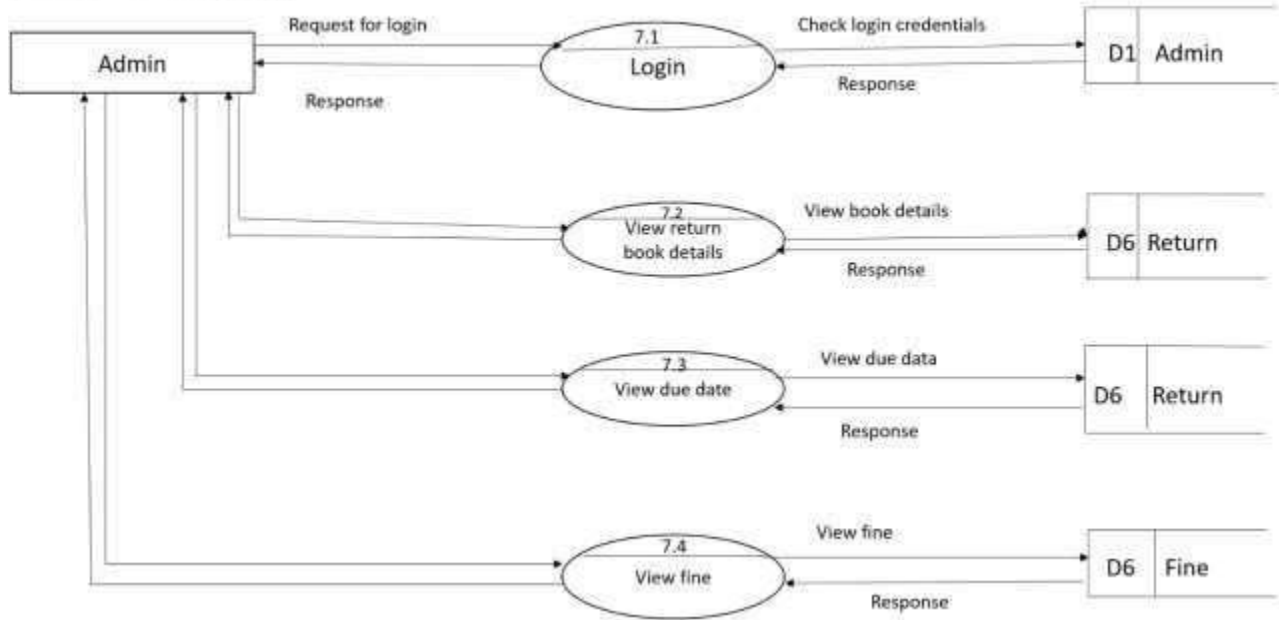
Request for Registration	1.0 Registration	Insert Data — D1 ADMIN
Response		Response
Request for Login	2.0 Login	Check Login Credentials — D1 ADMIN
Response		Response
View Book	3.0 View Book	View Book Details — D2 VIEW
Response		Response
Add New Book	4.0 Add Book	Add Book Details — D2 ADD
Response		Response
Delete Book	5.0 Delete Book	Delete Book Details — D2 DELETE
Response		Response
Issue Book	6.0 Issue Book	Issue Book Details — D3 Issue
Response		Response
Existing Return Details	7.0 Return Book	Return Book Details — D6 Record
Response		Response

Level-2: Admin(4.0)

Request for login	4.1 login	Check Credentials — D1 Admin
Response		Response
	4.2 Add book type	Add Book type — D5 Book type
		Response
	4.3 Add book Details	Add Book Data — D2 Book details
		Response

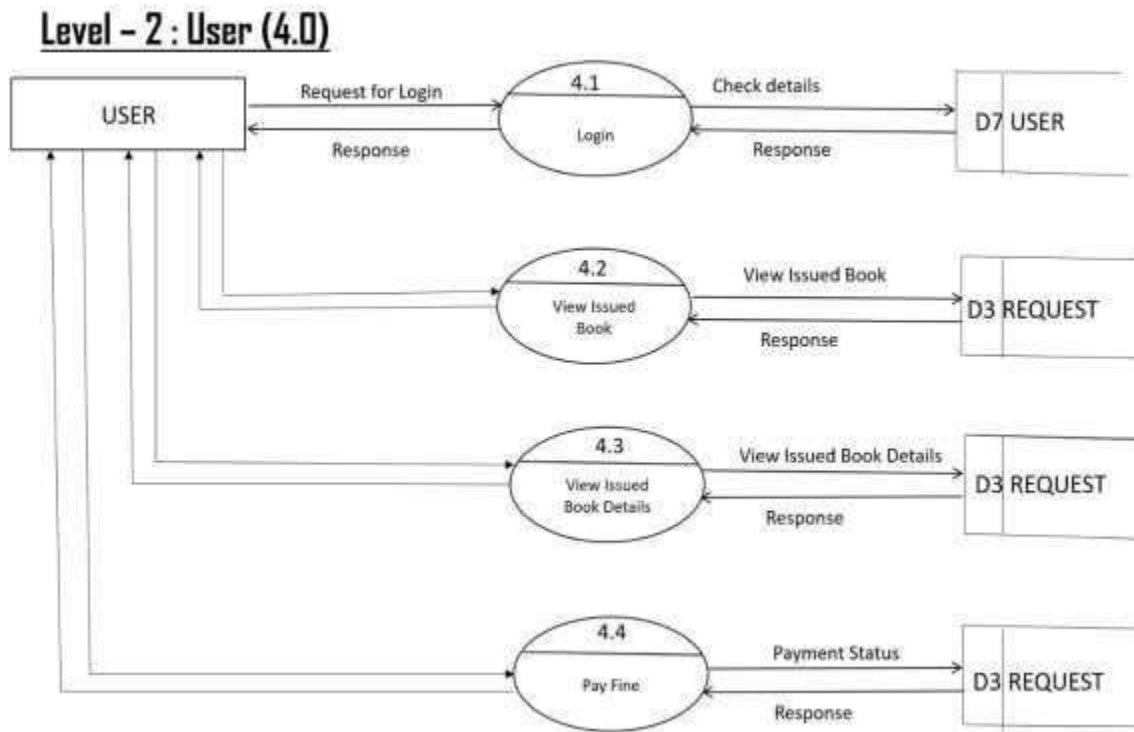## Level-2:Admin(5.0)

Level-2: Admin(6.0)

Level-2: Admin(7.0)

Level-1: User

Level – 1 : User

USER	Request for Registration → ← Response	1.0 Registration
		Insert data → ← Response	D7 USER

(Process 2.0 Login — Request for Login / Response — Check for Login / Response — D7 USER)

(Process 3.0 View book — View available book / Response — View book details / Response — D2 BOOK)

(Process 4.0 View Issued book — View Issued book / Response — View Issued book details / Response — D2 BOOK)
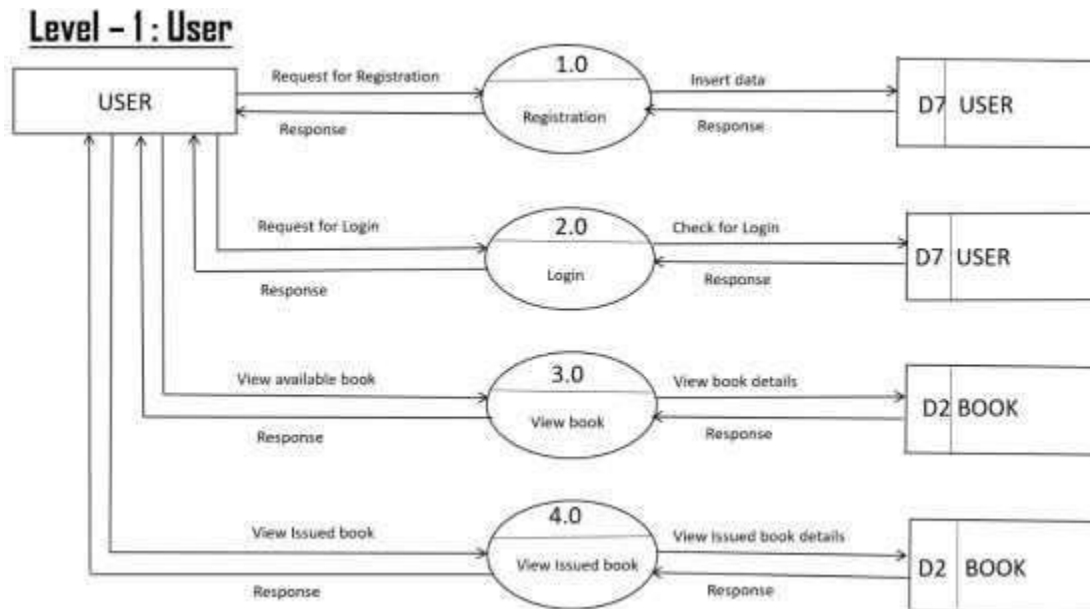
Level-2:User(2.0)

Level – 2 : User (2.0)

(Process 2.1 Login — Request for Login / Response — Check Login credentials / Response — D7 USER)

(Process 2.2 View account — Request for view / Response — D7 USER)

(Process 2.3 Change Password — Update Password / Response — D7 USER)

(Process 2.4 Edit account — Edit Profile / Response — D7 USER)

Level-2: User (4.0)

Level – 2 : User (4.0)
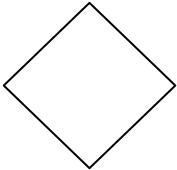
Chapter 3

SYSTEM DESIGN

3.1 Project Designing
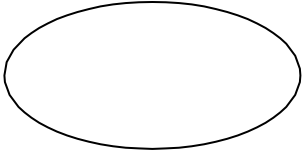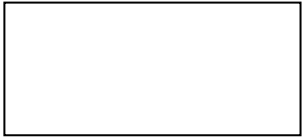
➢ The entire system is projected with a physical diagram which specifics the actual storage parameters that are physically necessary for any database to be stored on to the disk. The overall systems existential idea is derived from this diagram.

➢ The relation upon the system is structure through a conceptual ER-Diagram, which not only specifics the existential entities but also the standard relations through which the system exists and the cardinalities that are necessary for the system state to continue.

➢ The content level DFD is provided to have an idea of the functional inputs and outputs that are achieved through the system. The system depicts the input and output standards at the high level of the systems existence.

3.2 ER Diagram
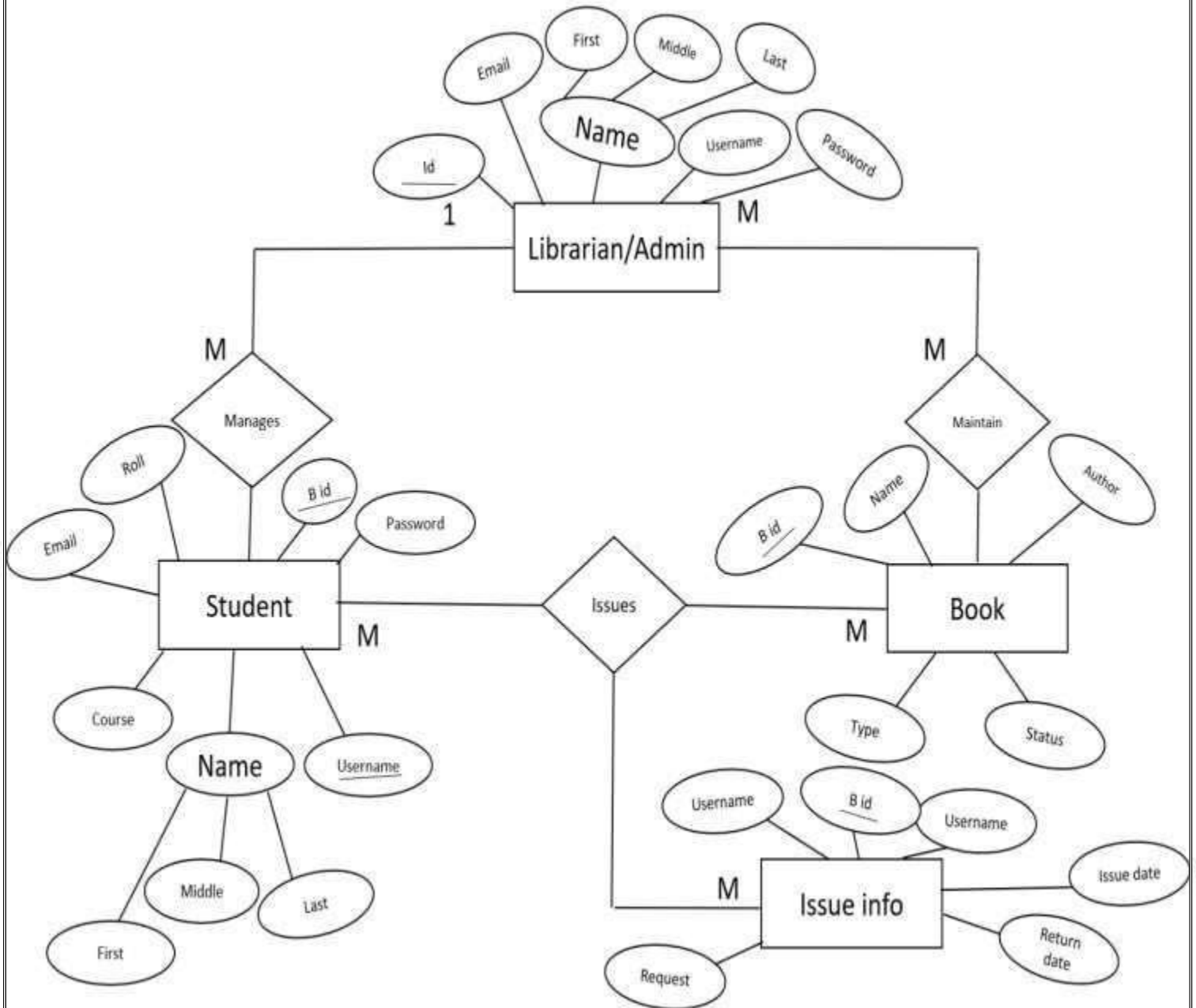
3.3 Flow Chart

A flowchart is a type of diagram that represents a workflow or process. A flowchart can also be define as a diagrammatic representation od an algorithm, step-by-step approach to solving a task. The flowchart shows the steps as boxes of various kinds, and their order by connecting the boxes with arrows.

Flowchart Symbol	Meaning	Explanation
	Start and end	The symbol denoting the beginning and end of the flowchart
	Step	This symbol shows that the user perform a task. (Note: In many flowcharts steps and actions are interchangeable).
	Decision	This symbol represents a point where a decision is made
	Action	This symbol means that the user performs an action. (Note: In many flow charts steps and action are interchangeable.)
	Flow line	A line that connects the various in an ordered ways.
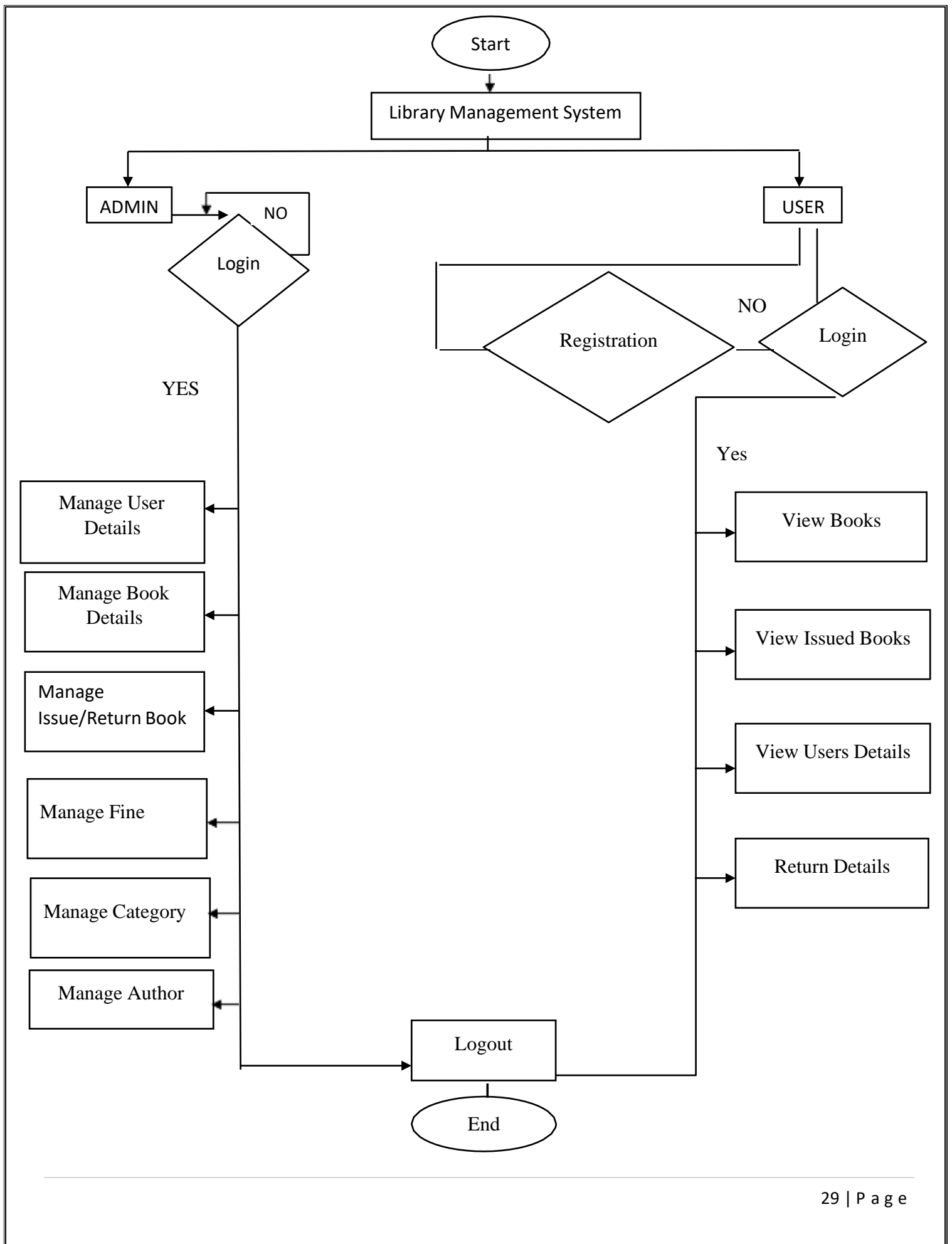
3.4 Database Normalisation

Normalisation is a database design technique that reduces data redundancy and eliminates undesirable characteristics like Insertion, Update, and Deletion Anomalies. Normalisation rules divides larger tables into smaller tables and links them using relationships. The purpose of normalization in SQL is to eliminate redundant(repetitive) data and ensure data is stored logically.
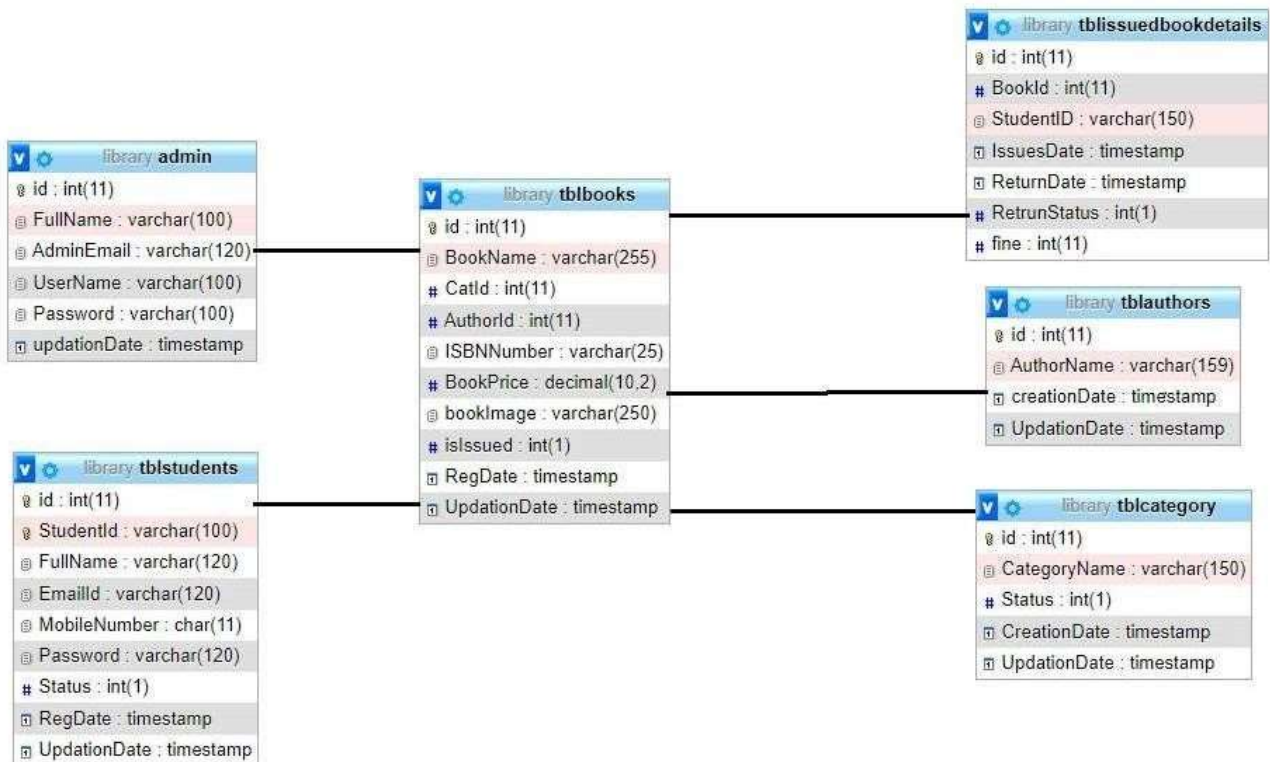
3.5 Database Design

The data in the system has to be stored and retrieved from database. Designing the database is part of system design. Data elements and data structures to be stored have been identified at analysis stage. They are structured and put together to design the data storage and retrieval system. A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make database access easy, quick, inexpensive and flexible for the user. Relationships are established between the data items and unnecessary data items are removed. Normalization is done to get an internal consistency of data and to have minimum redundancy and maximum stability. This ensures minimizing data storage required, minimizing chances of data inconsistencies and optimizing for updates. The MS Access database has been chosen for developing the relevant databases.

