



Tribhuvan University
Faculty of Humanities and Social Science

LIBRARY MANAGEMENT SYSTEM

A PROJECT REPORT

Submitted to
Department of Bachelor of computer Application
Pashupati Multiple campus

In partial fulfillment of the requirements for degree of Bachelor of computer application

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SUPERVISOR'S RECOMMENDATION

I hereby recommend that this project prepared under my supervision by Nirajan Kumar Bohara and Kishan Safi entitled “**LIBRARY MANAGEMENT SYSTEM**” in partial fulfillment of the requirements for the degree of Bachelor of Computer Application is recommended for the final evaluation.

.....

SIGNATURE

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LETTER OF APPROVAL

This is to certify that this project prepared by **NIRAJAN KUMAR BOHARA** and **KISHAN SAFI** entitled “**LIBRARY MANAGEMENT SYSTEM**” in partial fulfillment of the requirements for the degree of Bachelor in Computer Application has been evaluated. In our opinion it is satisfactory in the scope and quality as a project for the required degree.

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ABSTRACT

This report describes the project development of Library Management System that was developed to manage the daily book transaction and manage the member, books record more efficiency. It can improve management of the book property in the library. This library management system is mainly use by student 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. This project work aims to design and implement a computerized library management system. The library management system was design and implemented using the HTML (Hypertext mark-up language), CSS (Cascading style sheet), PHP(Hypertext pre-processor) JavaScript and MySQL database. The system was developed using the Iterative Waterfall software development approach. An extensive evaluation of the project determines that the project achieved many of its predefined objectives.

Keywords: SDLC, PHP, HTML, JavaScript, MYSQL, Library Management System

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This summer project has been prepared as partial fulfillment for the requirement for the degree of Bachelor of Computer Application (BCA) 4 years program offered by Tribhuvan University. It took me quite a long time to bring out this summer project in this form. I had to take help with faculty members, books, internet, senior guidance and peers. I want to thank everyone who helped me directly and indirectly to accomplish my project. This project work has encouraged me to be tactful as well as resourceful and also sharpen my creativity. First of all, I would like to thank my summer project supervisor **Raj Kumar Shrestha** and BCA Director, **Suman Ghimire**, who provided their valuable time for me to complete this summer project. During the project time I came to learn about the various library management system related material. Other faculty members and my closest friends also gave me a hand as a final touch to my summer project. I'm thankful to the faculty members and my dearest friends for helping me with the support, motivation and ideas. During the research I had help from the internet so I would like to thank the admin and publisher as well. Lastly, I couldn't have done it without my family support. I want to thank my parents and sibling for creating the good environment and continuous motivation in the home while I could work in peace. We are ensuring that this project was finished by me and not copied.

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LIST OF ABBREVIATIONS

CSS	Cascading Style Sheet
DFD	Data Flow Diagram
ER Diagram	Entity Relationship Diagram
GUI	Graphical User Interface
HTML	Hypertext Markup Language
IE	Internet Explorer
MYSQL	Structure Query Language
PHP	Hypertext Preprocessor
RAM	Random Access Memory
SDLC	System Design Life Cycle
SRS	Software Requirement Specification

Chapter 1 Introduction

1.1 Introduction

The project titled “Library Management System” is a Library management software for monitoring and controlling the transactions in a library. The project “Library Management System” is developed in HTML, CSS, JavaScript and PHP, which mainly focuses on basic operations in a library like adding new member, new books, and updating new information, searching books and members to borrow and return books. “Library Management System” is a windows application written for 64-bit Windows operating systems, designed to help users maintain and organize library. Our software is easy to use for both beginners and advanced users. It features a familiar and well thought-out, an attractive user interface. The software Library Management System has three main modules.

- ❖ Insertion to Database Module -User friendly input screen
- ❖ Extracting from Database module –Attractive Output Screen
- ❖ Search Facility system –search for books and members

1.2 Problem Statement

Many libraries are operated manually by group of people. These people keep records regarding the books and students check the books manually and keep records on issued books. Problems that are facing by the users while using the current Library system the current system of the university doesn't allow users to login from different campuses.

- i. If manual record book data will be lost completely.
- ii. You cannot keep track of how many times in the register of workers unite to form a copy.
- iii. when there is no computerized system there is always a difficulty in searching of records if the records are large in number.
- iv. After the number of records become large the space for physical storage of file and records also increases if no computerized system is implemented.
- v. As there is no computerized system the add each record paper will be needed which will increase the cost for the management of library.
- vi. Students have no idea to check their account.

1.3 Objectives

The project objectives are:

- i. To maintain issuing and returning books.
- ii. To manipulate books records.

1.4 Scope and limitations

1.4.1 Scope

Many libraries are operated manually by a group of people. These people regarding the books & students check the books manually and keep records on issued books. library management system that works as web-based application. the general scope of the system includes:

- i. Give the authorized person the ability to search books, access records and generate report
- ii. Give the authorized person the ability to search members, add members and remove members
- iii. Enable students to search for a book they want to reserve
- iv. Provide students with a user account
- v. Suggest related books for the student while he/she searches for a book
- vi. Notify students with important information such as time left to return a book if they have borrowed it for a long term
- vii. Give students the ability to review books they have read

1.4.2 Limitation

The project there are some limitations below:

- i. This system is used for small organization only.
- ii. Book order processing is not implemented.
- iii. Library members cannot book issue in advance if book is unavailable.
- iv. Fine Management Process is not implemented.
- v. Can't implement Barcode, SMS technologies into system

1.6 Report organization

The report can be organized into 6 chapters which are given below:

Chapter 1 includes introduction the brief introduction of the system, statement of problem, objectives, scope and limitation.

Chapter 2 includes background study and literature review includes the previous work related to the systems and similar works were studied and are summarized.

Chapter 3 includes system analysis and design includes different feasibility analysis and designed system architecture, system flow diagram, dataflow diagram.

Chapter 4 includes implementation and testing includes various implementation tools and also contains description of testing.

Chapter 5 includes conclusion and future recommendations includes outcomes of the system, conclusion to the system and description about what features can be added in the future.

Appendices to show screenshots and source codes of different functions and pages.

Chapter 2 Background Study and Literature Review

2.1 Background study

Library Management System is an application refer to other library system and it is suitable to 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.

Library System is designed to help users maintained and organized the library. This will help the library management to make their work easier and faster. This system will be designed to help the librarian identify a book that the member wants to borrow; this will also help the librarian to easily identify the unreturned books. The basic operation in a library system is adding new members, new books, and update new information, searching books, member and faculty to borrow and returned books. The purpose of library management system is to provide a medium for the library to computerize their entire functioning and would contribute as a first step in digitalizing their library. Book and member maintenance module also included in Library Management System. Users can register or edit the member or book in the system. With this computerized maintenance, library will not lost the book record or member record which always happen when no computerized system bring used.

