**Library Management System**

**Problem Description:**

A library management system is software that is designed to manage all the functions of a library. It helps librarians maintain the database of new books and the books that are borrowed by members along with their due dates. The components of library management system are book database, transaction database, user and the stuffs.

The basic purpose of using a library management system is to reduce the amount of human work involved. Automating various library operations makes the entire library process seamless for the librarians. It reduces the risk of paper work such as file lost, file damaged and time consuming.

**Problem Statement:**

The problems known before having computerized system and databases:

* Difficult to search records – In case of manual systems there is always a difficulty in searching of records if the records are large in number.
* Inconsistency – The existing system involves a lot of paper work and manual calculation. This has led to inconsistency and inaccuracy in the maintenance of data.
* Lack of security – Managing records by hand is prone to error and have no layer of security. The data, which is stored on the paper only, may be lost, stolen or destroyed due to natural calamity like fire and water
* Space consuming – With increasing number of records multiple notes would have been required which is definitely space consuming and difficult to maintain.

**System objectives:**

The project vision is to come up with a library management system database application that does the jobs of the librarian like maintaining book records, maintaining user records, due dates, fines, etc. efficiently and in a quick time without errors.

* Improvement in control and performance - The system is developed to cope up with the current issues and problems of library. The system can add user, validate user and is also bug free.
* Save cost - After computerized system is implemented less human force will be required to maintain the library thus reducing the overall cost.
* Save time - Librarian is able to search record by using few clicks of mouse and few search keywords thus saving his valuable time.