Database Tables

- Admin Table Structure: - This table shows admin login details.

	id	FullName	AdminEmail	UserName	Password	updationDate
☐ 🖉 Edit ⌗ Copy ⊖ Delete	1	Manish Kumar	admin@gmail.com	admin	f925916e2754e5e03f75dd58a5733251	2022-05-13 10:37:16

- Authors Table Structure: - This table shows the authors details.

				id	AuthorName	creationDate	UpdationDate
☐	Edit	Copy	Delete	1	Anuj kumar	2022-01-22 12:53:03	2022-01-22 12:53:03
☐	Edit	Copy	Delete	2	Chetan Bhagatt	2022-01-22 12:53:03	2022-01-22 12:53:03
☐	Edit	Copy	Delete	3	Anita Desai	2022-01-22 12:53:03	2022-01-22 21:53:41
☐	Edit	Copy	Delete	4	HC Verma	2022-01-22 12:53:03	2022-01-22 21:53:45
☐	Edit	Copy	Delete	5	R.D. Sharma	2022-01-22 12:53:03	2022-01-22 21:53:47
☐	Edit	Copy	Delete	9	fwdfrwer	2022-01-22 12:53:03	2022-01-22 21:53:55
☐	Edit	Copy	Delete	10	Dr. Andy Williams	2022-01-22 12:45:32	NULL
☐	Edit	Copy	Delete	11	Kyle Hill	2022-01-22 12:46:34	NULL
☐	Edit	Copy	Delete	12	Robert T. Kiyosak	2022-01-22 12:48:38	NULL
☐	Edit	Copy	Delete	13	Kelly Barnhill	2022-01-22 12:51:54	NULL
☐	Edit	Copy	Delete	14	Herbert Schildt	2022-01-22 12:53:03	NULL
☐	Edit	Copy	Delete	15	CJ Date	2022-05-08 21:00:58	NULL
☐	Edit	Copy	Delete	16	Narasimha Karumanchi	2022-05-08 21:08:20	NULL
☐	Edit	Copy	Delete	17	Andreas C.Muller & Sarah Guido	2022-05-08 21:08:41	NULL
☐	Edit	Copy	Delete	18	Ethem Alpaydin	2022-05-08 21:09:05	NULL
☐	Edit	Copy	Delete	19	Robun Nixon	2022-05-08 21:09:26	NULL
☐	Edit	Copy	Delete	20	Yashavant P .Kanetkar	2022-05-08 21:09:46	NULL
☐	Edit	Copy	Delete	21	Mark Allen Weiss	2022-05-08 21:10:09	NULL
☐	Edit	Copy	Delete	22	Real Python Team	2022-05-08 21:10:33	NULL
☐	Edit	Copy	Delete	23	Wes McKinney	2022-05-08 21:10:54	NULL
☐	Edit	Copy	Delete	24	Adam Stewart	2022-05-08 21:11:14	NULL

- Books Table Structure: - This table shows the books available in the library.

				id	BookName	CatId	AuthorId	ISBNNumber	BookPrice	bookImage	IsIssued	RegDate	UpdationDate
☐	Edit	Copy	Delete	1	PHP And MySql programming	1	1	222333	20.00	1efecc5ca822e48b7b6f7c0d7bae943f.jpg	1	2022-01-22 12:53:03	2022-01-22 21:54:13
☐	Edit	Copy	Delete	3	physics	8	4	1111	15.00	a00267b57a0a4fewe5911cb1e1a83a79.jpg	0	2022-01-22 12:53:03	2022-05-10 16:04:09
☐	Edit	Copy	Delete	5	Murach's MySQL	5	1	9350237695	455.00	8939d5465fb4d2ae443830073abc35e6.jpg	1	2022-01-21 22:12:11	2022-01-22 11:41:03
☐	Edit	Copy	Delete	6	WordPress for Beginners 2022: A Visual Step-by-Ste	5	10	B019MOJWCM	190.00	144ab70bba1cb56fc23b6ae9c0502b3.jpg	NULL	2022-01-22 12:46:07	2022-01-22 12:50:49
☐	Edit	Copy	Delete	7	WordPress Mastery Guide	5	11	B09NK0KH7NP	53.00	9b081a6661416fa80fca10286172a64.jpg	NULL	2022-01-22 12:48:03	2022-01-22 12:50:58
☐	Edit	Copy	Delete	8	Rich Dad Poor Dad: What the Rich Teach Their Kids	8	12	B67C7M85X9	120.00	53411b2bd2a0b2a0df3ab19043a5b640.jpg	0	2022-01-22 12:50:39	2022-05-10 16:26:33
☐	Edit	Copy	Delete	9	The Girl Who Drank the Moon	8	13	1848126476	200.00	f05cd19fac9335245e1bffa79326747.jpg	NULL	2022-01-22 12:52:33	NULL
☐	Edit	Copy	Delete	10	C++ The Complete Reference, 4th Edition	5	14	0073513408K	142.00	36af5de0012b6c001e499dc3c3b03a6.jpg	1	2022-01-22 12:53:36	2022-05-08 13:58:47
☐	Edit	Copy	Delete	11	ASP.NET Core 5 for Beginners	5	11	QBSJ3434567	422.00	b1b678931f6bfab12d4272564badc9.jpg	0	2022-01-22 13:44:21	2022-05-08 07:03
☐	Edit	Copy	Delete	12	An Introduction to Database Systems	9	15	AITDSCJO	NULL	An Introduction to Database Systems. C J Date.jpg	0	2022-05-00 20:50:56	2022-05-10 14:22:15
☐	Edit	Copy	Delete	13	Data Structure and Algorithmic Thinking with Pytho	8	16	DSAATWP	250.00	Data Structure and Algorithmic Thinking with Pytho	NULL	2022-05-08 21:03:29	NULL
☐	Edit	Copy	Delete	14	Data Structures and Algorithm Analysis in C++	9	21	DSAAAIC	NULL	Data Structures and Algorithm Analysis in C++ - Ma	NULL	2022-05-08 21:04:07	NULL
☐	Edit	Copy	Delete	15	Introduction to Machine Learning with Python	9	17	ITMLWP	320.00	Introduction to Machine Learning with Python.jpg	0	2022-05-08 21:04:17	2022-05-08 21:23:26
☐	Edit	Copy	Delete	16	Introduction to Machine Learning	9	18	ITMLOO	169.00	Introduction to Machine Learning-Ethem Alpaydin.jp	NULL	2022-05-08 21:05:09	NULL
☐	Edit	Copy	Delete	17	Learning PHP, MySQL, Javascript, CSS & HTML5	5	19	LPMBJCH	260.00	Learning PHP, MySQL, Javascript, CSS & HTML5.jpg	NULL	2022-05-08 21:35:37	NULL
☐	Edit	Copy	Delete	18	Let us c	9	20	LUCINS	200.00	Let us c - yashwantkanetkar.jpg	NULL	2022-05-08 21:06:05	NULL
☐	Edit	Copy	Delete	19	Practical Introduction to Python 3	8	22	PITP334	320.00	python basics.jpg	NULL	2022-05-08 21:36:37	NULL
☐	Edit	Copy	Delete	20	Python for Data Analysis Data Wrangling with Panda	9	23	PFDADWAPNN	450.00	Python for Data Analysis Data Wrangling with Panda.	NULL	2022-05-08 21:07:09	NULL
☐	Edit	Copy	Delete	21	Python Programming For Beginners	8	24	PPFB0012	320.00	Python Programming For Beginners.jpg	NULL	2022-05-08 21:07:27	NULL

- Categories Table Structure: - This table shows the category of books available in the library.

		id	CategoryName	Status	CreationDate	UpdationDate
Edit Copy Delete		4	Romantic	1	2022-01-22 12:53:03	2022-01-22 12:53:03
Edit Copy Delete		5	Technology	1	2022-01-22 12:53:03	2022-01-22 12:53:03
Edit Copy Delete		6	Science	1	2022-01-22 12:53:03	2022-01-22 21:54:37
Edit Copy Delete		7	Management	1	2022-01-22 12:53:03	2022-01-22 21:54:35
Edit Copy Delete		8	General	1	2022-01-22 12:53:03	2022-01-22 21:54:40
Edit Copy Delete		9	Programming	1	2022-01-22 12:53:03	2022-01-22 21:54:42

- Issued Book Table Structure: - This table shows the details of issued books from the library.

		id	BookId	StudentID	IssuesDate	ReturnDate	RetrunStatus	fine
Edit Copy Delete		7	5	SID011	2022-01-22 11:15:57	NULL	NULL	NULL
Edit Copy Delete		8	1	SID002	2022-01-22 11:29:17	2022-01-22 11:48:08	1	0
Edit Copy Delete		9	10	SID009	2022-01-22 13:08:09	2022-01-22 13:08:54	1	0
Edit Copy Delete		10	11	SID009	2022-01-22 13:45:02	2022-01-22 13:45:23	1	0
Edit Copy Delete		11	1	SID012	2022-01-22 13:47:15	NULL	NULL	NULL
Edit Copy Delete		12	10	SID012	2022-01-22 13:48:08	2022-01-22 13:48:22	1	5
Edit Copy Delete		13	10	SID013	2022-05-08 13:58:47	2022-05-01 14:09:05	NULL	NULL
Edit Copy Delete		14	15	SID013	2022-05-08 21:21:27	2022-05-08 21:23:26	1	10
Edit Copy Delete		15	8	SID013	2022-05-09 08:26:05	2022-05-09 08:26:33	1	15
Edit Copy Delete		16	11	SID013	2022-05-09 08:53:52	2022-05-09 08:57:03	1	15
Edit Copy Delete		17	3	SID002	2022-05-10 14:01:09	2022-05-10 14:04:09	1	35
Edit Copy Delete		18	12	SID013	2022-05-01 14:20:41	2022-05-11 12:26:50	1	35