2.2 Literature Review

Different article, documentation and project have been referred related to library management system in the preparation of this report. A Library Management System is a software built to handle the functions of a library. It helps to keep track of books and their checkouts as well as library members and their profiles [1]. Computer software has played a vital role in book management of library now. Computer software can retrieve books quickly and it also has high effective, long operating life, low costs advantage. Smaller libraries, especially, can gain from a system offering CRUD capabilities, report generation, event logs, and user feedback. Adopting a database system ensures systematic information storage, minimizing errors. Modern databases have seamlessly integrated into our daily routines, serving as structured repositories for digital data. They simplify accessibility and align effectively with diverse tasks, enabling prudent data management. Such systems are

constructed using discrete transactions [2]. In web development, PHP and MySQL stand out due to their open-source nature. PHP (recursive acronym for PHP: Hypertext Preprocessor) is a widely-used open-source general-purpose scripting language that is especially suited for web development and can be embedded into HTML. Those who have certain development experience can set up their development platform by choosing the related server, DBMS, and operating system. There are some PHP IDE (integrated development environment) such as WAMP, XAMPP, AppServ, PHP Study in the market for the developers develop the website by using PHP [3]. MySQL is a relational database management system based on the Structured Query Language, which is the popular language for accessing and managing the records in the database [4]. The library management system's database design is quite important, it involves to system's efficiency, affects to overall system's quality. The database modeling is the core and foundation of establishing the database and application system, regarding the application environment which assigns, it requests that it can construct the superior database pattern, establish the database application system and enable the system effectively the stored datum to satisfy the user each kind of application demand [5].

Chapter 3 System Analysis and Design

3.1. System Analysis

Every task is carried out with some methods, the method is either scientific or common, it provides desired output. Every work is planned before it is started. Similarly, we planned to construct a project named the library management system. For this project, we have used the Incremental Model of Software Process Model. The process is repeated following the delivery of each increment, until the complete product is produced.

Planning: The planning phase involves defining the project scope, objectives, and requirements. It includes identifying key stakeholders, establishing timelines, and creating a road map for the iterative development process.

Design: In the design phase, the overall architecture and user interface of the library management system platform are conceptualized. Wire frames, mock-ups, and prototypes are created to visualize the platform's structure and functionality. User experience (UX) design principles are incorporated to ensure a seamless and intuitive interface.

Development: The development phase involves coding and building the library management system platform based on the design specifications. The platform's features, such as secure payment systems, intelligent search functionality, and personalized recommendations, are implemented during this phase.

Testing: The testing phase focuses on quality assurance and ensuring that the platform functions as intended. Various testing methods, including unit testing, integration testing, and user acceptance testing, are conducted to identify and rectify any issues or bugs.

By adopting an iterative development model, the library management system platform can evolve and adapt to user needs, regulatory requirements, and technological advancements. It ensures that the platform is robust, user-friendly.

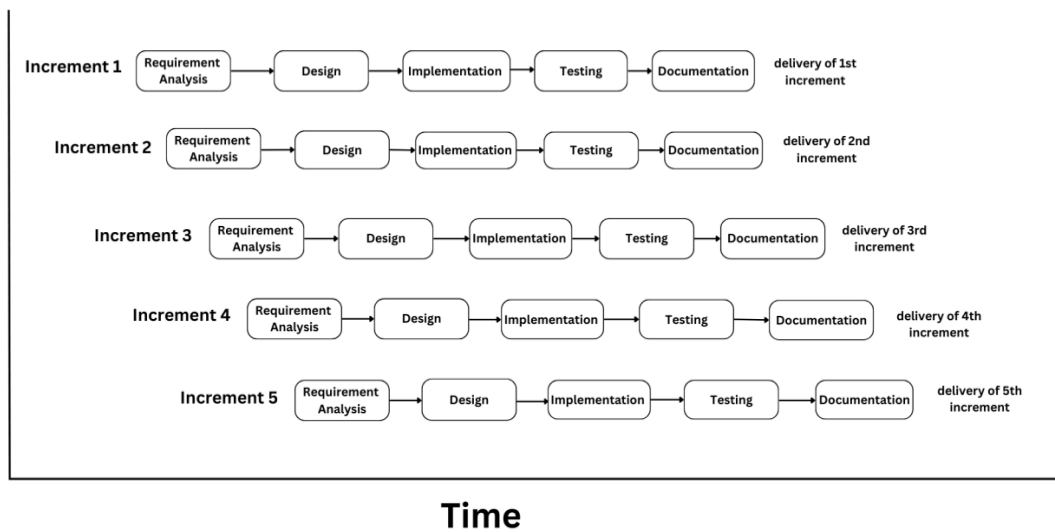


Figure 1.1 Incremental model

3.1.1. Requirement Analysis

In this project analyze about the developing process of Library Management System including software requirement specification (SRS) and comparison between existing and proposed system. The functional and non-functional requirements are included in SRS part to provide complete description and overview of system requirement before the developing process is carried out.

3.1.1.1 Functional Requirements

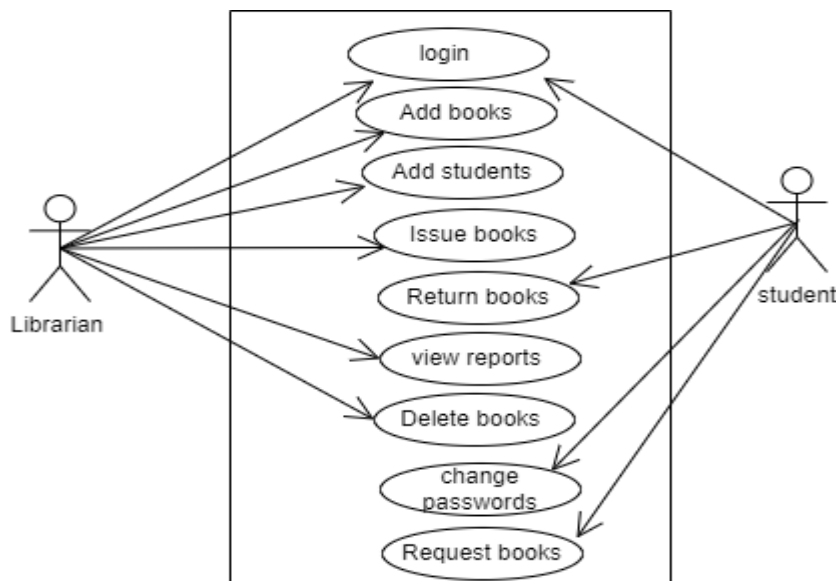


Figure 1.2 Use case of library management

a) **User login**

i) **Librarian**

User login

This feature used by the user to login into system. They are required to enter user id and password before they are allowed to enter the system. The user id and password will be verified and if invalid id is their user is allowed to not enter the system.

Functional requirements

- User id is provided when they register
- The system must only allow user with valid id and password to enter the system
- The system performs authorization process which decides what user level can access to.
- The user must be able to logout after they finished using system.

Register new user

This feature can be performed by register new user.

Functional requirements

- System must be able to verify information
- System must be able to delete information if information is wrong.

Add new books

This feature allows to add new books to the library

Functional requirements

- System must be able to verify information
- System must be able to enter number of copies into table.
- System must be able to not allow two books having same book id.

Delete books.

This feature allows to delete books to the library

Functional requirements

- System must be able to verify information
- System must be able to enter book id.
- System must be able to perform delete book.

Search book

This feature is found in book maintenance part. we can search book based on book id, book name, publication or by author name.

Functional requirements

- System must be able to search the database based on select search type
- System must be able to filter book based on keyword entered
- System must be able to show the filtered book in table view

Issue books

This feature allows to issue and also view reports of book issued.

Functional requirements

- System must be able to enter issue information in database.
- System must be able to update number of books.
- System must be able to search if book is available or not before issuing books.
- System should be able to enter issue date information.

