**LIBRARY MANAGEMENT SYSTEM WEB APP**

**PROJECT PERPOSAL**

**Project Background and Descriptions**

The library management system starts with entering & updating master records like books details, library information.

Any further transaction like book issue, book return will automatically update the current books. It will track on the how many books available in library and books issued to the students.

Purpose:

The purpose of this library management system is to provide a friendly environment to maintain the details of books and library members.

The main purpose of this library management system is to maintain easy circulation system using computers and to provide different reports.

Improved customer service though greater access to accurate information.

Greater accountability and transparency in operations.

**Project Scope:**

The document only covers the requirements specification for the Library Management System. This document does not provide any other information about Library Management System. This document does not provide any references to the other components of the Library Management System. All the dependencies are also identified in this document.

This Library Management System is basically updating the manual library system into a software based application so that the users can know the details of their account, availability of books etc.

User Requirements:

The software provides good graphical interface for the user any administrator can operate on the system, performing the required task as a create, update, viewing the details of the book.

Allows user to view quick reports like Book Issues/Returned etc. In between particular time.

Stock verification in different criteria or according to different categories.

Search facility based on different criteria in depth.

User Characteristics**:**

We have 2 levels of users

User Side: in user side, user will check the availability of the books.

Book Return

Administration Side: The following are the sub module in the administration side.

Register user

Entry book details

Book issue

Functional Requirements:

Book Entry: In this module we can store the details of the books.

Register Student: In this module we can keep the details of the new student.

Book Issue: This module is used to keep a track of book issue details.

Book Return: This module enables to keep a track of return the books.

Use Cases:

Add/Remove/Edit Book: To add, remove, or modify a book or book item.

Search catalogue: To search books by title, author, subject or publication date.

Register new account/cancel membership: To add a new member or cancel the membership of an existing member.

Check-out book: To borrow a book from the library.

Reserve Book: To reserve a book which is not currently available.

Renew a Book: To reborrow on already checked-out book.

Return a Book: To return a book to the library which was issued to a member.

Classes to be defined:

Library: The central part of the organization for which this software has been designed. It has attributes like “Name” to distinguish it from any other libraries and “address” to describe its location.

Books: The basic building block of the system. Every book will have ISBN, Title, Subject, Publisher, etc.

Book Item: Any book can have multiple copies, each copy will be considered a book item in our system. Each book item will have a unique barcode.

Account: We will have two types of accounts in the system, one will be a general member, and the other will be a librarian.

Library Card: Each library user will be issued a library card, which will be used to identify users while issuing or returning books.

Book Reservation: Responsible for managing reservations against book items.

Book Lending: Manage the checking-out of book items.

Catalog: Catalogs contain list of books sorted on certain criteria. Out system will support searching through four catalogs: Title, Author, Subject, and Publish-date.

Fine: This class will be responsible for calculating and collecting fines from library members.

Author: This class will encapsulate a book author.

**Deliverables:**

In this First I install the visual studio code and XAMP Server. After Installation First I work on the visual studio code form with the help of html, CSS, JavaScript as a front end and PHP, MYSQL as a backend. Then I make database in the XAMP Server in MYSQL. Then I connect my visual studio with the database with the help of connection string. I perform coding according to needs which I explain the SRS (Software Requirement Specification) Document. And at the last I test all the module separately which I made in my project. Then I will text my whole system. After Test my system is ready to use by the organization or company.

**Implementation Plan:**

User Interface:

Library Management System is used by librarian and admin so it just simple design in the web. The interface is user friendly and easy to use. This can be providing when user can know what the button’s function is when he/she looks at the button j. It is because the button’s text is clear and easy to understand. For example, when we wanted to delete a record, we use “Delete” as a button’s text and not “Destroy” or “Eliminate”.

Library Management System (application used by librarian)

1. Login Page

First of all I make the first page with the help of html in visual studio code. The first page is login page for both librarian and the admin. The form is designed colorful interface because it is used by librarian and admin. Then we make the page which I called the register page for the admin and the librarian. First the admin and librarian must be register and store the data in the database MYSQL. The login interface is simply design with ID and password textbox.

2. Main Page

Then I make the second page which I called main page. Here I take the form where book transaction module is made.

3. Book Maintenance Form

Then I will made the maintained form. In it I will show all books in library when the form is loaded.

4. Member Maintenance Form

This is the form of member maintenance. It is almost similar to book maintain form.

5. Publisher Maintenance Form

6. Lost Book Module Form

7. Book Transaction Form

Admin Level Users

1. Employee Management Form

2. Book Transaction Report (Rent/Return)

3. Top 10 Book Report

4. Lost Book Report

5. Activity Log Report

6. Library Detail Form

**High Level Timelines/Schedule**

The time require to complete the project is 8-months. But I will try to complete the project as soon as possible because time is require to design, develop and text. I will try to complete the project with maximum functionality and try to cover the basic security groups on my project.