- Students Table Structure: - This table shows the details of students registered in the library.

	id	StudentId	FullName	EmailId	MobileNumber	Password	Status	RegDate	UpdationDate
Edit ⅔ Copy ⊖ Delete	1	SID002	Rocky	Rocky@gmail.com	9065472555	f925916e2754e5e03f75dd58a5733251	1	2022-01-02 12:53:03	2022-05-13 10:40:54
Edit ⅔ Copy ⊖ Delete	4	SID005	sdfsd	csfsd@dfsfks.com	8569710025	92228410fc8b872914e023150cf4ee0f	1	2022-01-02 12:53:03	2022-01-22 21:55:53
Edit ⅔ Copy ⊖ Delete	8	SID009	test	test@gmail.com	2359874527	f925916e2754e5e03f75dd58a5733251	1	2022-01-02 12:53:03	2022-01-22 21:55:58
Edit ⅔ Copy ⊖ Delete	9	SID010	Amit	amit@gmail.com	8585866224	f925916e2754e5e03f75dd58a5733251	1	2022-01-02 12:53:03	2022-01-22 21:56:02
Edit ⅔ Copy ⊖ Delete	10	SID011	Seema	seema@gmail.com	4672423754	f925916e2754e5e03f75dd58a5733251	1	2022-01-02 12:53:03	2022-05-13 10:39:40
Edit ⅔ Copy ⊖ Delete	11	SID012	Ravi	Ravi@test.com	1234569870	f925916e2754e5e03f75dd58a5733251	1	2022-01-22 13:46:18	2022-05-13 10:40:02
Edit ⅔ Copy ⊖ Delete	12	SID013	Manish Kumar	manish@gmail.com	9608602628	59c95189ac895fcc1c8e1c38d067e244	1	2022-05-08 13:55:12	NULL
Edit ⅔ Copy ⊖ Delete	13	SID014	Deepshikha	deepshikha@gmail.com	7488824324	b2d2d406cfc50540c4a302592cb42650	1	2022-05-09 08:29:19	NULL

Chapter 4

SYSTEM TESTING AND PROGRAM CODE

4.1 Screenshorts

➢ Admin Login Form
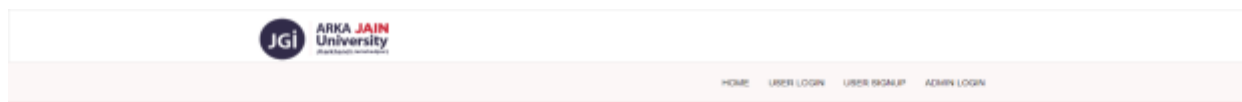
➢ Admin Dashboard

➢ Add Category

➢ Manage Category

➢ Add Author

➢ Manage Authors

➢ Add Book

➢ Manage Book

➢ Issue a New Book

➢ Manage Issued Book

➢ Manage Registered Student

➢ Admin Change Password

➢ User Login

➢ User Dashboard

➢ Issued Books

➢ User Profile

➢ User Change Password

USER CHANGE PASSWORD

Change Password

Current Password

Enter Password

Confirm Password

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4.2 Coding

Index.php

```php
<?php
<!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">
<!--Slider --- >
    <div class="row">
        <div class="col-md-10 col-sm-8 col-xs-12 col-md-offset-1">
            <div id="carousel-example" class="carousel slide slide-bdr" data-ride="carousel" >
```

```html
<div class="row pad-botm">
<div class="col-md-12">
<h4 class="header-line">USER LOGIN</h4>
</div>
</div>
 <a name="ulogin"></a>
<!--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">
 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>
```

```
<!---LOGIN PABNEL END-->


   </div>
   </div>
   <!-- CONTENT-WRAPPER SECTION END-->
<?php include('includes/footer.php');?>
   <!-- FOOTER SECTION END-->
   <script src="assets/js/jquery-1.10.2.js"></script>
   <!-- BOOTSTRAP SCRIPTS  -->
   <script src="assets/js/bootstrap.js"></script>
    <!-- CUSTOM SCRIPTS -->
   <script src="assets/js/custom.js"></script>

</body>
</html>
```

Admin-login.php

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

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

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

    <title>Online Library Management System | User Dash Board</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">User DASHBOARD</h4>


                </div>
        </div>
            <div class="row">
<div class="col-md-4 col-sm-4 col-xs-6">
 <div class="alert alert-success back-widget-set text-center">
 <a href="listed-books.php"><img src="assets/img/library 128.png" alt="logo">
<?php
$sql ="SELECT id from tblbooks ";
$query = $dbh -> prepare($sql);
```

```php
<?php
$rsts=0;
 $sid=$_SESSION['stdid'];
$sql2 ="SELECT id from tblissuedbookdetails where StudentID=:sid and (RetrunStatus=:rsts || RetrunStatus
is null || RetrunStatus=')";
$query2 = $dbh -> prepare($sql2);
$query2->bindParam(':sid',$sid,PDO::PARAM_STR);
$query2->bindParam(':rsts',$rsts,PDO::PARAM_STR);
$query2->execute();
$results2=$query2->fetchAll(PDO::FETCH_OBJ);
$returnedbooks=$query2->rowCount();
?>
```

```html
                  <h3><?php echo htmlentities($returnedbooks);?></h3>
                Books Not Returned Yet
              </div>
            </div>
<div class="col-md-4 col-sm-4 col-xs-6">
 <div class="alert alert-success back-widget-set text-center">
 <a href="issued-books.php"><img src="assets/img/issued book 2.png" alt="logo">
    <h3> </h3>
Issued Books
</div></div></a>
   </div>
   </div>
   </div>
   <!-- CONTENT-WRAPPER SECTION END-->
<?php include('includes/footer.php');?>
    <!-- FOOTER SECTION END-->
   <!-- JAVASCRIPT FILES PLACED AT THE BOTTOM TO REDUCE THE LOADING TIME -->
   <!-- CORE JQUERY  -->
   <script src="assets/js/jquery-1.10.2.js"></script>
```
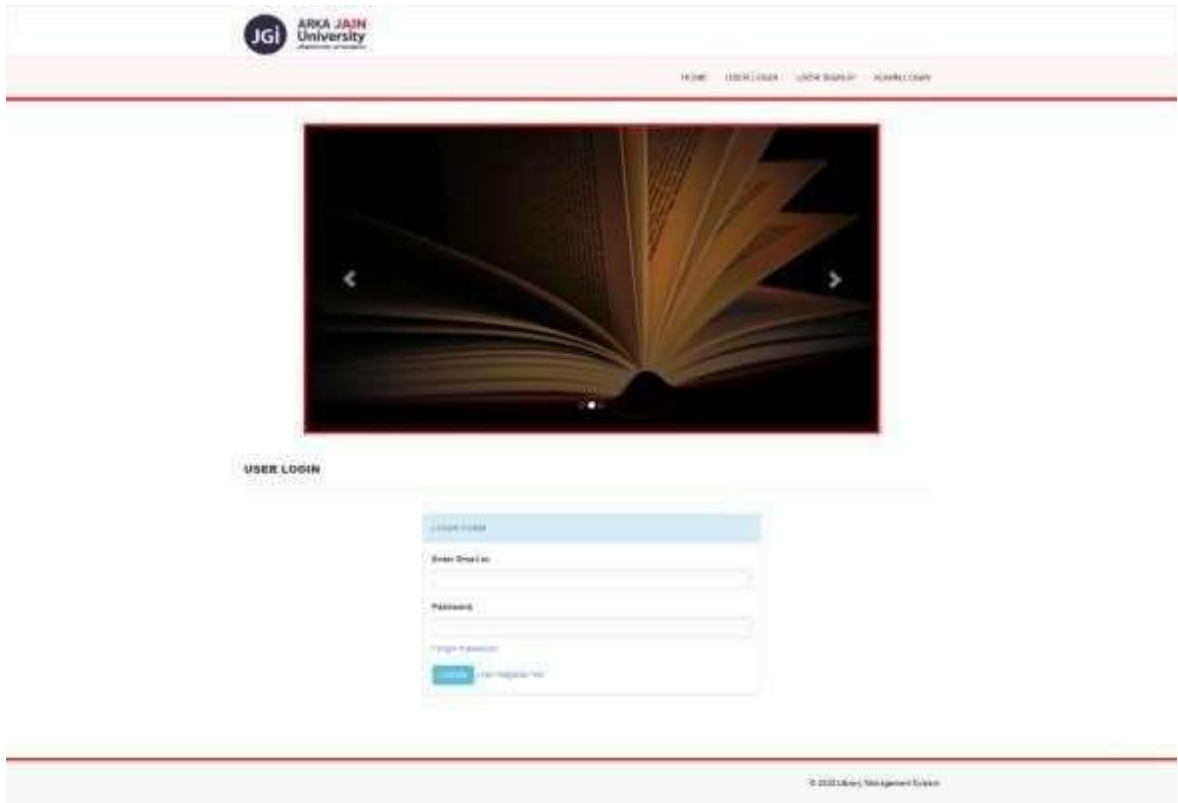
```
    <!-- BOOTSTRAP SCRIPTS  -->
    <script src="assets/js/bootstrap.js"></script>
      <!-- CUSTOM SCRIPTS -->
    <script src="assets/js/custom.js"></script>
</body>
</html>
<?php } ?>
```

Book.php

```
<?php include 'includes/session.php'; ?>
<?php
 $catid = 0;
 $where = '';
 if(isset($_GET['category'])){
  $catid = $_GET['category'];
  $where = 'WHERE books.category_id = '.$catid;
 }
?>
<?php include 'includes/header.php'; ?>
<body class="hold-transition skin-blue sidebar-mini">
<div class="wrapper">

 <?php include 'includes/navbar.php'; ?>
 <?php include 'includes/menubar.php'; ?>

 <!-- Content Wrapper. Contains page content -->
 <div class="content-wrapper">
  <!-- Content Header (Page header) -->
  <section class="content-header">
   <h1>
    Book List
          <th>Title</th>
```

```php
          <th>Author</th>
          <th>Publisher</th>
          <th>Status</th>
          <th>Tools</th>
        </thead>
        <tbody>
         <?php
          $sql = "SELECT *, books.id AS bookid FROM books LEFT JOIN category ON
category.id=books.category_id $where";
          $query = $conn->query($sql);
          while($row = $query->fetch_assoc()){
          if($row['status']){
            $status = '<span class="label label-danger">borrowed</span>';
           }
           else{
            $status = '<span class="label label-success">available</span>';
           }
           echo "
            <tr>
             <td>".$row['name']."</td>
             <td>".$row['isbn']."</td>
             <td>".$row['title']."</td>
             <td>".$row['author']."</td>
             <td>".$row['publisher']."</td>
             <td>".$status."</td>
             <td>
              <button class='btn btn-success btn-sm edit btn-flat' data-id='".$row['bookid']."'><i
class='fa fa-edit'></i> Edit</button>
              <button class='btn btn-danger btn-sm delete btn-flat' data-id='".$row['bookid']."'><i
class='fa fa-trash'></i> Delete</button>
             </td>
            </tr>
```

```
                   ";
                 }
               ?>
             </tbody>
           </table>
         </div>
       </div>
     </div>
   </div>
  </section>
 </div>

 <?php include 'includes/footer.php'; ?>
 <?php include 'includes/book_modal.php'; ?>
</div>
<?php include 'includes/scripts.php'; ?>
<script>
$(function(){
 $('#select_category').change(function(){
  var value = $(this).val();
  if(value == 0){
   window.location = 'book.php';
  }
  else{
   window.location = 'book.php?category='+value;
  }
 });

 $(document).on('click', '.edit', function(e){
  e.preventDefault();
  $('#edit').modal('show');
  var id = $(this).data('id');
```

```
    getRow(id);
  });


  }
 });
}
</script>
</body>
</html>
```

Issued-book.php

```php
<?php
session_start();
error_reporting(0);
include('includes/config.php');
if(strlen($_SESSION['login'])==0)
   {
header('location:index.php');
}
else{
 ?>
<!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 | Issued Books</title>
   <!-- BOOTSTRAP CORE STYLE  -->
   <link href="assets/css/bootstrap.css" rel="stylesheet" />
   <!-- FONT AWESOME STYLE  -->
```

```html
<link href="assets/css/font-awesome.css" rel="stylesheet" />
<!-- DATATABLE STYLE  -->
<link href="assets/js/dataTables/dataTables.bootstrap.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');?>
          <h4 class="header-line">Issued Books</h4>
    </div>
       <div class="row">
          <div class="col-md-12">
             <!-- Advanced Tables -->
             <div class="panel panel-default">
                <div class="panel-heading">
                  Issued Books
                </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>Book Name</th>
                              <th>ISBN </th>
                              <th>Issued Date</th>
                              <th>Return Date</th>
                              <th>Fine</th>
```

```
                                    </tr>
                                </thead>
                                <tbody>
                                  <tr class="odd gradeX">
                                     <td class="center"><?php echo htmlentities($cnt);?></td>
                                     <td class="center"><?php echo htmlentities($result->BookName);?></td>
                                     <td class="center"><?php echo htmlentities($result->ISBNNumber);?></td>
                                     <td class="center"><?php echo htmlentities($result->IssuesDate);?></td>
                                     <td class="center"><?php if($result->ReturnDate=="")
                                     {?>
                                     <span style="color:red">
                                      <?php  echo htmlentities("Not Return Yet"); ?>
                                        </span>
                                     <?php } else {
                                     echo htmlentities($result->ReturnDate);
                                   }
                                     ?></td>
                                      <td class="center"><?php echo htmlentities($result->fine);?></td>
                                                                            <td><a
href='invoice.php?id=<?php echo htmlentities($result->rid); ?>'>
                                          <span class='uk-badge uk-badge-success'>Get Reciept</span>
        </a></td>

                                    </tr>
 <?php $cnt=$cnt+1;}} ?>
                                </tbody>
                            </table>
                        </div>

                   </div>
               </div>
               <!--End Advanced Tables -->
```

```
            </div>

        </div>

    </div>

    </div>

    </div>


    <!-- CONTENT-WRAPPER SECTION END-->
  <?php include('includes/footer.php');?>
    <!-- FOOTER SECTION END-->
  <!-- JAVASCRIPT FILES PLACED AT THE BOTTOM TO REDUCE THE LOADING TIME -->
  <!-- CORE JQUERY  -->
  <script src="assets/js/jquery-1.10.2.js"></script>
  <!-- BOOTSTRAP SCRIPTS  -->
  <script src="assets/js/bootstrap.js"></script>
  <!-- DATATABLE SCRIPTS  -->
  <script src="assets/js/dataTables/jquery.dataTables.js"></script>
  <script src="assets/js/dataTables/dataTables.bootstrap.js"></script>
    <!-- CUSTOM SCRIPTS -->
  <script src="assets/js/custom.js"></script>

</body>
</html>
<?php } ?>
```

Home.php

```
<?php include 'includes/session.php'; ?>
<?php
  include 'includes/timezone.php';
  $today = date('Y-m-d');
  $year = date('Y');
  if(isset($_GET['year'])){
```

```php
    $year = $_GET['year'];
  }
?>
<?php include 'includes/header.php'; ?>
<body class="hold-transition skin-blue sidebar-mini">
<div class="wrapper">

  <?php include 'includes/navbar.php'; ?>
  <?php include 'includes/menubar.php'; ?>

  <!-- Content Wrapper. Contains page content -->
  <div class="content-wrapper">
   <!-- Content Header (Page header) -->
   <section class="content-header">
    <h1>
     Dashboard
    </h1>
    <ol class="breadcrumb">
     <li><a href="#"><i class="fa fa-dashboard"></i> Home</a></li>
     <li class="active">Dashboard</li>
    </ol>
   </section>
 <!-- Main content -->
   <section class="content">
    <?php
    if(isset($_SESSION['error'])){
    echo "
       <div class='alert alert-danger alert-dismissible'>
        <button type='button' class='close' data-dismiss='alert' aria-hidden='true'>&times;</button>
        <h4><i class='icon fa fa-warning'></i> Error!</h4>
        ".$_SESSION['error']."
       </div>
```

```php
    <a    href="book.php"    class="small-box-footer">More    info    <i    class="fa    fa-arrow-circle-
right"></i></a>
     </div>
    </div>
    <!-- ./col -->
    <div class="col-lg-3 col-xs-6">
     <!-- small box -->
     <div class="small-box bg-green">
      <div class="inner">
       <?php
         $sql = "SELECT * FROM students";
         $query = $conn->query($sql);


         echo "<h3>".$query->num_rows."</h3>";
        ?>
       <p>Total Students</p>
      </div>
      <div class="icon">
       <i class="fa fa-graduation-cap"></i>
      </div>
      <a    href="student.php"    class="small-box-footer">More    info    <i    class="fa    fa-arrow-circle-
right"></i></a>
     </div>
    </div>
    <!-- ./col -->
    <div class="col-lg-3 col-xs-6">
     <!-- small box -->
     <div class="small-box bg-yellow">
      <div class="inner">
       <?php
         $sql = "SELECT * FROM returns WHERE date_return = '$today'";
```

```html
        <a    href="borrow.php"    class="small-box-footer">More    info    <i   class="fa   fa-arrow-circle-
right"></i></a>
      </div>
    </div>
    <!-- ./col -->
  </div>
  <!-- /.row -->
  <div class="row">
   <div class="col-xs-12">
    <div class="box">
     <div class="box-header with-border">
       <h3 class="box-title">Monthly Transaction Report</h3>
       <div class="box-tools pull-right">
        <form class="form-inline">
         <div class="form-group">
           <label>Select Year: </label>
           <select class="form-control input-sm" id="select_year">
            <?php
              for($i=2015; $i<=2065; $i++){
                $selected = ($i==$year)?'selected':'';
                echo "
                 <option value='".$i."' ".$selected.">".$i."</option>
                ";
              }
            ?>
           </select>
         </div>
        </form>
       </div>
     </div>
     <div class="box-body">
  datasets: [
```

```
    {
      label            : 'Borrow',
      fillColor        : 'rgba(210, 214, 222, 1)',
      strokeColor      : 'rgba(210, 214, 222, 1)',
      pointColor       : 'rgba(210, 214, 222, 1)',
      pointStrokeColor   : '#c1c7d1',
      pointHighlightFill : '#fff',
      pointHighlightStroke: 'rgba(220,220,220,1)',
      data             : <?php echo $borrow; ?>
    },
    {
      label            : 'Return',
      fillColor        : 'rgba(60,141,188,0.9)',
      strokeColor      : 'rgba(60,141,188,0.8)',
      pointColor       : '#3b8bba',
      pointStrokeColor   : 'rgba(60,141,188,1)',
      pointHighlightFill : '#fff',
      pointHighlightStroke: 'rgba(60,141,188,1)',
      data             : <?php echo $return; ?>
    }
  ]
}
barChartData.datasets[1].fillColor = '#00a65a'
barChartData.datasets[1].strokeColor = '#00a65a'
barChartData.datasets[1].pointColor = '#00a65a'
var barChartOptions              = {
  //Boolean - Whether the scale should start at zero, or an order of magnitude down from the lowest value
  scaleBeginAtZero     : true,
  //Boolean - Whether grid lines are shown across the chart
  scaleShowGridLines    : true,
  //String - Colour of the grid lines
  scaleGridLineColor     : 'rgba(0,0,0,.05)',
```

```
    //Number - Width of the grid lines
    scaleGridLineWidth     : 1,
    //Boolean - Whether to show horizontal lines (except X axis)
    scaleShowHorizontalLines: true,
    //Boolean - Whether to show vertical lines (except Y axis)
    scaleShowVerticalLines : true,
    //Boolean - If there is a stroke on each bar
    barShowStroke          : true,
    //Number - Pixel width of the bar stroke
    barStrokeWidth         : 2,
    //Number - Spacing between each of the X value sets
    barValueSpacing        : 5,
    //Number - Spacing between data sets within X values
    barDatasetSpacing      : 1,
    //String - A legend template
    legendTemplate                  : '<ul  class="<%=name.toLowerCase()%>-legend"><%  for  (var  i=0;
i<datasets.length;                        i++){%><li><span                        style="background-
color:<%=datasets[i].fillColor%>"></span><%if(datasets[i].label){%><%=datasets[i].label%><%}%></li
><%}%></ul>',
    //Boolean - whether to make the chart responsive
                    : true,
    maintainAspectRatio    : true
  }
  barChartOptions.datasetFill = false
  var myChart = barChart.Bar(barChartData, barChartOptions)
  document.getElementById('legend').innerHTML = myChart.generateLegend();
});
</script>
<script>
$(function(){
  $('#select_year').change(function(){
    window.location.href = 'home.php?year='+$(this).val();
```

```
  });
});
</script>
</body>
</html>
```

Login.php

```php
<?php
    session_start();
    include 'includes/conn.php';

    if(isset($_POST['login'])){
        $username = $_POST['username'];
        $password = $_POST['password'];

