**Introduction**

**Chapter 1**

**-1.1 Purpose**

The purpose of this document is to familiarize reader with software. Specification describes all hardware and software requirements for product, behaviour of it and its components. Software Requirements Specification (SRS) allows to verify the customer that all his requirements are observed and implemented correctly by developer.

The intended audience for the SRS reading consists of system end-users (patrons), customer, engineers, software developers.

1.2 Scope

The software will reflect all the requirements defined by the customer. College Library

Management System will allow to perform all necessary procedures for librarians and patrons.

According to customer requirements the software to be developed will consist of three

databases:

•Item’s database (books, journals, magazines, newspapers, diploma thesis, etc)

•Patron’s database

•a small Access-based database with information about digital items, that College has

(software, music) integrated with Item’s database

LMS will also provide all necessary services for databases such as creating, deleting, updating

and searching information. Patrons will be able to access to the library site (web-based)

through the Internet, scattered throughout the library for sending request, receiving

information about current status of the books or renewing them. User interfaces will be

ergonomical and easy-to-use

1.2 Scope

The software will reflect all the requirements defined by the customer. College Library

Management System will allow to perform all necessary procedures for librarians and patrons.

According to customer requirements the software to be developed will consist of three

databases:

•Item’s database (books, journals, magazines, newspapers, diploma thesis, etc)

•Patron’s database

•a small Access-based database with information about digital items, that College has

(software, music) integrated with Item’s database

LMS will also provide all necessary services for databases such as creating, deleting, updating

and searching information. Patrons will be able to access to the library site (web-based)

through the Internet, scattered throughout the library for sending request, receiving

information about current status of the books or renewing them. User interfaces will be

ergonomical and easy-to-use

**-1.2 Scope**

The software will reflect all the requirements defined by the customer. College Library Management System(LMS) will allow to perform all necessary procedures for librarians and patrons.

According to customer requirements the software to be developed will consist of three databases:

•Item’s database (books, journals, magazines, newspapers, diploma thesis, etc)

•Patron’s database

•a small Access-based database with information about digital items, that College has

(software, music) integrated with item’s database.

Library Management System will also provide all necessary services for databases such as creating, deleting, updating and searching information. Users will be able to access to the library site which will be (web-based) through the internet , scattered throughout the library for sending request, receiving information about current status of the books or renewing them. User interfaces will be easy-to-use.

Chapter 2

Overall Description

2.1 Product Perspective

LMS is a replacement for the ordinary library management systems which depend on paper

work for recording book and users’ information.

LMS will provide an advanced book search mechanism and will make it easy to borrow, insert

and index a book in the library

**Chapter 2**

**Overall Description**

**-2.1 Product Perspective**

LMS is a replacement for the ordinary library management systems which depend on paper work for recording book and users’ information.

LMS will provide an advanced book search mechanism and will make it easy to borrow, insert and index a book in the library.

2.2.1

Administrator

•Admin should be able to insert, modify and delete books.

•Can accept or reject a new user according to the library policy or payment methods.

•Increase the period for borrowing a book for specific type or group of users.

•Can get the information (status report) of any member who has borrowed a book.

•Add and edit book categories and arrange books by categories.

•Add and edit authors and publishers information.

•Can send lateness warnings to people who have exceeded deadline date.

•Can record books returned by users

**PRODUCT FUNCTIONS**

**-2.2.1**

**Administrator**

1. Administrator can make changes in the LMS and add new book which is issued to the library in the LMS so students can check which new issued books are there in the library.
2. Administrator can go through the list of all the available books in the library and view them in one single go which makes it easier and reduces the time taken to check availability physically.
3. Administrator can remove the books when it’s not available in the library and can also remove a student from the list when he/she leaves the school.
4. LMS makes it easier for the administrator to issue books to students without any hassle as it can be done in few seconds and without requirement of any physical copy.
5. Administrator can keep track of all the books which are issued and which are not.
6. 2.2.2
7. Users(Library Members)
8. •The member should be provided with the updated information about the books catalog.
9. •Members are given a provision to check their account’s information and change it.
10. •Members have the ability to search through books by subject, title, authors or any
11. information related to the book.
12. •Can extend the period of borrowing books according to the library policy.
13. •The customer may suggest a book to be brought to the library book collectio

2.2.2

Users(Library Members)

•The member should be provided with the updated information about the books catalog.

