

## **INTRODUCTION**

The "Library Management System" has been developed to override the problems prevailing in the practicing manual system. This software is supported to eliminate and, in some cases, reduce the hardships faced by this existing system. Moreover, this system is designed for the particular need of the company to carry out operations in a smooth and effective manner.

The application is reduced as much as possible to avoid errors while entering the data. It also provides error message while entering invalid data. No formal knowledge is needed for the user to use this system. Thus, by this all it proves it is user-friendly. Library Management System, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus, it will help organization in better utilization of resources.

Every organization, whether big or small, has challenges to overcome and managing the information of Books, Student, Librarian, Address, Member. Every Library Management System has different Student needs; therefore, we design exclusive employee management systems that are adapted to your managerial requirements. This is designed to assist in strategic planning, and will help you ensure that your organization is equipped with the right level of information and details for your future goals. Also, for those busy executive who are always on the go, our systems come with remote access features, which will allow you to manage your workforce anytime, at all times.

The Application includes:

- Login Form
- Admin Page
- Student Information
- Book Information
- Issuing Books
- Borrowing Books

These systems will ultimately allow you to better manage resources.

# **OBJECTIVES**

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The main objective of the Project on Library Management System is to manage the details of Student, Books, Issues, Librarian, Member. It manages all the information about Student, Address of Member as well as Student. The project is totally built at administrative end and thus only the administrator is guaranteed the access. The purpose of the project is to build a web-based application program to reduce the manual work for managing the Student, Books, Address, Issues. It tracks all the details about the Issues, Librarian, Member, etc.

- 1.** The objectives of a library management system is to operate a library with efficiency and at reduced costs. The system being entirely automated streamlines all the tasks involved in operations of the library.
- 2.** The activities of book purchasing, cataloging, indexing, circulation recording and stock checking are done by the software. Such software eliminates the need for repetitive manual work and minimizes the chances of errors.
- 3.** The library management system software helps in reducing operational costs. Managing a library manually is labor intensive and an immense amount of paperwork is involved. An automated system reduces the need for manpower and stationery. This leads to lower operational costs.
- 4.** The system saves time for both the user and the librarian. With just a click the user can search for the books available in the library. The librarian can answer queries with ease regarding the availability of books.
- 5.** Adding, removing or editing the database is a simple process. Adding new members or cancelling existing memberships can be done with ease.

- 6.** Stock checking and verification of books in the library can be done within a few hours. The automated system saves a considerable amount of time as opposed to the manual system.
- 7.** The library management system software makes the library a smart one by organizing the books systematically by author, title and subject. This enables users to search for books quickly and effortlessly.
- 8.** Students need access to authentic information. An advanced organized library is an integral part of any educational institution.
- 9.** In this digital age a web-based library management system would be ideal for students who can access the library's database on their smartphones.
- 10.** The main objective of the Project of Library Management System is to manage the details of users as well as books.
- 11.** It also manages all the information about Student, Address of Member as well as Student.

**PRELIMINARY**

**SYSTEM**

**ANALYSIS**

### **Preliminary Investigation:**

The first step in the System Development Life Cycle (SDLC) is the identification of the need. This is the user request to change, improve or enhance an existing system. Because there is likely to be a stream of such requests, standard procedures must be established to deal with them. The initial investigation is one way of this solutions.

In this process, the development team visit the customer and studies their system. They investigate the need for possible software automation of the given system by the end of the preliminary investigation. Our project furnish the document that hold the different recommendation of the needs of the user.

### **Present System In Use:**

Present system comprises all the information related to books such as book name, author and edition. Current system also contains information about the students and books. It contains registration option to users. Without registration nobody can use this system.

### **Flaws In Present System:**

Present system has various limitations. Present System is difficult to use. User interface not shown properly. Fast report generations is not possible. Tracing a book is difficult. Security issues occurring sometimes. Information about issue or return of the book books are not properly maintained.

### **Need For New System:**

A current system is not compatible because the current system is a bit complicated to use. The new system is designed to be easy for the user to use. Admin can get all the information about books and students according to the new system. The new system includes student's mobile number, issuing and borrowing date of the books, fine if the student does not return the book within the given period, etc. The aim of new system is to develop a system of improved facilities. The new system can overcome all the limitations of the existing system.

# Feasibility Study

## **Feasibility Study**

Feasibility study of a system means whether the system is practically possible to build or not. It also evaluates the benefits of the new system. A feasibility study is an analysis of how successfully a project can be completed, according to factors that affect it such as Economical, behavioral, Technical and Operational. Project Manager use feasibility studies to determine potential positive and negative outcomes of the project before investing a consideration of amount of time and money into it.

The software that has to be developed is analyzed in details and the system which is to be developed in technically, operationally and economically feasible or not is taken care of. The feasibility study means not to solve the problems completely but also to acquire the scope and work ability of the problem by giving various solutions to give problem and picking up one of the best solutions.

- **Technical Feasibility:**

Technical Feasibility one of the studies that must be conducted after a project has been identified. Technical Feasibility means to solve the problems related to hardware and software. It refers to the technical resources needed to develop the new application. The analyst must find out whether current technologies are sufficient for proposed system. In “Library Management System” web-based application is developed in Microsoft Visual Studio Code, which can be easily run on any system with the required configuration.

- **Behavioral Feasibility:**

It is natural observation that people are resistant to change and computers have known to facilitate change. When the user system has been developed or when a step is taken to convert a manual system to the computerized system, it is a significant factor to know the reaction of the user staff as they are once who will judge the working of the