        $sql = "SELECT * FROM admin WHERE username = '$username'";
        $query = $conn->query($sql);

        if($query->num_rows < 1){
            $_SESSION['error'] = 'Cannot find account with the username';
        }
        else{
            $row = $query->fetch_assoc();
            if(password_verify($password, $row['password'])){
                $_SESSION['admin'] = $row['id'];
            }
            else{
                $_SESSION['error'] = 'Incorrect password';
            }
        }
```

```php
        }
        else{
                $_SESSION['error'] = 'Input admin credentials first';
        }

        header('location: index.php');
?>
```

Logout.php

```php
<?php
        session_start();
        session_destroy();

        header('location: index.php');
?>
```

Dashboard.php

```php
<?php
session_start();
error_reporting(0);
include('includes/config.php');
if(strlen($_SESSION['login'])==0)
  {
header('location:index.php');
}
else{?>
<!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 | User Dash Board</title>
```

```html
    <!-- 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">User DASHBOARD</h4>


                 </div>


     </div>
          <div class="row">
<div class="col-md-4 col-sm-4 col-xs-6">
 <div class="alert alert-success back-widget-set text-center">
 <a href="listed-books.php"><img src="assets/img/library 128.png" alt="logo">
<?php
<div class="col-md-4 col-sm-4 col-xs-6">
 <div class="alert alert-success back-widget-set text-center">
 <a href="issued-books.php"><img src="assets/img/issued book 2.png" alt="logo">
    <h3> </h3>
```

Issued Books

```
</div></div></a>
    </div>
  </div>
  </div>
  <!-- CONTENT-WRAPPER SECTION END-->
<?php include('includes/footer.php');?>
  <!-- FOOTER SECTION END-->
  <!-- JAVASCRIPT FILES PLACED AT THE BOTTOM TO REDUCE THE LOADING TIME -->
  <!-- CORE JQUERY  -->
  <script src="assets/js/jquery-1.10.2.js"></script>
  <!-- BOOTSTRAP SCRIPTS  -->
  <script src="assets/js/bootstrap.js"></script>
  <!-- CUSTOM SCRIPTS -->
  <script src="assets/js/custom.js"></script>
</body>
</html>
<?php } ?>
```

Student.php

```
<?php include 'includes/session.php'; ?>
<?php include 'includes/header.php'; ?>
<body class="hold-transition skin-blue sidebar-mini">
<div class="wrapper">

  <?php include 'includes/navbar.php'; ?>
  <?php include 'includes/menubar.php'; ?>

  <!-- Content Wrapper. Contains page content -->
  <div class="content-wrapper">
   <!-- Content Header (Page header) -->
```

```php
<section class="content-header">
  <h1>
    Student List
  </h1>
  <ol class="breadcrumb">
    <li><a href="#"><i class="fa fa-dashboard"></i> Home</a></li>
    <li>Students</li>
    <li class="active">Student List</li>
  </ol>
</section>
<!-- Main content -->
<section class="content">
  <?php
  if(isset($_SESSION['error'])){
  echo "
    <div class='alert alert-danger alert-dismissible'>
      <button type='button' class='close' data-dismiss='alert' aria-hidden='true'>&times;</button>
      <h4><i class='icon fa fa-warning'></i> Error!</h4>
      ".$_SESSION['error']."
    </div>
   ";
   unset($_SESSION['error']);
  }
  if(isset($_SESSION['success'])){
   echo "
    <div class='alert alert-success alert-dismissible'>
      <button type='button' class='close' data-dismiss='alert' aria-hidden='true'>&times;</button>
      <h4><i class='icon fa fa-check'></i> Success!</h4>
      ".$_SESSION['success']."
    </div>
   ";
   unset($_SESSION['success']);
```

```
                <a      href='#edit_photo'     data-toggle='modal'     class='pull-right    photo'    data-
id='".$row['studid']."'><span class='fa fa-edit'></span></a>
                ";
              }
            ?>
          </tbody>
        </table>
      </div>
    </div>
  </div>
  </div>
  </section>
 </div>
  <?php include 'includes/footer.php'; ?>
  <?php include 'includes/student_modal.php'; ?>
</div>
<?php include 'includes/scripts.php'; ?>
<script>
$(function(){
  $(document).on('click', '.edit', function(e){
    e.preventDefault();
    $('#edit').modal('show');
    var id = $(this).data('id');
    getRow(id);
  });
 $(document).on('click', '.delete', function(e){
    e.preventDefault();
    $('#delete').modal('show');
    var id = $(this).data('id');
    getRow(id);
  });
 $(document).on('click', '.photo', function(e){
```

```
    e.preventDefault();
    var id = $(this).data('id');
    getRow(id);
  });
});
function getRow(id){
  $.ajax({
    type: 'POST',
    url: 'student_row.php',
    data: {id:id},
    dataType: 'json',
    success: function(response){
      $('.studid').val(response.studid);
      $('#edit_firstname').val(response.firstname);
      $('#edit_lastname').val(response.lastname);
      $('#selcourse').val(response.course_id);
      $('#selcourse').html(response.code);
      $('.del_stu').html(response.firstname+' '+response.lastname);
    }
  });
}
</script>
</body>
</html>
```

Course.php

```
<?php include 'includes/session.php'; ?>
<?php include 'includes/header.php'; ?>
<body class="hold-transition skin-blue sidebar-mini">
<div class="wrapper">

  <?php include 'includes/navbar.php'; ?>
  <?php include 'includes/menubar.php'; ?>
```

```php
<!-- Content Wrapper. Contains page content -->
<div class="content-wrapper">
  <!-- Content Header (Page header) -->
  <section class="content-header">
   <h1>
    Course
   </h1>
   <ol class="breadcrumb">
    <li><a href="#"><i class="fa fa-dashboard"></i> Home</a></li>
    <li>Students</li>
    <li class="active">Course</li>
   </ol>
  </section>
  <!-- Main content -->
  <section class="content">
   <?php
    if(isset($_SESSION['error'])){
    echo "
      <div class='alert alert-danger alert-dismissible'>
       <button type='button' class='close' data-dismiss='alert' aria-hidden='true'>&times;</button>
       <h4><i class='icon fa fa-warning'></i> Error!</h4>
       ".$_SESSION['error']."
      </div>
     ";
     unset($_SESSION['error']);
    }
    if(isset($_SESSION['success'])){
     echo "
      <div class='alert alert-success alert-dismissible'>
       <button type='button' class='close' data-dismiss='alert' aria-hidden='true'>&times;</button>
       <h4><i class='icon fa fa-check'></i> Success!</h4>
```

```php
                ".$_SESSION['success']."
              </div>
            ";
            unset($_SESSION['success']);
          }
      ?>
        <div class="row">
         <div class="col-xs-12">
           <div class="box">
             <div class="box-header with-border">
              <a href="#addnew" data-toggle="modal" class="btn btn-primary btn-sm btn-flat"><i class="fa-
plus"></i> New</a>
             </div>
             <div class="box-body">
              <table id="example1" class="table table-bordered">
                <thead>
                  <th>Code</th>
                  <th>Course Title</th>
                  <th>Tools</th>
                </thead>
 <?php include 'includes/footer.php'; ?>
   <?php include 'includes/course_modal.php'; ?>
</div>
<?php include 'includes/scripts.php'; ?>
<script>
$(function(){
  $(document).on('click', '.edit', function(e){
    e.preventDefault();
    $('#edit').modal('show');
    var id = $(this).data('id');
    getRow(id);
  });
```

```javascript
   $(document).on('click', '.delete', function(e){
    e.preventDefault();
    $('#delete').modal('show');
    var id = $(this).data('id');
    getRow(id);
   });
});


function getRow(id){
  $.ajax({
    type: 'POST',
    url: 'course_row.php',
    data: {id:id},
    dataType: 'json',
    success: function(response){
      $('.corid').val(response.id);
      $('#edit_code').val(response.code);
      $('#edit_title').val(response.title);
      $('#del_code').html(response.code);
    }
  });
}
</script>
</body>
</html>
```

Category.php

```php
<?php include 'includes/session.php'; ?>
<?php include 'includes/header.php'; ?>
<body class="hold-transition skin-blue sidebar-mini">
```

```php
<div class="wrapper">

 <?php include 'includes/navbar.php'; ?>
 <?php include 'includes/menubar.php'; ?>


 <!-- Content Wrapper. Contains page content -->
 <div class="content-wrapper">
  <!-- Content Header (Page header) -->
  <section class="content-header">
   <h1>
    Category
   </h1>
   <ol class="breadcrumb">
    <li><a href="#"><i class="fa fa-dashboard"></i> Home</a></li>
    <li>Books</li>
    <li class="active">Category</li>
   </ol>
  </section>
  <!-- Main content -->
  <section class="content">
   <?php
    if(isset($_SESSION['error'])){
    echo "
      <div class='alert alert-danger alert-dismissible'>
       <button type='button' class='close' data-dismiss='alert' aria-hidden='true'>&times;</button>
       <h4><i class='icon fa fa-warning'></i> Error!</h4>
       ".$_SESSION['error']."
      </div>
     ";
     unset($_SESSION['error']);
    }
    if(isset($_SESSION['success'])){
```

```php
    echo "
      <div class='alert alert-success alert-dismissible'>
        <button type='button' class='close' data-dismiss='alert' aria-hidden='true'>&times;</button>
        <h4><i class='icon fa fa-check'></i> Success!</h4>
        ".$_SESSION['success']."
      </div>
      ";
      unset($_SESSION['success']);
    }
  ?>
  <div class="row">
    <div class="col-xs-12">
      <div class="box">
        <div class="box-header with-border">
          <a href="#addnew" data-toggle="modal" class="btn btn-primary btn-sm btn-flat"><i class="fa-plus"></i> New</a>
        </div>
                <td>
                  <button class='btn btn-success btn-sm edit btn-flat' data-id='".$row['id']."'><i class='fa-edit'></i> Edit</button>
                  <button class='btn btn-danger btn-sm delete btn-flat' data-id='".$row['id']."'><i class='fa-trash'></i> Delete</button>
                </td>
              </tr>
            ";
          }
        ?>
        </tbody>
      </table>
    </div>
  </div>
</div>
```

```
      </div>
    </section>
  </div>
  <?php include 'includes/footer.php'; ?>
  <?php include 'includes/category_modal.php'; ?>
</div>
<?php include 'includes/scripts.php'; ?>
<script>
$(function(){
 $(document).on('click', '.edit', function(e){
  e.preventDefault();
  $('#edit').modal('show');
  var id = $(this).data('id');
  getRow(id);
 });

 $(document).on('click', '.delete', function(e){
  e.preventDefault();
  $('#delete').modal('show');
  var id = $(this).data('id');
  getRow(id);
 });
});

function getRow(id){
 $.ajax({
  type: 'POST',
  url: 'category_row.php',
  data: {id:id},
  dataType: 'json',
  success: function(response){
    $('.catid').val(response.id);
```

```
    $('#edit_name').val(response.name);