View reports

This feature records every process done by user in the system. System will record down every process such as add record, update record as well as login information. When system crash, admin can check back which action happens lastly and maybe the action is the cause for system crash.

Functional Requirements

- System must able to show out all the activity log information.
- System must store all the critical process into activity log

ii) **student**

User login

This feature used by the user to login into system. They are required to enter user id and password before they are allowed to enter the system. The user id and password will be verified and if invalid id is their user is allowed to not enter the system.

Functional requirements

- User id is provided when they register
- The system must only allow user with valid id and password to enter the system
- The system performs authorization process which decides what user level can access to.

Password Changed

This feature used by the user whenever they forget their login password.

Functional Requirements

- The system must be able to send the correct password to the user's mailbox.

- System must able to filter the book based on the keyword entered.
- System must able to show out the filtered book in list view.

Books return

This feature allows to return books and also view reports of book returned.

Functional requirements

- System should be able to enter return date information.

Books request

This feature allows to request books and also view reports of book.

Functional requirements

- System should be able to request books for librarian.

3.1.1.2 Non-Functional Requirements

Efficiency requirement

When a library management system will be implemented librarian and user will easily access library as searching and book transaction will be very faster.

Reliability requirement

The system should accurately perform member registration, member validation, report generation, book transaction and search

Usability requirement

The system is designed for a user-friendly environment so that student and staff of library can perform the various tasks easily and in an effective way.

Implementation requirements

In implementing whole system, it uses html in front end with PHP as server-side scripting language which will be used for database connectivity and the backend i.e. the database part is developed using MYSQL.

Delivery requirements

The whole system is expected to be delivered in two months of time an evaluation by the project guide.

3.1.2. Feasibility Analysis

3.1.2. 1 Technical

Minimum Hardware requirements

CLIENT

Processor	: Intel(R) Core i3
Speed	: 1.9 GHz
RAM	: 2 GB
Hard Disk Capacity	: 100GB
Monitor	: Screen resolution minimum 1250 x 1024
Browser	: Google chrome (Or any version)/IE

Minimum Software requirements

Operating system	: Windows 7
Web server	: Apache Web server
Database	: MYSQL
Scripting language	: PHP

3.1.2.2 Operational

To establish system's operational feasibility, we must analyze several Criteria:

SN	Criteria	Outcome
1	UI	Incredibly User-Friendly
2	Deployment Expenses	Acceptable
3	User Training	Simple or Not-required

Table 1.1 Operational feasibility

The project team estimated that the remaining and running system after the deployment would not be a major difficulty, indicating that the project is operationally feasible.

3.1.3.3 Economic

To determine if a project is economically feasible, we must analyze several criteria:

SN	Criteria	Outcome
1	Cost	Very minimal
2	Maintenance expenses	Extremely low
3	Developer payment	No payment

Table 1.2 Operational feasibility

The above-mentioned criteria impose no additional economic overheads, making the system economically

3.1.2.4 Project Schedule

Gantt Chart

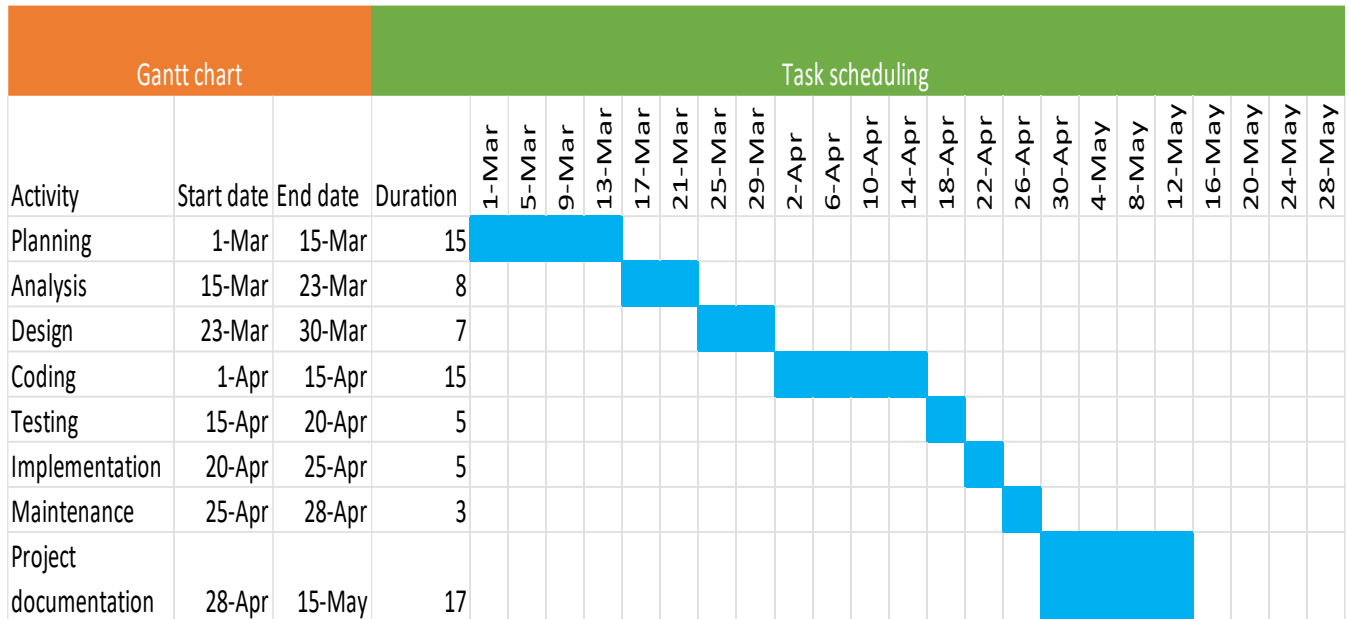


Figure 1.3 Representation project schedule from Gantt chart

3.1.4. Data Modelling (ER-Diagram)

An E-R Diagram is a graphical representation of entities and their relationships. It shows how data is organized, make it easier to plan databases, and helps developers to understand the data structures they need to develop. Build a Library Management System that meets the needs of the organization it is being built for.

