COLLEGE LIBRARY MANAGEMENT SYSTEM

High Level Design

**Document Control :**

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| **College Library Management System** | | | | | | | | |
| Guided by -Aliasger |  |  | |  |  |  |  |  |
| **Date** | **Version** | **Author** | **Brief Description of Changes** | | | | **Approver Signature** | |
| 26-10-2022 | 1.0 | Veena,Rohini,Harika  Revathi,Shyamala | To manage the books in the library | | | |  | |
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# Introduction

**1 Purpose:**

The purpose of College Library Management System is to manage and store the books information electronically according to student needs. The system helps both students and librarian to keep a track of all books available in library. It allows both the librarian and students to search for the desired book.

**1.1 Intended Audience:**

There is no such specific audience, it could be a librarian or student also.

**1.2 Acronyms/Abbreviations:**

|  |  |
| --- | --- |
| ISSUING | LIBRARY |
| LIBRARIAN | TO ESTABLISH CONNECTION BETWEEN  LIBRARY AND STUDENT |
| BORROWING | STUDENT |

**1.3 Project Purpose:**

The purpose of this project is implemented to issuing the books to the students and returning the books to the librarian through College Library Management System.

This system aims at providing the books for the students and issuing the books from the students also.

This allows the students and librarian to search for the wanted books in the library.

**1.4 Key Project Objectives:**

1. Allow students and librarian to login.

2. Allow librarian to add the books in to the library records.

3. Allow librarian to search for the books.

4. Allow librarian to delete the books from the records.

5. Allow students to borrow the books from the library.

6. Allow librarian to update the library records after giving the books.

7. Allow students to return the books to the library.

8. Allow librarian to update the library records.

**1.5 Project Scope and Limitation:**

Now the students can able to login and search for the books which they want, then borrow the books by informing and maintaining a track of books with the librarian, then after usage returning the books to the library.

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**1.5.1 In Scope:**

It provides general architecture for College Library Management System, This system consists of track of all the books in the library with the librarian and allows the students to borrow the books from the library. This is written C Linux Language.

The application is divided into two parts, librarian and student, the librarian in this project will add, search and delete the books from the library. Students are used to borrow the books from the library and return back to the library by using credentials. Librarian is allowed to add the books by using the credentials.

**1.6 Functional Overview**

The following functions are included in the program:

a. void menu\_librarian( );

menu\_librarian( ) function allows to the librarian to first login to the library.

And it allows the librarian to perform the specific operations. They are:

Add the Books

Display the books

Search the books

Delete the books

Maintain the details of students

b. void menu\_student();

menu\_student() function is used for students to login to the library

After successful login he or she will borrow the books from the library by providing the details to the librarian.

# 2 Design Overview:

Instant Chatters comprises of the following modules:

|  |  |
| --- | --- |
| Name of the Module | Librarian |
| Handled by | Veena, Harika |
| Description | Add the books  Search the books  Display the books  Delete the books  Librarian can give the report regarding the collection of books to the students. |

|  |  |
| --- | --- |
| Name of the Module | Student |
| Handled by | Rohini, Shyamala, Revathi |
| Description | Log in: Username, password details store in file.  After logging in successfully the students can search for the specific book and borrow the book from the library by providing the details to the librarian. |

**2.1 Design Objectives:**

College Library Management System between librarian and students, there are two objectives namely primary and secondary.

Primary:

The librarian will be allowed to add the books into the library records. The librarian is also having the access to search for the books and delete the books from the library records.

Secondary:

The Students who wanted to take the books from the library can be able to search for the books they want and borrow the books from the library and then after the usage the students are allowed to return the books to the library.

**2.2 Design Alternative:**

We have used librarian to add and delete, search the records of the books. The librarian can also provide the reports of books to the students.

Students can update the book details like Book ID, Book Name etc..

**2.2.1 User Interface Paradigms:**

The College Library Management System gives access to the librarian and students to login with a username and password. The details of the books are only stored as a single file.

Here, there will be no mediator. There will be direct contact between librarian and students to borrow or return books from or to the library.

**2.2.2 Error Detection / Exceptional Handling:**

The librarian must check whether the books are there or not before deleting from the records. The students also can borrow the books from the library whether the wanted book is present in the library only. The students cannot borrow the books which are not present in the library.

**2.2.3 Performance:**

The system will work on the librarian. The performance depends on the hardware component of the user’s system.

**2.2.4 Maintenance:**

Very little maintenance should be required for this setup. An initial configuration will be the only system required interaction after system is put together. The only other user maintenance would be any changes to settings after setup, and any specified special cases where user settings or history need to be changed.

Physical maintenance on the system’s parts may be required, and would result in temporary loss of data or Internet. Upgrades of hardware and software should have little effect on this project but may result in downtime.

**3.Environment Description:**

**3.1 Time Zone Support:** IST- Kolkata

**3.2 Language Support:** English

**3.3 User Desktop Requirements:**

a. 64-bit processor, 1 GHz or faster

b. At least 2 GB free hard drive space

c. At least 1 GB RAM

**3.4 Server-Side Requirements:**

a. 64-bit processor, 1 GHz or faster

b. At least 1 GB free hard drive space

c. At least 1GB RAM

**3.4.1 Deployment Considerations:**

System is easy to deploy.

**3.4.2 Integration Requirements:**

1. Language: C

2. Tools: Valgrind, Makefile ,Splint

3. Complier: gcc, vi editor

4. Linux

**3.4.3 Jobs:**

We can establish connections between librarian and students who are there in the College Library Management System.

**3.4.4 Network:** End to End

**3.5 Configuration:**

**3.5.1: Operating System**: Linux