    $('#del_cat').html(response.name);

  }

 });

}

</script>

</body>

</html>
```

Book_row.php

```php
<?php
      include 'includes/session.php';


      if(isset($_POST['id'])){
            $id = $_POST['id'];
            $sql = "SELECT *, books.id AS bookid FROM books LEFT JOIN category ON
category.id=books.category_id WHERE books.id = '$id'";
            $query = $conn->query($sql);
            $row = $query->fetch_assoc();


            echo json_encode($row);
      }
?>
```

Student_row.php

```php
<?php
      include 'includes/session.php';


      if(isset($_POST['id'])){
            $id = $_POST['id'];
            $sql = "SELECT *, students.id AS studid FROM students LEFT JOIN course ON
course.id=students.course_id WHERE students.id = '$id'";
```

```php
                $query = $conn->query($sql);

                $row = $query->fetch_assoc();


                echo json_encode($row);

        }

?>
```

Book_delete.php

```php
<?php
        include 'includes/session.php';


        if(isset($_POST['delete'])){
                $id = $_POST['id'];
                $sql = "DELETE FROM books WHERE id = '$id'";
                if($conn->query($sql)){
                        $_SESSION['success'] = 'Book deleted successfully';
                }
                else{
                        $_SESSION['error'] = $conn->error;
                }
        }
        else{
                $_SESSION['error'] = 'Select item to delete first';
        }


        header('location: book.php');

?>
```

Course_delete.php

```php
<?php
        include 'includes/session.php';
```

```php
        if(isset($_POST['delete'])){
                $id = $_POST['id'];
                $sql = "DELETE FROM course WHERE id = '$id'";
                if($conn->query($sql)){
                        $_SESSION['success'] = 'Course deleted successfully';
                }
                else{
                        $_SESSION['error'] = $conn->error;
                }
        }
        else{
                $_SESSION['error'] = 'Select item to delete first';
        }

        header('location: course.php');

?>
```

Student_delete.php

```php
<?php
        include 'includes/session.php';

        if(isset($_POST['delete'])){
                $id = $_POST['id'];
                $sql = "DELETE FROM students WHERE id = '$id'";
                if($conn->query($sql)){
                        $_SESSION['success'] = 'Student deleted successfully';
                }
                else{
                        $_SESSION['error'] = $conn->error;
```

```php
                }
        }
        else{
                $_SESSION['error'] = 'Select item to delete first';
        }
         header('location: student.php');
?>
```

Category_delete.php

```php
<?php
        include 'includes/session.php';

        if(isset($_POST['delete'])){
                $id = $_POST['id'];
                $sql = "DELETE FROM category WHERE id = '$id'";
                if($conn->query($sql)){
                        $_SESSION['success'] = 'Category deleted successfully';
                }
                else{
                        $_SESSION['error'] = $conn->error;
                }
        }
        else{
                $_SESSION['error'] = 'Select item to delete first';
        }

        header('location: category.php');

?>
```

Category_add.php

```php
<?php
    include 'includes/session.php';
  if(isset($_POST['add'])){
        $name = $_POST['name'];

        $sql = "INSERT INTO category (name) VALUES ('$name')";
        if($conn->query($sql)){
            $_SESSION['success'] = 'Category added successfully';
        }
        else{
            $_SESSION['error'] = $conn->error;
        }
    }
    else{
        $_SESSION['error'] = 'Fill up add form first';
    }
  header('location: category.php');
?>
```

Category_edit.php

```php
<?php
    include 'includes/session.php';

    if(isset($_POST['edit'])){
        $id = $_POST['id'];
        $name = $_POST['name'];

        $sql = "UPDATE category SET name = '$name' WHERE id = '$id'";
        if($conn->query($sql)){
            $_SESSION['success'] = 'Category updated successfully';
        }
```

```php
                else{

                        $_SESSION['error'] = $conn->error;

                }

        }

        else{

                $_SESSION['error'] = 'Fill up edit form first';

        }

        header('location:category.php');

?>
```

Course_add.php

```php
<?php

        include 'includes/session.php';


        if(isset($_POST['add'])){

                $code = $_POST['code'];

                $title = $_POST['title'];


                $sql = "INSERT INTO course (code, title) VALUES ('$code', '$title')";

                if($conn->query($sql)){

                        $_SESSION['success'] = 'Course added successfully';

                }

                else{

                        $_SESSION['error'] = $conn->error;

                }

        }

        else{

                $_SESSION['error'] = 'Fill up add form first';

        }

 header('location: course.php');


?>
```

Book_add.php

```php
<?php
    include 'includes/session.php';

    if(isset($_POST['add'])){
        $isbn = $_POST['isbn'];
        $title = $_POST['title'];
        $category = $_POST['category'];
        $author = $_POST['author'];
        $publisher = $_POST['publisher'];
        $pub_date = $_POST['pub_date'];

        $sql = "INSERT INTO books (isbn, category_id, title, author, publisher, publish_date)
VALUES ('$isbn', '$category', '$title', '$author', '$publisher', '$pub_date')";
        if($conn->query($sql)){
            $_SESSION['success'] = 'Book added successfully';
        }
        else{
            $_SESSION['error'] = $conn->error;
        }
    }
    else{
        $_SESSION['error'] = 'Fill up add form first';
    }

    header('location: book.php');

?>
```

Book_edit.php

```php
<?php
    include 'includes/session.php';

    if(isset($_POST['edit'])){
        $id = $_POST['id'];
        $isbn = $_POST['isbn'];
        $title = $_POST['title'];
        $category = $_POST['category'];
        $author = $_POST['author'];
        $publisher = $_POST['publisher'];
        $pub_date = $_POST['pub_date'];

        $sql = "UPDATE books SET isbn = '$isbn', title = '$title', category_id = '$category', author =
'$author', publisher = '$publisher', publish_date = '$pub_date' WHERE id = '$id'";
        if($conn->query($sql)){
            $_SESSION['success'] = 'Book updated successfully';
        }
        else{
            $_SESSION['error'] = $conn->error;
        }
    }
    else{
        $_SESSION['error'] = 'Fill up edit form first';
    }

    header('location:book.php');
```

Return_add.php

```php
<?php
    include 'includes/session.php';

    if(isset($_POST['add'])){
        $student = $_POST['student'];

        $sql = "SELECT * FROM students WHERE student_id = '$student'";
        $query = $conn->query($sql);
        if($query->num_rows < 1){
            if(!isset($_SESSION['error'])){
                $_SESSION['error'] = array();
            }
            $_SESSION['error'][] = 'Student not found';
        }
        else{
            $row = $query->fetch_assoc();
            $student_id = $row['id'];

            $return = 0;
            foreach($_POST['isbn'] as $isbn){
                if(!empty($isbn)){
                    $sql = "SELECT * FROM books WHERE isbn = '$isbn'";
                    $query = $conn->query($sql);
                    if($query->num_rows > 0)
                        $sql = "SELECT * FROM borrow WHERE student_id =
'$student_id' AND book_id = '$bid' AND status = 0";
                        $query = $conn->query($sql);
                        if($query->num_rows > 0){
                            $borrow = $query->fetch_assoc();
                            $borrow_id = $borrow['id'];
```

```php
                                            $sql = "INSERT INTO returns (student_id, book_id,
date_return) VALUES ('$student_id', '$bid', NOW())";
                                            if($conn->query($sql)){
                                                    $return++;


$sql = "UPDATE books SET status = 0 WHERE id = '$bid'";
                                            $conn->query($sql);
                                            $sql = "UPDATE borrow SET status = 1
WHERE id = '$borrow_id'";
                                            $conn->query($sql);


    else{
                            if(!isset($_SESSION['error'])){
                                    $_SESSION['error'] = array();
                                    }
                                    $_SESSION['error'][] = 'Book not found: ISBN - '.$isbn;
                            }
                            }
                    }

                    if($return > 0){
                            $book = ($return == 1) ? 'Book' : 'Books';
                            $_SESSION['success'] = $return.' '.$book.' successfully returned';
                    }
    }
    else{
            $_SESSION['error'] = 'Fill up add form first';
    }
   header('location: return.php');

?>
```

Book_modal.php

```
<!-- Add -->

<div class="modal fade" id="addnew">

    <div class="modal-dialog">

        <div class="modal-content">

            <div class="modal-header">

                    <button type="button" class="close" data-dismiss="modal" aria-label="Close">

                            <span aria-hidden="true">&times;</span></button>

                    <h4 class="modal-title"><b>Add New Book</b></h4>

            </div>

            <div class="modal-body">

                    <form class="form-horizontal" method="POST" action="book_add.php">

                     <div class="form-group">

                    <label for="isbn" class="col-sm-3 control-label">ISBN</label>


                    <div class="col-sm-9">

                    <input type="text" class="form-control" id="isbn" name="isbn" required>

                    </div>

                </div>

                <div class="form-group">

                    <label for="title" class="col-sm-3 control-label">Title</label>


                    <div class="col-sm-9">
```

```
            <textarea class="form-control" name="title" id="title" required></textarea>

        </div>

    </div>

    <div class="form-group">

        <label for="category" class="col-sm-3 control-label">Category</label>


        <div class="col-sm-9">

            <select class="form-control" name="category" id="category" required>

                <option value="" selected>- Select -</option>

                <?php

                    $sql = "SELECT * FROM category";

                    $query = $conn->query($sql);

                    while($crow = $query->fetch_assoc()){

                    echo "

                        <option value='".$crow['id']."'>".$crow['name']."</option>

                    ";

                    }

                ?>

            </select>

        </div>

    </div>

    <div class="form-group">

        <label for="author" class="col-sm-3 control-label">Author</label>
```

```
<div class="modal-header">

        <button type="button" class="close" data-dismiss="modal" aria-label="Close">

                <span aria-hidden="true">&times;</span></button>

        <h4 class="modal-title"><b>Deleting...</b></h4>

</div>

<div class="modal-body">

        <form class="form-horizontal" method="POST" action="book_delete.php">

                <input type="hidden" class="bookid" name="id">

                <div class="text-center">

                <p>DELETE BOOK</p>

                <h2 id="del_book" class="bold"></h2>

                </div>

</div>

<div class="modal-footer">

        <button type="button" class="btn btn-default btn-flat pull-left" data-dismiss="modal"><i
class="fa fa-close"></i> Close</button>

        <button type="submit" class="btn btn-danger btn-flat" name="delete"><i class="fa-
trash"></i> Delete</button>

        </form>

</div>

    </div>

  </div>

</div>
```

Add-book.php

```php
<?php

session_start();

error_reporting(0);

include('includes/config.php');

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

    {

header('location:index.php');

}

else{


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

{

$bookname=$_POST['bookname'];

$category=$_POST['category'];

$author=$_POST['author'];

