

## **EXP NO: 2B NON-FUNCTIONAL REQUIREMENTS FOR LIBRARY MANAGEMENT SYSTEM**

### **AIM:**

To perform analysis of the given problem statement for listing the non-functional requirements

### **PROBLEM STATEMENT:**

#### **LIBRARY INFORMATION SYSTEM:**

As the size and capacity of the institute is increasing with the time, it has been proposed to develop a Library Information System (LIS) for the benefit of students and employees of the institute. LIS will enable the members to borrow a book (or return it) with ease while sitting at his desk/chamber. The system also enables a member to extend the date of his borrowing if no other booking for that particular book has been made. For the library staff, this system aids them to easily handle day-to-day book transactions. The librarian, who has administrative privileges and complete control over the system, can enter a new record into the system when a new book has been purchased, or remove a record in case any book is taken off the shelf. Any non-member is free to use this system to browse/search books online. However, issuing or returning books is restricted to valid users (members) of LIS only. The final deliverable would be a web application (using the recent HTML 5), which should run only within the institute LAN. Although this reduces security risk of the software to a large extent, care should be taken no confidential information (eg., passwords) is stored in plain text.

### **NON-FUNCTIONAL REQUIREMENTS:**

#### **EFFICIENCY REQUIREMENT:**

When a library management system will be implemented librarian and user will easily access library as searching and book transaction will be very faster

#### **PERFORMANCE REQUIREMENT:**

The performance of the system should be fast and accurate and the system should be able to handle large amount of data. Thus it should accommodate high number of books and users without any fault.

#### **RELIABILITY REQUIREMENT:**

The system should accurately perform member registration, member validation, report generation, book transaction and search.

#### **USABILITY REQUIREMENT:**

The system is designed for a user friendly environment so that student and staff of library can perform the various tasks easily and in an effective way.

#### **SAFETY REQUIREMENT:**

The database may get crashed at any certain time due to virus or operating system failure. Therefore, it is required to take the database backup so that the database is not lost. Proper UPS/inverter

facility should be there in case of power supply failure.

### **IMPLEMENTATION**

In implementing whole system it uses html in front end with php as server side scripting language which will be used for database connectivity and the backend i.e. the database part is developed using SQL.

### **DELIVERY:**

The whole system is expected to be delivered in six months of time with a weekly evaluation by the project guide.

### **SECURITY REQUIREMENT:**

System should use secured database, normal users can just read information but they cannot edit or modify anything except their personal and some other information. Proper user authentication should be provided

### **RESULT:**

The given problem statement is analyzed and various functional requirements are listed.