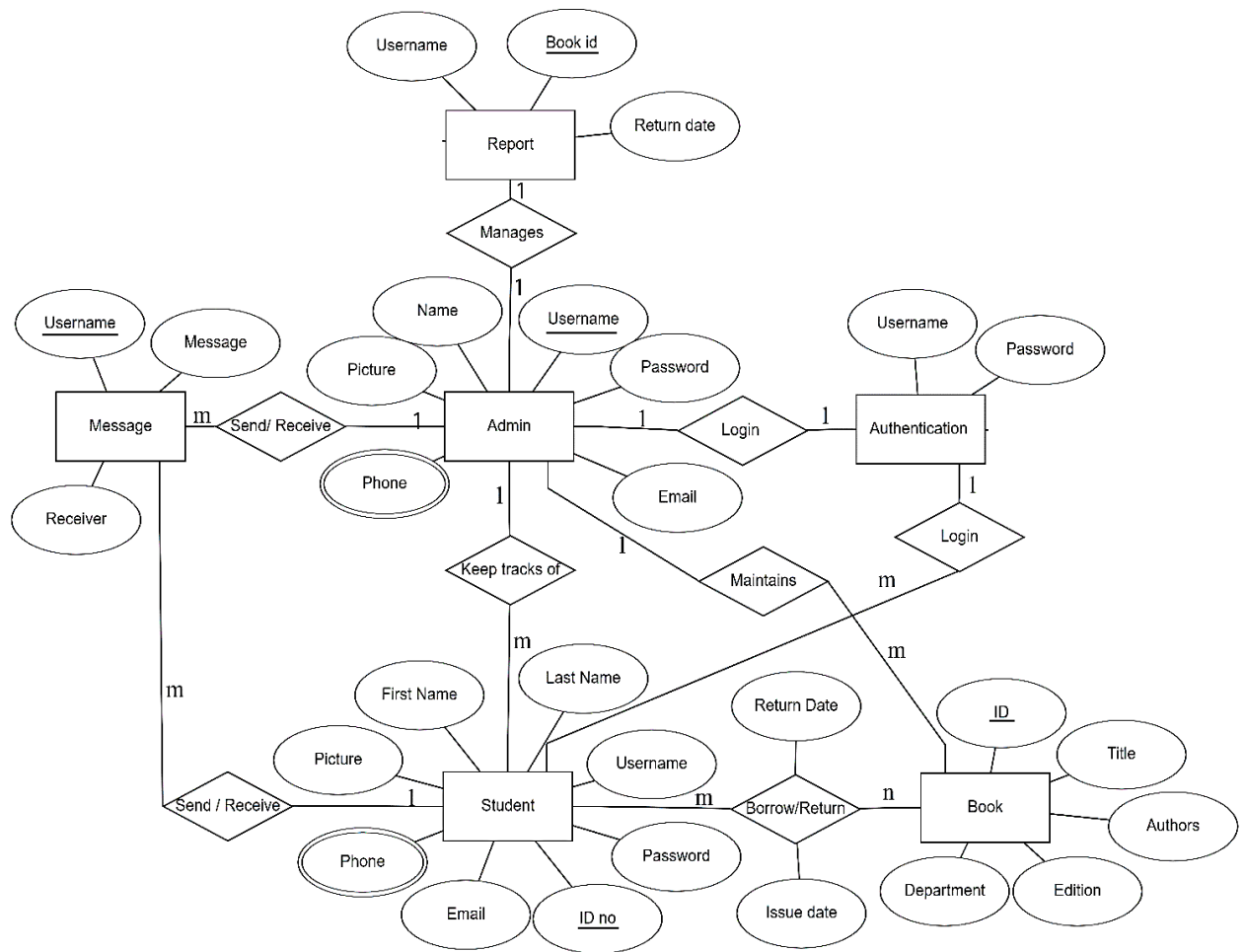


Figure 1.4 E-R diagram of LMS

3.1.4. Process Modelling (DFD)

A context diagram (level 0 data-flow diagram) clarifies the library system's boundaries. It shows how information moves between the system and the external entities. A single process shows the whole concept of the software.

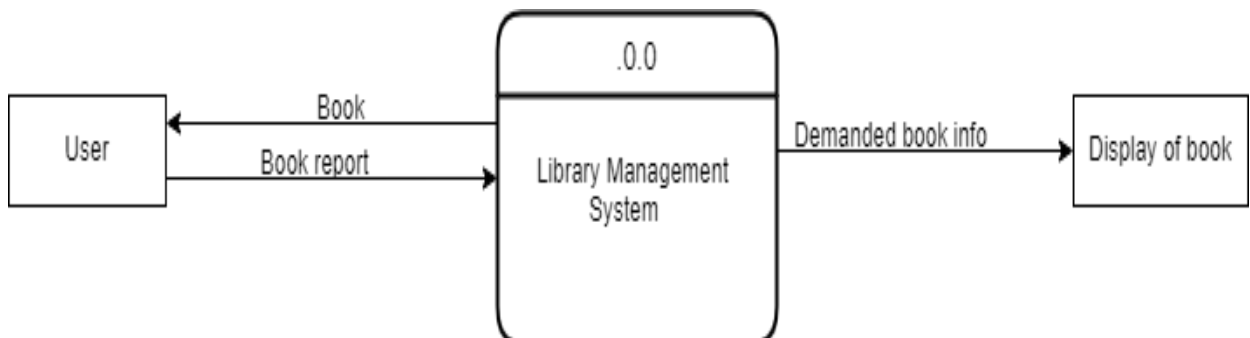


Figure 1.5 LMS DFD – Level 0

Level 1 Data Flow Diagram

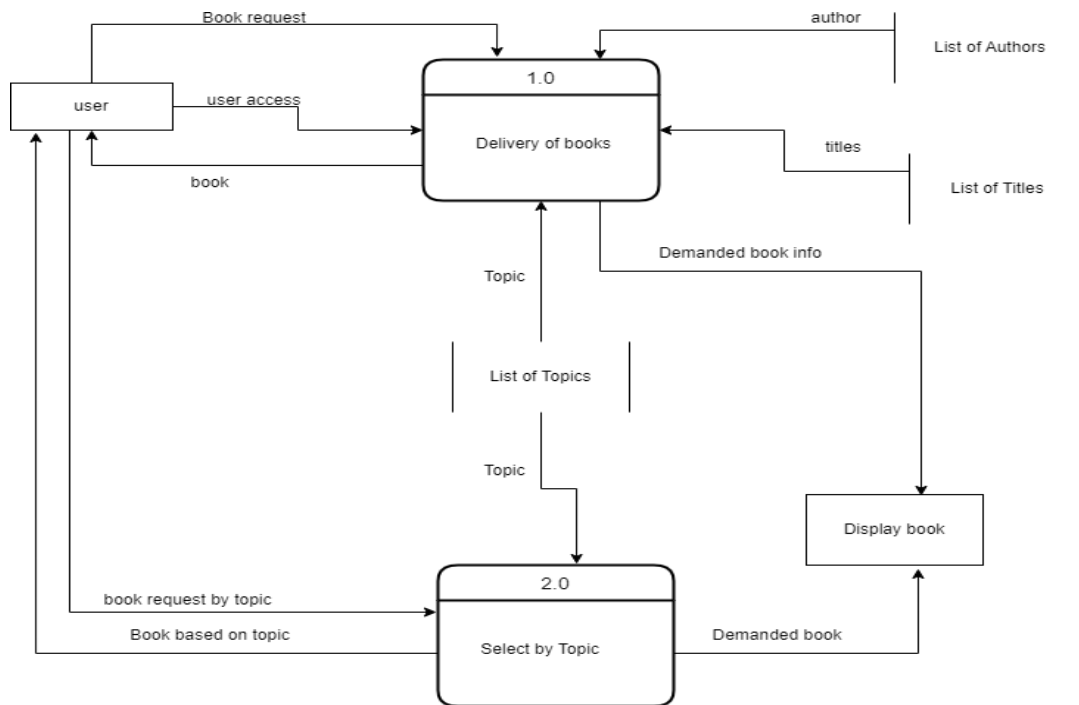


Figure 1.6 LMS DFD – Level 1

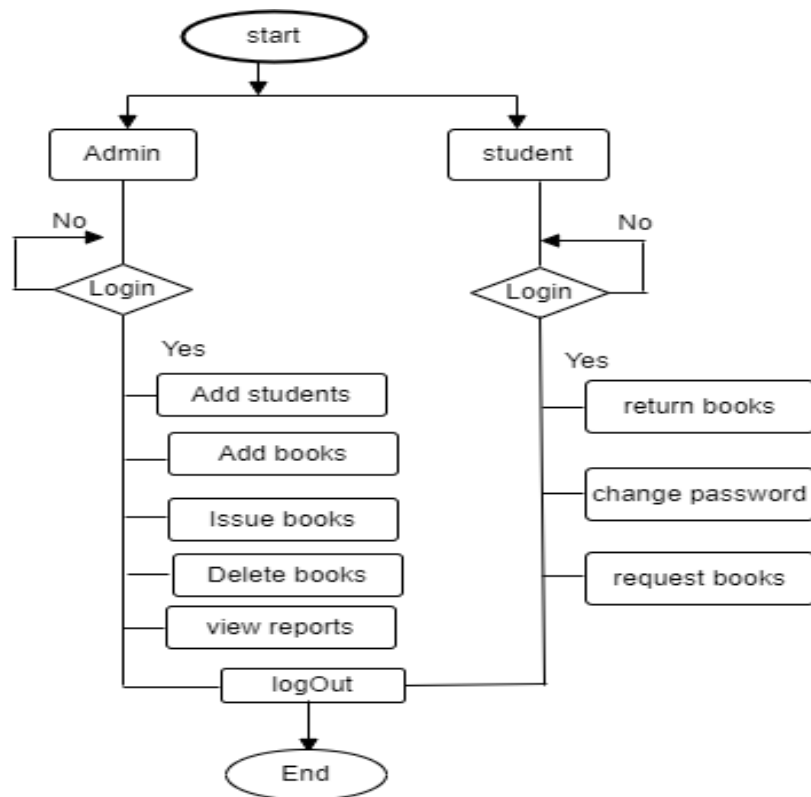


Figure 1.7 System flowchart of the LMS

3.2. System Design

This part will discuss about System Design phase which is one of the SDLC phase. The GUI design, database design will be carried out in this part.