$isbn=$_POST['isbn'];

$price=$_POST['price'];

$bookimg=$_FILES["bookpic"]["name"];

// get the image extension

$extension = substr($bookimg,strlen($bookimg)-4,strlen($bookimg));

// allowed extensions

$allowed_extensions = array(".jpg","jpeg",".png",".gif");
```

// Validation for allowed extensions .in_array() function searches an array for a specific value.

//rename the image file

```php
$imgnewname=md5($bookimg.time()).$extension;
```

// Code for move image into directory

```php
if(!in_array($extension,$allowed_extensions))

{

echo "<script>alert('Invalid format. Only jpg / jpeg/ png /gif format allowed');</script>";

}

Else

{

move_uploaded_file($_FILES["bookpic"]["tmp_name"],"bookimg/".$imgnewname);

$sql="INSERT INTO tblbooks(BookName,CatId,AuthorId,ISBNNumber,BookPrice,bookImage) VALUES(:bookname,:category,:author,:isbn,:price,:imgnewname)";

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

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

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

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

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

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

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

$query->execute();

$lastInsertId = $dbh->lastInsertId();

if($lastInsertId)
```

```
}}

}

?>

<!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 | Add Book</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' />

<script type="text/javascript">

    function checkisbnAvailability() {

$("#loaderIcon").show();

jQuery.ajax({
```

```php
    <!----- 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">Add Book</h4>

                </div>

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

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

    <!-- FOOTER SECTION END-->

    <!-- JAVASCRIPT FILES PLACED AT THE BOTTOM TO REDUCE THE LOADING TIME -->

    <!-- CORE JQUERY  -->

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

    <!-- BOOTSTRAP SCRIPTS  -->

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

     <!-- CUSTOM SCRIPTS -->

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

</body>

</html>

<?php } ?>
```

Update-issue-book-detail.php

```php
<?php

session_start();

error_reporting(0);

include('includes/config.php');

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

  {

header('location:index.php');

}

else{

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

{

$rid=intval($_GET['rid']);

$fine=$_POST['fine'];

$rstatus=1;

$bookid=$_POST['bookid'];

$sql="update tblissuedbookdetails set fine=:fine,RetrunStatus=:rstatus where id=:rid;

update tblbooks set isIssued=0 where id=:bookid";

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

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

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

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

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

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

$_SESSION['msg']="Book Returned successfully";

header('location:manage-issued-books.php');

}

?>
```

```html
<!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 | Issued Book Details</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' />

<script>

// function for get student name
```

```
function getstudent() {

$("#loaderIcon").show();

jQuery.ajax({

url: "get_student.php",

data:'studentid='+$("#studentid").val(),

type: "POST",

success:function(data){

$("#get_student_name").html(data);

$("#loaderIcon").hide();

},

error:function (){}

});

}

//function for book details

function getbook() {

$("#loaderIcon").show();

jQuery.ajax({

url: "get_book.php",

data:'bookid='+$("#bookid").val(),

type: "POST",

success:function(data){

$("#get_book_name").html(data);

$("#loaderIcon").hide();
```

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

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

<!-- MENU SECTION END-->

```html
   <div class="content-wrapper">

     <div class="container">

     <div class="row pad-botm">

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

         <h4 class="header-line">Issued Book Details</h4>

           </div>

   </div>

<div class="row">

<div class="col-md-10 col-sm-6 col-xs-12 col-md-offset-1">

<div class="panel panel-info">

<div class="panel-heading">

Issued Book Details

</div>

<div class="panel-body">

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

```php
<?php

$rid=intval($_GET['rid']);

$sql = "SELECT tblstudents.StudentId
,tblstudents.FullName,tblstudents.EmailId,tblstudents.MobileNumber,tblbooks.BookName,tblbooks.ISBN
Number,tblissuedbookdetails.IssuesDate,tblissuedbookdetails.ReturnDate,tblissuedbookdetails.id as
rid,tblissuedbookdetails.fine,tblissuedbookdetails.RetrunStatus,tblbooks.id as bid,tblbooks.bookImage from
```

tblissuedbookdetails join tblstudents on tblstudents.StudentId=tblissuedbookdetails.StudentId join tblbooks on tblbooks.id=tblissuedbookdetails.BookId where tblissuedbookdetails.id=:rid";

</div></div>

<div class="col-md-6">

<div class="form-group">

<label>Book Name :</label>

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

</div>

</div>

<div class="col-md-6">

<div class="form-group">

<label>ISBN :</label>

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

</div>

</div>

<div class="col-md-6">

<label>Fine (in USD) :</label>

<?php

if($result->fine==0)

{

   $datea=new DateTime($result->ReturnDate);

$today=new DateTime();

```php
$interval=$datea->diff($today);

$diffInDays    = $interval->d * 5;

$sql="update tblissuedbookdetails set fine=:fine where id=:rid;";

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

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

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

$query->execute();
```

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

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

    <!-- FOOTER SECTION END-->

   <!-- JAVASCRIPT FILES PLACED AT THE BOTTOM TO REDUCE THE LOADING TIME -->

   <!-- CORE JQUERY -->

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

   <!-- BOOTSTRAP SCRIPTS -->

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

    <!-- CUSTOM SCRIPTS -->

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

</body>

</html>

<?php } ?>

Add-author.php

```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']))
{
$author=$_POST['author'];
$sql="INSERT INTO  tblauthors(AuthorName) VALUES(:author)";
$query = $dbh->prepare($sql);
$query->bindParam(':author',$author,PDO::PARAM_STR);
$query->execute();
$lastInsertId = $dbh->lastInsertId();
if($lastInsertId)
{
$_SESSION['msg']="Author Listed successfully";
header('location:manage-authors.php');
}
else
{
$_SESSION['error']="Something went wrong. Please try again";
header('location:manage-authors.php');
}
```

```
        }

        ?>

<!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 | Add Author</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-wra

    <div class="content-wrapper">

        <div class="container">

        <div class="row pad-botm">

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

```html
        <h4 class="header-line">Add Author</h4>


                </div>
</div>
<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">
Author Info
</div>
<div class="panel-body">
<form role="form" method="post">
<div class="form-group">
<label>Author Name</label>
<input class="form-control" type="text" name="author" autocomplete="off"  required />
</div>


<button type="submit" name="create" class="btn btn-info">Add </button>


                </form>
            </div>
        </div>
            </div>
  </div>
   </div>
    <!-- CONTENT-WRAPPER SECTION END-->
  <?php include('includes/footer.php');?>
    <!-- FOOTER SECTION END-->
  <!-- JAVASCRIPT FILES PLACED AT THE BOTTOM TO REDUCE THE LOADING TIME -->
```

```html
<!-- CORE JQUERY  -->

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

<!-- BOOTSTRAP SCRIPTS  -->

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

 <!-- CUSTOM SCRIPTS -->

<script src="assets/js/custom.js"></script>
</body>
</html>
<?php } ?>
```

Invoice.php

```php
<?php
//require_once 'core.php';

require_once 'includes/config.php';

	$id=$_GET["id"];

	$sql="SELECT
tblstudents.FullName,tblbooks.BookName,tblbooks.ISBNNumber,tblbooks.id,tblissuedbookdetails.Issues
Date,tblissuedbookdetails.fine,tblissuedbookdetails.ReturnDate,tblissuedbookdetails.id as rid   from
tblissuedbookdetails  join tblstudents on tblstudents.StudentId=tblissuedbookdetails.StudentId join tblbooks
on   tblbooks.id=tblissuedbookdetails.BookId        where    tblissuedbookdetails.id='$id'   order   by
tblissuedbookdetails.id desc";

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

	$query->execute();

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


	$table = '
	<table border="1" cellspacing="0" cellpadding="0" style="width:100%;">

		<tr>

			<th>Student Name</th>
```

```php
            <th>Book Name</th>
            <th>Book ID</th>
            <th>ISBN Number</th>
            <th>Issued Date</th>
            <th>Return Date</th>
            <th>Fine</th>
    </tr>
    <tr>';
    $cnt=1;
    if($query->rowCount() > 0)
    {
    foreach($results as $result)
    {
            //echo"<script>alert('".$result->FullName."')</script>";
            $table .= '<tr>
                    <td><center>'.$result->FullName.'</center></td>
                    <td><center>'.$result->BookName.'</center></td>
                    <td><center>'.$result->id.'</center></td>
                    <td><center>'.$result->ISBNNumber.'</center></td>
                    <td><center>'.$result->IssuesDate.'</center></td>
                    <td><center>'.$result->ReturnDate.'</center></td>
                    <td><center>'.$result->fine.'</center></td>
        </tr>';
    }
    }
    $table .= '
    </tr>
</table>
<button onClick="window.print()">Print this page</button>
```

```
        ';


        echo $table;
?>
```

Login.php

```php
<?php
session_start();
session_destroy(); // destroy session
header("location:index.php");
?>
```

4.3 System Testing

The aim of the system testing process was to determine all defects in our project .The program was subjected to a set of test inputs and various observations were made and based on these observations it will be decided whether the program behaves as expected or not.

Our Project went through two levels of testing :

1.Unit testing

2.integration testing

4.3.1 Unit Testing

Unit testing is undertaken when a module has been created and successfully reviewed. In order to test a single module we need to provide a complete environment i.e. besides the module we would require

- The procedures belonging to other modules that the module under test calls
- Non local data structures that module accesses
- A procedure to call the functions of the module under test with appropriate parameters

Unit testing was done on each and every module that is described under module description of 4

➢ Test For the admin module

- Testing admin login form-This form is used for log in of administrator of the system. In this we enter the username and password if both are correct administration page will open other wise if any of data is wrong it will get redirected back to the login page and again ask for username and password
- Student account addition- In this section the admin can verify student details from student academic info and then only add student details to main library database it contains add and delete buttons if user click add button data will be added to student database and if he clicks delete button the student data will be deleted

- Book Addition- Admin can enter details of book and can add the details to the main book table also he can view the books requests .

➢ Test for User login module

- Test for Student login Form-This form is used for log in of Student .In this we enter the library id, username and password if all these are correct student login page will open other wise if any of data is wrong it will get redirected back to the login page and again ask for library id, username and password.
- Test for new registration - This form is used for new registration when student does not fill the form completely it asks again to fill the whole form when he fill the form fully it gets redirected to page which show waiting for conformation message as his data will be only added by administrator after verification.

4.3.2 Integration Testing

In this type of testing we test various integration of the project module by providing the input. The primary objective is to test the module interfaces in order to ensure that no errors are occurring when one module invokes the other module.

Chapter 5

CONCLUSION AND FUTURE SCOPE

This website provides a computerized version of library management system which will benefit the students as well as the staff of the library.

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

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 fulfils each users need in the best way possible occurring when one module invokes the other module

Chapter 6
REFERENCES.

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