

AIM : Perform requirement analysis and develop Software Requirement Specification Sheet (SRS) for **Library Management System**.

Software Requirement Specification

1. INTRODUCTION

Library Management System is a comprehensive library management solution that is suitable for both large and small libraries. Its flexible design enables Library Management System to be installed in a range of Library organizations, ranging from public libraries, through to academic, joint use and special libraries. This Library Management System Software is capable of handling Books with equal ease and efficiency. This is a Windows-based Library Management System, utilizing the latest advancements in the Information Technology to provide and improve Library Services.

1.1 Purpose

The purpose of this project is to develop an application that will automate the whole procedure of a library. The software that would be developed should have facilities like Add / Delete Members, Add / Delete Books, Issue & Return. The application should be secured, as well as with limited access. The main requirement of the project will be the ease of use, besides being the most efficient and effective tool for the purpose. The application should be user friendly. It should be robust and scalable. An automated solution would be very beneficial to the organization, as it would bring structure to the whole process so that it can be traced for any kind of query. Also, an automated solution will lead to optimal utilization of the available resources, reducing duplication of effort, increasing efficiency and minimizing time-delays. Following are the main purpose of computerization:

- To provide services to all the employees for issue, return & search etc. at oneplace.
- To improve co-ordination in staff.
- To reduce paper filling work.
- To reduce risk of fraud.
- To reduce chances of information leaking.

1.2 Scope

For Members: -

- Facility for search of Books based on Access Number, Title, Author, Subject, Keyword.
- Facility for ISSUE / RETURN Books.
- Facility for RENEWAL of Books.

For Library Staff: -

- Automatic installation.
- Simple and intuitive GUI for performing all functions.
- Short-cut keys and point-and-click operation.
- Security features like access control using passwords and login-i.d.
- Automatic calculation of late-fee.
- Facility to ADD / DELETE Members, Library Staff & Books and Maintain an easy record of all these.

1.3 Acronyms used

LMS - Library Management System

UI - User Interface

DBMS - Database Management System

1.4 Overview

The rest of the document deals with all the main features of this software. It not only describes various functions but also gives details about how these functions are related to each other. Apart from the data flow diagrams, the document also contains cost estimates for developing this system. Various risks associated with the system have also been mentioned along with the ways to mitigate them.

The timeline chart describing how the entire project was scheduled has been attached. At the end a pseudo code for the customer management module” has been provided. A flow graph has been generated corresponding to this module and test cases that were used to test the system have also been mentioned.

2. System Specification

2.1 Hardware Specification

- 1) Intel p4 processor with minimum 2GHz speed
- 2) RAM minimum 1GB
- 3) Hard Disk : Min 20 GB

2.2 Software Specification

- 1) Visual Studio 2010
- 2) DB Server : SQL SERVER 2008
- 3) OS : Window Vista/XP/7