3.2.1. Architectural Design

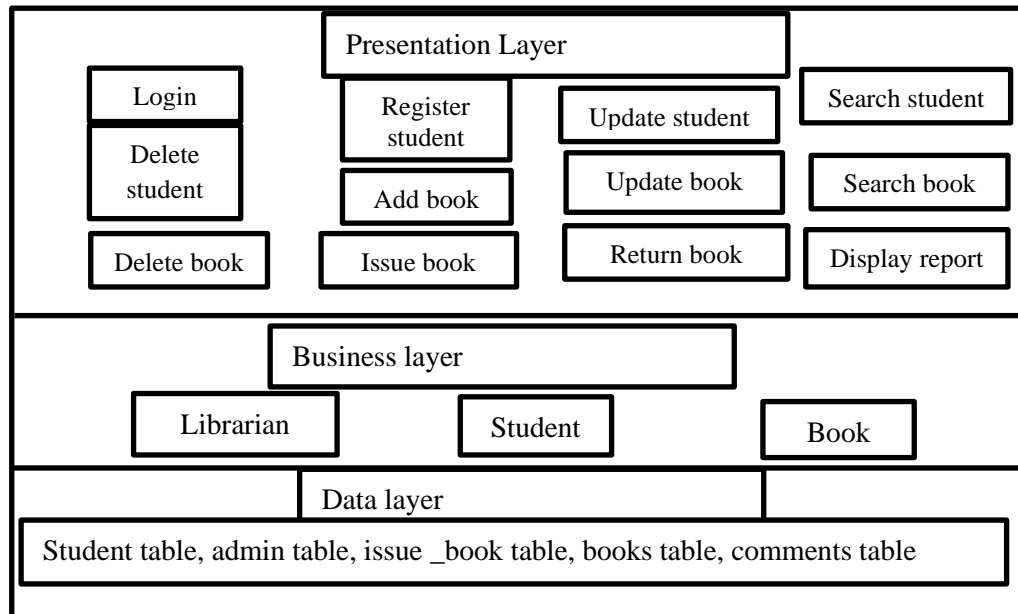


Figure 1.8 Architectural design of LMS

3.2.2. Database Schema Design

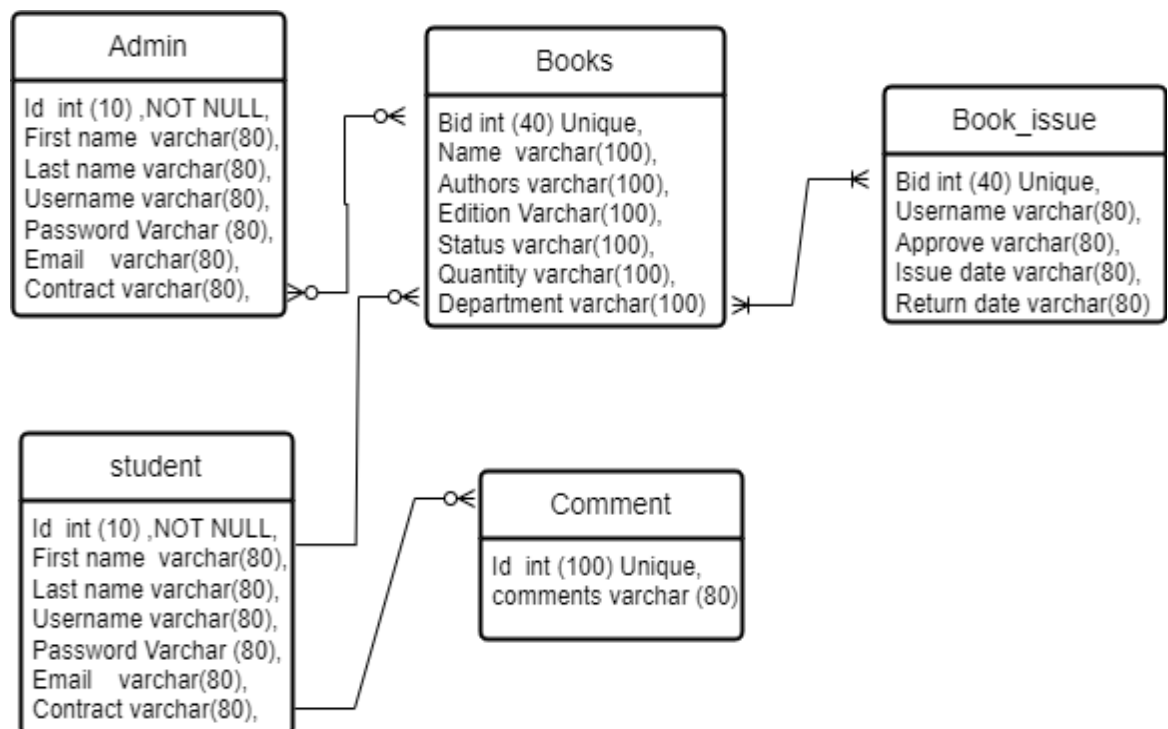


Figure 1.9 Database Schema Design of LMS

3.2.3. Interface Design

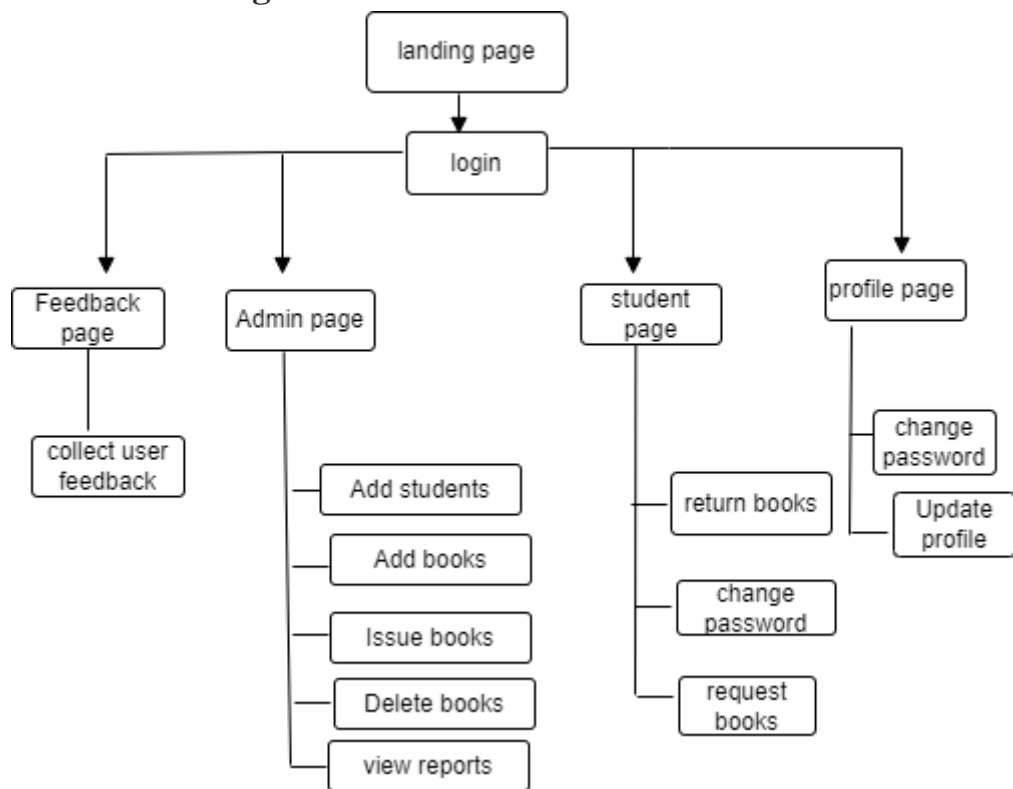


Figure 1.10 Interface design of LMS

3.2.4. Physical DFD

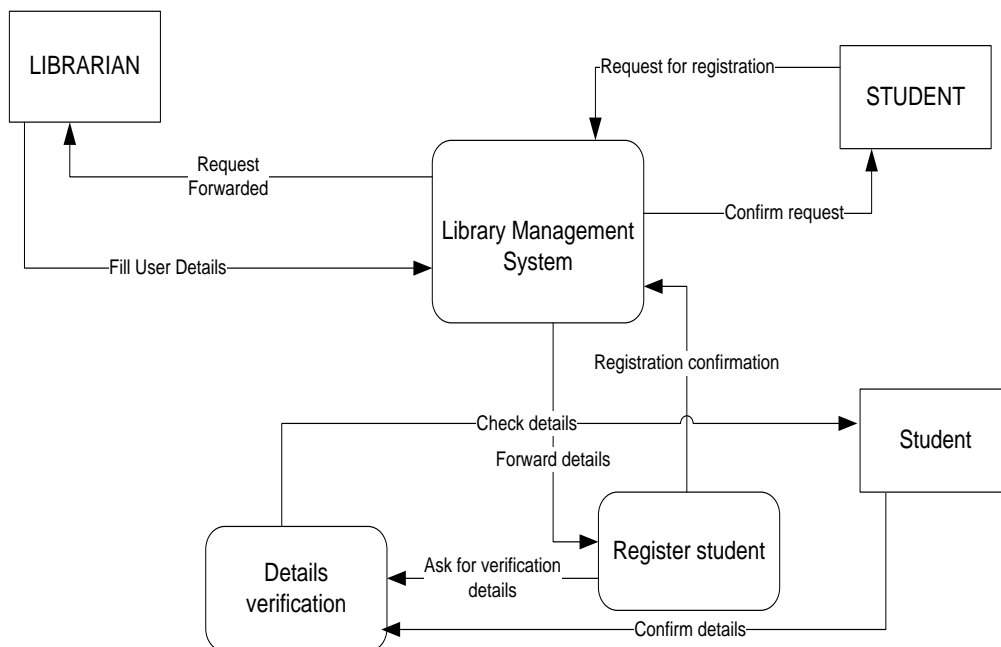


Figure 1.11 Physical DFD LMS

Chapter 4: Implementation and Testing

4.1. Implementation

The implementation phase involves the application of the design specifications done before. The implementation involves coding of the system designs if this project, systems testing and live running.

4.1.1. Tools Used

Front-end

HTML: It is the used for creating web pages. It is used to define the structure and content of a web page.

CSS: It is used to describe the presentation of a web page. It is used to control the look and feel of a web page, including the colors, fonts, and layout.

JavaScript: It is used to add interactivity to web pages. It is used to create dynamic web pages that can respond to user input and events.

jQuery: It is used to makes it easy to manipulate HTML elements and add interactivity to web pages.

Backend

PHP: It is used for PHP files can contain HTML, CSS, and JavaScript code, as well as server-side code that is executed on the web server.

MySQL: It is used to store and manage data for a web application.

Code Editor: Visual Studio Code

Browser: Google Chrome

Draw.io: It was used for designing the system designs such as system flowchart, ER diagram, architectural design, use case diagram and DFDs

4.1.2. Implementation Details of Modules

Administrator Module:

This is the main module in the proposed project. The administrator can read and write information about any students. The administrator can also update, create and delete the record of students as per requirement and implementation plans. Issuing of book and retrieving of book is done easier than before.

The following are the sub module in the administrator module.

Register student: Allow the administrator to register new student and update the student records.

Book management: Allow administrator to manage book details.

Book issue: Here administrator issues the books to the student from library.

Book retrieve: Here administrator retrieves the books from the student to library.

User Module

In this module student can check availability of the book from the system.

The following are the sub module in the user module.

- i. Student can search for book from his system if it is available or not.
- ii. Reminder for the user to return book.
- iii. The students can make requests to the librarian to book books for them
- iv. Students can manage to find out a particular book member from the database with the search option

4.2. Testing

4.2.1. Test Cases for Unit Testing

Table 1.3 Test case for Login

SN	Input user data	Expected output	Actual output	Pass/fail
TC 1	nirajan Nirajan@123	Login with access to admin dashboard.	Logged in and got access admin dashboard.	Pass
TC 2	nirajan 35555123	alert message "Coniform Password does not match"	alert message "Coniform Password does not match please try again"	Fail
TC 3	pcm pcm@123	Login with as user.	Logged in and but got no access to admin dashboard.	Pass

Table 1.4 Test Case for Sign up

S.N.	Input user data	Expected output	Actual Output	Pass/fail
TC 1	nirajan	User already registered.	User already registered.	fail
TC 3	iirajan 24444889	Password must be 8 character long, one character uppercase and digit.	Password must be 8 character long, one character uppercase and digit.	fail
TC 4	pcm@gmail.com Pcm@1234	Signup successful.	Signup successful.	pass

Table 1.5 Test case for request book

S.N	Input user data	Expected output	Actual output	Pass/fail
1.	Bid: 101	Book request Successfully	Book request Successfully	Pass
2.	Bid:202	Can not enter valid book id.	Can not enter valid book id.	Pass

Table 1.6 Test case for search book

S.N	Input user data	Expected output	Actual output	Pass/fail
TC 1	Bname: java	Book search Successfully	Book search Successfully	Pass
TC 3	Bname: Economic	Can not available enter valid book name.	Can not available enter valid book name.	Fail

Table 1.7 Test case for update profile

S.N.	Input user data	Expected output	Actual Output	Pass/fail
TC 1	Choose file	File must be jpg/png format.	File must be jpg/png	fail
TC 2	Choose file	Upload file successfully	Upload file successfully	pass
TC 3	nirajan@gmail.com 333998123	Password must be 8 character long, one character uppercase and digit.	Password must be 8 character long, one character uppercase and digit.	fail
TC 4	nirajan@gmail.com Bohara@123	Signup successful.	Signup successful.	pass

4.2.2. Test Cases for System Testing

SN	Input user data	Expected outcome	Actual outcome	Result
TC 1	Enter URL	Open the application homepage.	Application homepage opened.	pass
TC 2	nirajan@gmail.com Nirajan@123	Login with admin privileges.	Logged in and got access to admin privileges.	Pass
TC 3	nirajan@gmail.com Nirajan@123	Login with as user.	Logged in and but got no access to admin dashboard.	Pass
TC 4	nirajan@gmail.com 123456	alert message "Coniform Password does not match"	alert message "Coniform Password does not match please try again"	Fail
TC 5	Add book	Add new book.	New book was created.	Pass
TC 6	Delete book.	Delete the book.	Book was deleted.	Pass
TC 7	Update profile	Update details and password of logged in user.	The details and password of logged in user is updated.	Pass
TC 8	Password recovery	Verify that you get the password reset for an already registered email.	Login after resetting the password and see if you can successfully log in.	Pass

Table 1.8 Test case for system testing

Involves in-house testing of the entire system before delivery to the user. Its aim is to satisfy the user the system meets all requirements of the client's specifications.

Chapter 5 Conclusion and Future Recommendations

5.1. Lesson Learnt / Outcome

The complete the project, it was achieving the project goal. The library management system needs to be computerized to reduce human errors and to increase the efficiency. The proposed library management system in this proposal will be a computerized management system developed to maintain all the daily work of library. Library management systems are designed to store all the information about books and members. The main focus of this project is to lessen human effort and encourage efficient record keeping. Through we are making an offline version, if we able to make online version and also a student viewing section through creating account on this system.

5.2. Conclusion

Library Management System allows the user to store the book details and the students details. This application allows storing the details of all the data related to library. 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 and do book transactions. It also has a facility for student login where student can login and can see status of books issued.

This system has been developed in a way to make it very user friendly. Any person having a basic understanding of computer can run this system without any pain. The implementation of the system in the organization will considerably reduce data entry, time and also provide readily calculated reports. The problems, which existed in the earlier system, have been removed to a large extent. And it is expected that this project will go a long way in satisfying user's requirements. The computerization of the Library Management will not only improve the efficiency but will also reduce human stress thereby indirectly improving human recourses. This project is very useful in managing the record and other operation of library. Moreover, this project can be upgraded and changed according to the need of user.

5.3. Future Recommendations

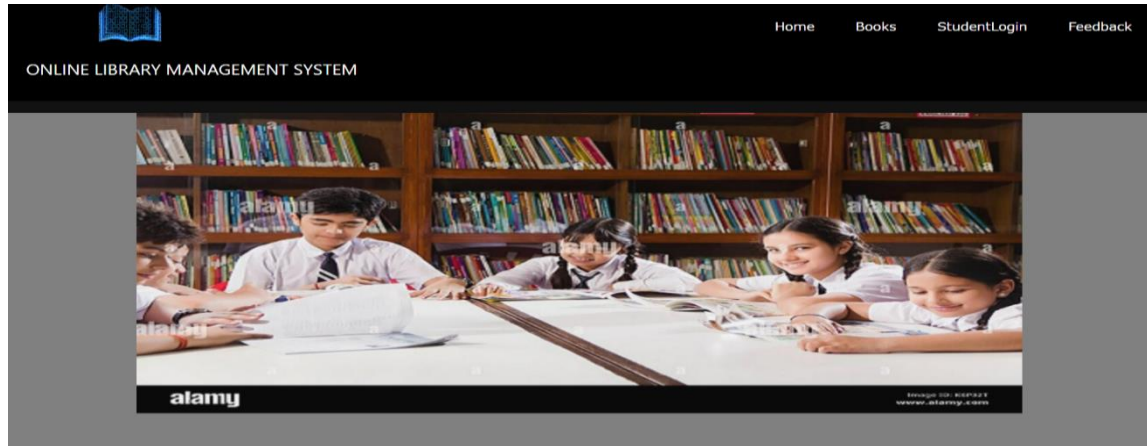
Our web-based application "**Library Management System**" which provides complete information about users like student and admin. we will add more content on them feature. There are some core features that are common to most LMSs, including:

- i. This system only performs as Library Management System and works well only in small organizations. However, the system make work in the bigger organization.
- ii. we will also provide more images in GUI related to our web-based application in future. we will try find out more about this topic and in future. we will try add feature of group chat.
- iii. Fine payment system can be added.

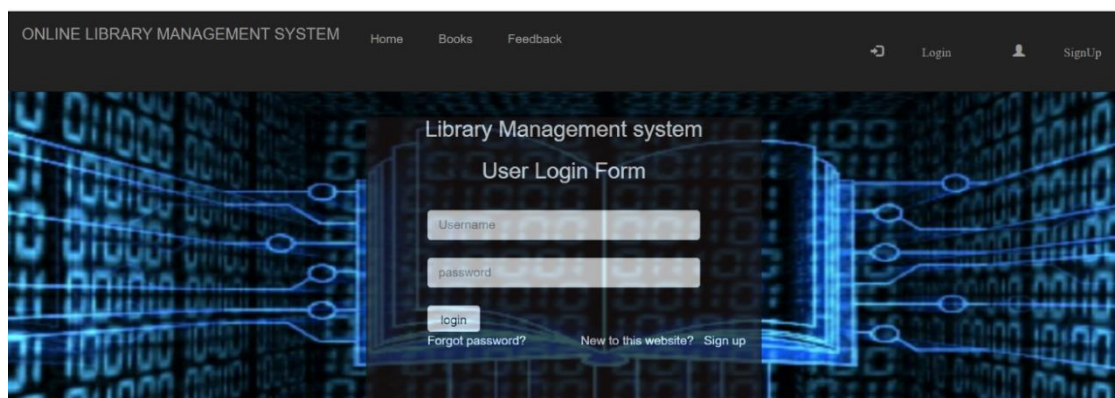
- iv. There is a feature scope of this facility that many more feature such as online lectures video tutorials can be added by teachers aa well as online assignments submission.
- v. The system implements make Barcode system.

