**PROJECT PROPOSAL FOR**

**A LIBRARY MANAGEMENT SYSTEM**

**BY**

**Jaweria Alam**

**&**

**Minal hashim**

**BS(SE) SOFTWARE ENGINEERING**

LIBRARY MANAGEMENT SYSTEM

Library management System (LMS) provides a simple GUI (Graphical User Interface) for the Library Staff to manage the functions of the library effectively. The Library Management System is designed & developed for the receipt and Issuance of books in the library.

In a non-computerized Library management system, when a book is issued or returned, it is noted down in a register after which data entry is done to update the status of the books. This process takes some time and proper update of this information cannot be guaranteed. Anomalies in the update process can cause loss of books. So a more user friendly interface which could update the database instantly has a great demand in libraries, hence the need for this project.

PROPOSET SYSTEM

The project system is an automated Library management system that is used to maintain book record, Issue book, return book and all Necessary requirement for the library manage day-to-day operation.

This project will track how many books are available in the library and book issued to the student and user.

This application is reduced as much as possible to avoid error while entering the data.It leads to error-free, secure and fast management system

**Our proposal has following advantage:**

1. user-friendly interface.
2. fast access to the database.
3. Less error.
4. look and feel environment

System Description

**System Analysis:**

**Software Requirentments Specification:**

A software Requirentments specification (SRS) is a detailed description of a software system to be developed with its functional and non functional requirements.

**Functional Requirements:**

* **Log in**
* The system performs authorization process which decides what user level access to.
* The user must be able to logout after they finished using system.
* **New member Registration**
* System must be able to verify information
* System must be able to delete information if information is wrong
* **Register new Book**
* System must be able to not allow two books having some book id.
* System must be able to enter new book details.
* **Search Book**
* System must be able to search the database based on select search type.
* **Book Issue and Book Return**

* System must be able to enter issue information in database.
* System must be able to update book Details.
* System must be able to Search if Book is available or not before issuing books.
* System should be able to enter issue and Return date Information.

**Non functional requirements**

* The performance of the system should be fast and accurate.
* Library Management System shall handle expected and non-expected errors in ways that prevent loss in information and long downtime period Thus, it should have inbuilt error testing t identify invalid username and password.
* The System should be able to handle large amount of data. Thus, if should accommodate high number of books and members without any fault.

OBJECTIVE

the objective of this project is to develop a system that can handle and manage the activities involved in a library in an efficient and reliable way.

* develop a system that can replace the manual library managing system.
* develop a database which Store user detail and book detail. give reliable search facility for the user.
* Administrator all librarian should have login.
* create and easy to understand user friendly environment

SCOPE

* Online use of library can be goof feature of library management system
* We can make his application in to online library management system
* Advanced fine payment system can be added
* We do not have user interaction we can make this happen in future
* Inventory system can be used to maintain the books of library
* We can make this application as an android application which is very useful and helpful to use in future

Schema diagram:

###### Database name : Issue Table

|  |  |  |
| --- | --- | --- |
| Column name | type | constraint |

|  |  |  |
| --- | --- | --- |
| Account no | Integer | Foregin key |
| title | Varchar (50) | Not null |
| Fine | Integer | Default 0 |
| Member no | Integer | Foregin key |
| Return Data | data | Default 0 |
| Book issue | Varchar | Default issued |
| Book return | Varchar | Default Null |
| Book return by date | data | Default 0 |
| Issue data | data | Default 0 |

###### Database name : member Table

|  |  |  |
| --- | --- | --- |
| Column no | type | constraint |
| Memb­\_No | Integer (Autoincrement) | Primary key |
| Memb \_Name | Varchar (20) |  |
| Memb \_Add | Varchar (20) |  |
| Memb\_phone | Char |  |
| Join Data | Date | Default current Data |
| Expiry Date | Date | Default current Data +12 |
| Fee | Double (8,2) | Default 2000 |
| Status | Varchar (20) |  |
| Book issue | Varchar (20) |  |

###### Database name : publicher Table

|  |  |  |
| --- | --- | --- |
| Column no | type | constraint |
| Pub \_Id | integer | Primary key |
| Pub \_name | Varchar (30) |  |
| Pub \_ add | Varchar (30) |  |
| Pub \_ phone | Varchar (10) |  |
| Pub \_ status | Varchar (30) |  |

###### Database name : library Table

|  |  |  |
| --- | --- | --- |
| Column name | type | Size |
| Acc \_no | Integer (Autoincrement) | Primary key |
| Title | Varchar (30) | Not null |
| Author | Varchar (20) |  |
| Pub \_ id | integer | Foreign key ref publisher  (pub \_ id) |
| price |  |  |
| pages | Decimal |  |
| Purchase \_ Data | Integer |  |
| Edition | Varchar (20) |  |
| Status | Varchar (30) |  |

Draft ER Diagram

## *Z*

Book

Issue Return

Member

publish

Publisher