•Members are given a provision to check their account’s information and change it.

•Members have the ability to search through books by subject, title, authors or any

information related to the book.

•Can extend the period of borrowing books according to the library policy.

•The customer may suggest a book to be brought to the library book collectio

**-2.2.2**

**Students (Library Members)**

1. A student can go through his profile any time and keep track of the books issued and when does he/she needs to submit them back to library.
2. Given the option to make changes to their profile can add image and see the books there in the library.
3. If a student forgets his password one can change or reset it by clicking on forget password and receiving mail on the login email id.

2.3 User Classes and Characteristics

We have 2 levels of users

•User module: In the user module, user will check the availability of the books.

–Book return

•Administration module: The following are the sub module in the administration module.

–Register user

–Entry book details

–Book issue

**-2.3 User Classes and Characteristics**

We have 2 levels of users

•User module: In the user module, user will check the availability of the books.

–Book return

•Administration module: The following are the sub module in the admin module.

–Register user

–Entry book details

–Book issue

**-2.4 Assumptions and Dependencies**

The success of this system depends on

•Existence of an Internet service to all people (students and admins).

•If the librarians and users comfortable with computers and have enough ability to work with

the product?

•Website interface must be friendly and easy-to-use so it can be used by them easily.

•The search mechanism should be simple and fast.

**Chapter 3**

**Functional Requirements**

**-3.1 Scope of the work**

There are several motivations to order new computer-based College LMS:

•To modernize College Library database, where data was stored in a card-based catalog.

•To optimize librarians’ work and time.

•To join small Access-based database, where library has stored information about digital

items (software, music).

•To expand services of library and users possibilities.

•To check ability of commercial using of library management systems(LMS).

**-3.2 Scope of the product**

Features provided by the library management system:

•Store necessary information about items in the library:

* Author
* Item’s Name
* Call number
* Year of publication
* Number of copies available

•System will provide librarian to add, modify, and remove items to/from the library

database, and check availability of the item.

•System will allow patron to get information about his/her status after authorization

procedures:

* Student Name
* Roll Number
* Branch
* Phone number
* Image

3.3 Functional requirements

Functional requirements are the following:

•The LMS should store all information about librarians and patrons, their access keys,

priority and etc.

•The LMS allow searching items by author, title or keywords

•The LMS should support 500 patrons and 1000 requests/min simultaneously.

•The LMS should allow librarians to add, delete and modify items in database, and check

availability of the items.

**-3.3 Functional requirements**

Functional requirements are the following:

•The LMS should store all information about librarians and patrons, their access keys,

priority and etc.

•The LMS allow searching items by author, title or keywords

•The LMS should support 500 patrons and 1000 requests/min simultaneously.

•The LMS should allow librarians to add, delete and modify items in database, and check availability of the items.

**Chapter 4**

**Non-functional Requirements**

**-4.1 Performance Requirements**

•The system shall accommodate high number of books and users without any fault.

•Responses to view information shall take no longer than 5 seconds to appear on the screen.

4.2 Safety Requirements

•System use shall not cause any harm to human users

**-4.2 Safety Requirements**

•System use shall not cause any harm to human users

**-4.3 Security Requirements**

•System will use secured database

•Normal users can just read information but they cannot edit or modify anything except

their personal and some other information.

•System will have different types of users and every user has access constraints.

**-4.4 Error Handling**

•LMS product shall handle expected and non-expected errors in ways that prevent loss in information and long downtime period.