Appendices

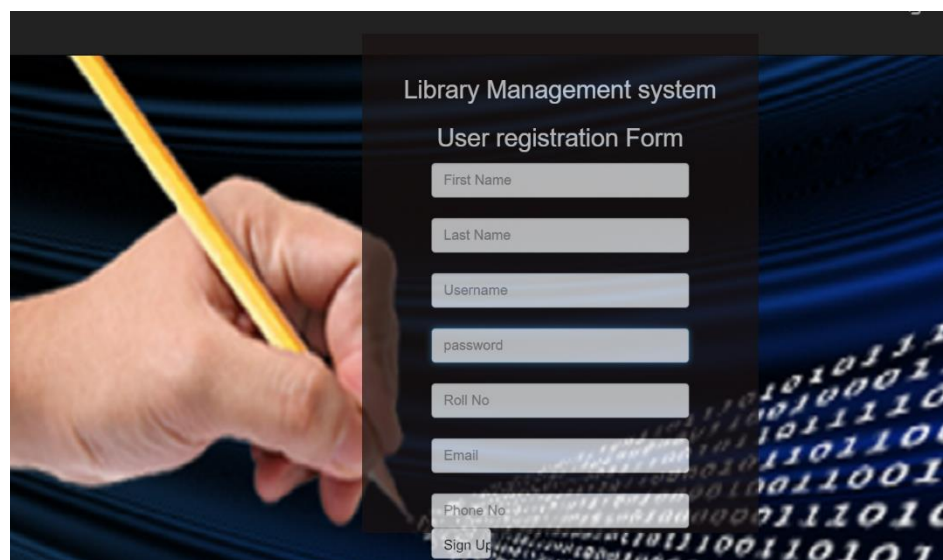
Screen Shots





Home page (library management system)



User login page (library management system)



Registration page (library management system)

ONLINE LIBRARY MANAGEMENT SYSTEM Home Books Feedback  nirajan  Logout Profile Student-Information

If you suggestions or questions please comments below.



Write something...

very good


good

YOU CAN TALLS FEEDBACK HERE

Feedback page (library management system)

ONLINE LIBRARY MANAGEMENT SYSTEM Home Books Feedback  nirajan  Logout Profile Student-Information

My profile



Welcome
nirajan

First name:	nirajan
Last name:	bohara
Username:	nirajan
Password:	nirajan
Email:	nirajanbohara66@gmail.com
Contact:	9847119089

User profile page (library management system)

Edit information

Welcome
nirajan

First Name:

Last Name:

Username

Password:

Email:

Phnone No:

User information edit page (library management system)

List of students

First_name	Last_name	Username	roll	Email	contact
dabal	bohara	dabal;	2	dab@gamil.com	98485093344
dabal	bohara	kamal;	2	dab@gamil.com	9888
hari	khanal	hari;	23	hari@gamil.com	984531874
nirajan	nirajan	nirajan	1	nirajanbohara@gmail.com	9847119089

Books list page (library management system)

≡ open

List of Books

ID	Book_name	Authers_Name	Edition	Status	Quantity	Department
101	DBMS	H R Dhamala	3rd	avaliabile	33	BCA
104	Digital logic	M. K, saud	3rd	avaliabile	345	BCA
103	English	G. k koirala	4th	avaliabile	346	BCA
103	English	G. k koirala	4th	avaliabile	346	BCA
102	Math	Dr Durgajung KC	3rd	avaliabile	455	BCA
105	Microprocessor	D j sharma	4th	avaliabile	32	BCA

Search and delete book page (library management system)

Add new Books

Book id

Book name

Authors name

Edition

Status

Quantity

Department

ADD

Add book page (library management system)

≡ open

Username

BID

Submit

Request of Book

There's no panding request.

Books request page (library management system)

≡ open

Information of Borrowed Books

Username	Roll No	BID	Book Name	Authors Name	Edition	Issue Date	Return Date
Total records updated: 1Total records updated: 1Total records updated: 1Total records updated: 1Total records updated: 1Total records updated: 1Total records updated: 1							
nirajan	1	3	NM	H R Dhamala	3rd	2022-03-04	2022-04-04
nirajan	1	101	DBMS	H R Dhamala	3rd	2022-03-04	2022-04-04
nirajan	1	102	Math	Dr Durgajung KC	3rd	2022-03-04	2022-04-04
nirajan	1	103	English	G. k koirala	4th	2022-03-04	2022-04-04
nirajan	1	104	Digital logic	M. K. saud	3rd	2022-03-04	2022-04-04

Issue information page (library management system)

≡ open

Username

BID

Submit

Username	Roll No	BID	Book Name	Authors Name	Edition	Status	Issue Date	Return Date
nirajan	1	105	Microprocessor	D j sharma	4th	Returned	2023-04-14	2023-11-29
nirajan	1	105	MIS and E-Business	Ram	4th	Returned	2023-04-14	2023-11-29
nirajan	1	108	scripting	Aakash	5th	Returned	2022-04-22	2024-04-05

Books returned page (library management system)

Source Codes

Sign Up Verification (Client Side)

```
<script>
function validateForm() {
    var firstName = document.forms["registration"]["first"].value;
    var lastName = document.forms["registration"]["last"].value;
    var username = document.forms["registration"]["username"].value;
    var password = document.forms["registration"]["password"].value;
    var rollNo = document.forms["registration"]["roll"].value;
    var email = document.forms["registration"]["email"].value;
    var contact = document.forms["registration"]["contact"].value;

    // Basic Form Field Presence Check
    if (firstName === "" || lastName === "" || username === "" || password === "" ||
rollNo === "" || email === "" || contact === "") {
        alert("All fields must be filled out");
        return false;
    }
    Validate email format
    var emailRegex = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;
    if (!emailRegex.test(email)) {
        alert("Please enter a valid email address");
        return false;
    }
    Validate password strength
    var passwordRegex = /^(?=.*[a-z])(?=.*[A-Z])(?=.*\d)(?=.*[!@#%$^&*()_+])[A-
Za-z\d!@#%$^&*()_+]{8,}$/;
    if (!passwordRegex.test(password)) {
        alert("Password must be at least 8 characters long and include at least one
uppercase letter, one lowercase letter, one digit, and one special character");
        return false;
    }
    Validate phone number
    var phoneRegex = /^(+\d{1,2})?\d{10}$/;
    if (!phoneRegex.test(contact)) {
        alert("Please enter a valid phone number");
        return false;
    }

    return true;
}
</script>
```

Add book (sever side)

```
<?php
if(isset($_POST['submit']))
{
    if($_SESSION['login_user'])
    {
        mysqli_query($db,"INSERT INTO books VALUE ('$_POST[bid]','$_POST[name]',
        '$_POST[authors]','$_POST[edition]','$_POST[status]','$_POST[quantity]',
        '$_POST[department]');");
    }
    ?>
```

Delete book

```
<?php
    if (isset($_POST['submit1']))
    {
        if(isset($_SESSION['login_user']))
        {
            mysqli_query($db,"DELETE FROM books WHERE bid='$_POST[bid]');");
            ?>
            <script>
                alert("Delete successfully");
            </script>
            <?php
            }
            else
            {
                ?>
                <script>
                    alert("please login first.");
                </script>
                <?php
            }
        }
    }
    ?>
```

Update user

```
<?php
if(isset($_POST['submit']))
{
    move_uploaded_file($_FILES['file']['tmp_name'], "images/" . $_FILES['file']
    ['name']);
    $first= $_POST['first'];
```



```

$last= $_POST['last'];
$username= $_POST['username'];
$password= $_POST['password'];
$email= $_POST['email'];
$contact=$_POST['contact'];
$pic=$_FILES['file'] ['name'];
$sql = "UPDATE admin SET pic='$pic',first='$first', last='$last', username='$username',
password='$password', email='$email', contact='$contact' WHERE username=" .
$_SESSION['login_user'] . """;
if(mysqli_query($db,$sql))
{
    ?>
    <script>
        alert("saved successfully....");
        window.location="profile.php";
    </script>
    <?php
}
}
?>

```

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