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**Library Management System**

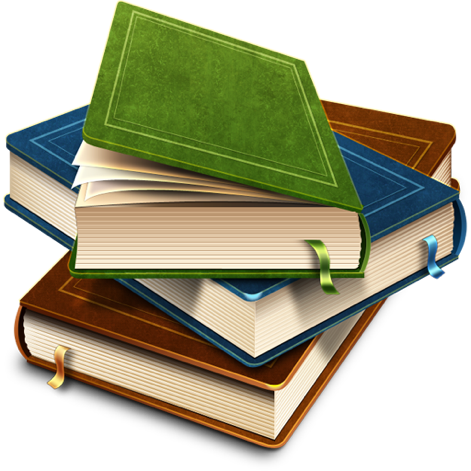


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# Executive Summary

The modern business world has been irreversible shaped by technology, and for good reason. Many long-standing problems in schools', colleges and universities can be solved with right software or application. It's not enough to simply use pre-existing solutions. LMS is built on latest technologies and standards, and based on school and colleges. It is user friendly and incredibly easy to use and as simple as you want. 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 or late fine charges, etc. You can find books in an instant, issue/reissue books quickly, and manage all the data efficiently and orderly using this system. The purpose of a library management system is to provide instant and accurate data regarding any type of book, thereby saving a lot of time and effort. The library software is user-friendly, intuitive, and easy-to- use. Provides greater efficiency of work processes & saves time of librarian. It offers 24\*7 access to library resources. Faster scanning and identification of book details. Automation of data collection minimizes human errors.

New features can be added as per requirement.

## Create (Front module of LBMS within a week)

After a thorough but efficient preparation period, our team will create the first module of the LBMS within a week. We will build this with a focus on the records of the number of books in the library, to provide instant and accurate data regarding any type of book, students able to pre-hold book of what they want.

## Develop

Through clear communication and regular meetings with your planning team, we will develop 24\*7 Labrian active facilities, QR code for scanning book for record and renew the book.

## Final

We will achieve all the goals that we have promised to you. We mentioned above what types of modules have been made and we upgrade the tools as per the requirement. As a result, our team members will complete this project in time what we have promised.

# Objectives:

The main objective of the Library Management System is to manage the details of

Address of student

Issues dates of books

Books return date

Student details

It manages all the information about Address, Librarian and Student. The project is totally built at administrative end and thus only the administrator is guaranteed the access.

# Scope:

The Library Management System is an application for assisting a librarian in managing a book library in a school, colleges and university. The system would provide basic set of features to add/update members, add/update books, and manage check in specifications for the systems based on the client’s statement of need.

# Features:

**Catalogue management:**

To digitally keep track of what is available in the library. The books wil be catalogued by title, subject, author and date of publishing.

**Membership management:**

To maintain a detailed database of the members. The system records the name, ID and password of each user. The system helps in ascertaining the track record of the member.

**Circulation management:**

track the movement of books. The location of any book at any point of time can be tracked. Misplaced or missing books can be traced with ease. The details on books to be returned and that which are overdue for return are provided on a daily basis.

**Acquisition management:**

To acquire new books and add them digitally. Irrelevant and

outdated books are deleted.

**Search function:**

To enable both the librarian and the members to search the catalogue of books in the library. The search functions can be filtered to the need of each user.

**Self-management:**

To check in and check out books by oneself. The library management system software of digital libraries allows the members to login, search, select, issue and return books by themselves.

# TOOLS AND TECHNOLOGY USED TOOL:

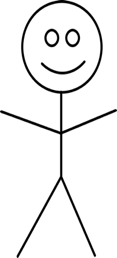
* Visual Studio Code: Microsoft Visual Studio is a powerful IDE that ensures quality code throughout the entire application lifecycle, from design to deployment. Whether you’re developing applications for SharePoint, the web, Windows, Windows Phone, and beyond, Visual Studio is your ultimate all-in-one solution.
* Dev C++: Dev-C++ is a full-featured IDE for Win32. It uses GCC, Mingw or Cygwin as compiler and libraries set.

**Technology:**

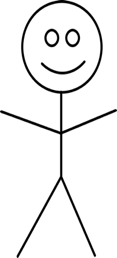
* C ++ Programming: - C++ is a general-purpose programming language that was developed as an enhancement of the C++ language to include object-oriented paradigm. It is an imperative and a compiled language. C++ is a middle-level language rendering it the advantage of programming low-level and even higher-level applications (games, GUI, desktop apps etc.). The basic syntax and code structure of both C and C++ are the same.

# Software Development Life Cycle:

As we know, Software Development Life Cycle (SDLC) is a systematic process for building software that ensures the quality and correctness of the software built; we have listed out some of the main project and explained below: -



**Librarian**



**Student**

WATERFALL MODEL

The waterfall model is a classical model used in system development life cycle to create a system with linear and sequential approach. It is termed as waterfall because the model develops systematically from one phase to another in a downward fashion. This model is divided into different phase and the output of one phase is used as the input of the next phase starts and there is no overlapping of the phase.

The sequential phases described in the Waterfall model are:

