**INTRODUCTION**

The project titled Library Management System is Library management software for monitoring and controlling the transactions in a library .The project “**Library Management System”** is developed in java, which mainly focuses on basic operations in a library like adding new member, new books, and updating new information, searching books and members and facility to borrow and return books.

“Library Management System” is a windows application written for 32-bit Windows operating systems, designed to help users maintain and organize library. Our software is easy to use for both beginners and advanced users. It features a familiar and well thought-out, an attractive user interface, combined with strong searching Insertion and reporting capabilities. The report generation facility of library system helps to get a good idea of which are the books borrowed by the members, makes users possible to generate reports’ hard copy.

The software Library Management System has four main modules.

* Insertion to Database Module – User friendly input screen
* Extracting from Database module – Attractive Output Screen
* Report Generation module – borrowed book list & Available book list
* Search Facility system – search for books and members

**SYSTEM ANALYSIS**

**EXISTING SYSTEM:**

System Analysis is a detailed study of the various operations performed by a system and their relationships within and outside of the system. Here the key question is- what all problems exist in the present system? What must be done to solve the problem? Analysis begins when a user or manager begins a study of the program using existing system.

During analysis, data collected on the various files, decision points and transactions handled by the present system. The commonly used tools in the system are Data Flow Diagram, interviews, etc. Training, experience and common sense are required for collection of relevant information needed to develop the system. The success of the system depends largely on how clearly the problem is defined, thoroughly investigated and properly carried out through the choice of solution. A good analysis model should provide not only the mechanisms of problem understanding but also the frame work of the solution. Thus it should be studied thoroughly by collecting data about the system. Then the proposed system should be analyzed thoroughly in accordance with the needs.

System analysis can be categorized into four parts.

* System planning and initial investigation
* Information Gathering
* Applying analysis tools for structured analysis
* Feasibility study
* Cost/ Benefit analysis.

In our existing system all the transaction of books are done manually, So taking more time for a transaction like borrowing a book or returning a book and also for searching of members and books. Another major disadvantage is that to preparing the list of books borrowed and the available books in the library will take more time, currently it is doing as a one day process for verifying all records. So after conducting the feasibility study we decided to make the manual Library management system to be computerized.

***PROPOSED SYSTEM***

Proposed system is an automated Library Management System. Through our software user can add members, add books, search members, search books, update information, edit information, borrow and return books in quick time. Our proposed system has the following advantages.

* User friendly interface
* Fast access to database
* Less error
* More Storage Capacity
* Search facility
* Look and Feel Environment
* Quick transaction

All the manual difficulties in managing the Library have been rectified by implementing computerization.

**FEASIBILITY ANALYSIS**

Whatever we think need not be feasible .It is wise to think about the feasibility of any problem we undertake. Feasibility is the study of impact, which happens in the organization by the development of a system. The impact can be either positive or negative. When the positives nominate the negatives, then the system is considered feasible. Here the feasibility study can be performed in two ways such as technical feasibility and Economical Feasibility.

**Technical Feasibility:**

We can strongly says that it is technically feasible, since there will not be much difficulty in getting required resources for the development and maintaining the system as well. All the resources needed for the development of the software as well as the maintenance of the same is available in the organization here we are utilizing the resources which are available already.

**Economical Feasibility**

Development of this application is highly economically feasible .The organization needed not spend much m one for the development of t he system already available. The only thing is to be done is making an environment for the development with an effective supervision. I f we are doing so , we can attain the maximum usability of the corresponding resources .Even after the development , the organization will not be in a condition to invest more in t he organization .There fore , the system is economically feasible.

**HARDWARE CONFIGURATION**

**Processor : Pentium III 630MHz**

**RAM : 128 MB**

**Hard Disk : 20GB**

**Monitor : 15” Color monitor**

**Key Board : 122 Keys**

**SOFTWARE CONFIGURATION**

Operating System : Windows NT,

Windows 98,

Windows XP.

Language : Java 2 Runtime Environment

Database : MS Access2007.