



# Library Management System

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## Abstract:

Library Management System is a system which maintains the information about the books present or counting the total number of books in the library, their authors, the members of library to whom books are issued. It is a console-based project. The Library Management System which is very difficult to organize manually. Maintenance of all this manually is a very complex. Owing to the advancement technology, organization of a library becomes much simple. It reduces the workload of management as most of the manual work done is reduced.

# **CHAPTER 1**

## **INTRODUCTION**

This chapter gives an overview about the aim, objectives, background and operation environment of the system.

### **1.1 PROJECT AIMS AND OBJECTIVES**

The aims and objectives are as follows:

- Storing all of the books information
- Availability of books
- Admin can add books where he/she can include book name, author name.

### **1.2 BACKGROUND OF PROJECT**

Library Management System is a menu-based console application which is used by admin to manage to manage the library where he/she can add new books, books price, books author name.

It is obligate/significant to keep track of the students using library and a detailed description about the books a library contains. With this system there will be no loss of book record which generally happens when a non computerized system is used.

All of this information is able to help admin to manage the library with more convenience and in a more efficient way as compared to library systems which are not computerized.

PROCESSOR	INTEL CORE PROCESSOR OR BETTER PERFORMANCE
OPERATING SYSTEM	WINDOWS 10
MEMORY	1 GB RAM OR MORE

## **CHAPTER 2**

### **SYSTEM ANALYSIS**

In this chapter, we will discuss and analyze about the developing process of Library Management System including software requirement specification (SRS) and comparison between existing and proposed system. The functional and no functional requirements are included in SRS part to provide complete description and overview of system requirement before the developing process is carried out. Besides that, existing vs proposed provides a view of how the proposed will be more efficient than the existing system.

## **2.1 SOFTWARE REQUIREMENT SPECIFICATION**

### **2.1.1 GENERAL DESCRIPTION**

#### **PRODUCT DESCRIPTION:**

Library Management System is a computerized system which helps admin to keep track detail of books. It reduces the risk of paper work such as file lost, file damaged and consuming.

#### **PROBLEM STATEMENT:**

The problem occurred before having computerized system includes:

- File lost

When computerized system is not implemented file is always lost because of human environment. Some times due to some human error may be a lost of records.

- File damaged when a computerized system is not there file is always lost due to some accident like spilling of water by some member on file accidentally. Besides some natural disaster like floods or fires may also damage the files.

### **2.1.2 SYSTEM REQUIREMENTS**

#### **2.1.2.1 NON FUNCTIONAL REQUIREMENTS**

- Product Requirements

#### **EFFICIENCY REQUIREMENT**

When a Library Management System will be implemented admin and students will easily access library as searching and detail information of books will be very fast.

## USABILITY REQUIREMENT

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

## ORGANIZATIONAL REQUIREMENT

## IMPLEMENTATION REQUIREMENT

In implementing whole system it uses only C Program.

### 2.1.2.2 FUNCTIONAL REQUIREMENTS

#### 1.1 REGISTER NEW USER

##### Description of feature

This feature can be performed by all users to register new user to create account.

##### Functional Requirements

- System must be able to verify information.
- System must be able to delete information if information is wrong.

#### 1.2 REGISTER NEW BOOK

##### Description of feature

This feature allows to add new books to the library.

##### Functional Requirements

- System must be able to verify information.
- System must be able to not allow two books having same book id.

#### 1.3 SEARCH BOOK

##### Description of feature

This feature is found in book maintenance part. We can search based on book id, book name, publication or by author name.

### Functional Requirements

- System must be able to filter book based on keyword entered.

### Functional Requirements

- System should be able to add detailed information about events.
- System should be able to display information.

## **2.1.3 SOFTWARE AND HARDWARE REQUIREMENTS**

The section describes the software and hardware requirements of the system

### 2.1.3.1 SOFTWARE REQUIREMENTS

- Operating system- Windows 10 is used as the operating system as it is stable and supplies more features and is more user friendly.
- Development tools and Programming Language only C is used to write the code and develop the system.

### 2.1.3.2 HARDWARE REQUIREMENTS

- Intel core i3 7<sup>th</sup> generation is used as a processor because it is fast than other processors and provide reliable and stable and I can run my pc for longtime.

## **2.2 SOFTWARE TOOLS USED**

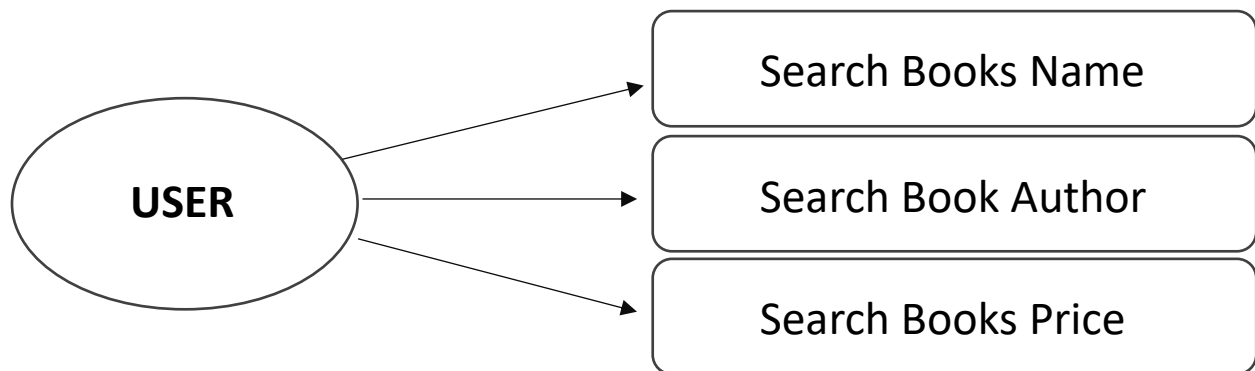
The whole project is accomplished by C Programming Language.



## **CHAPTER 3**

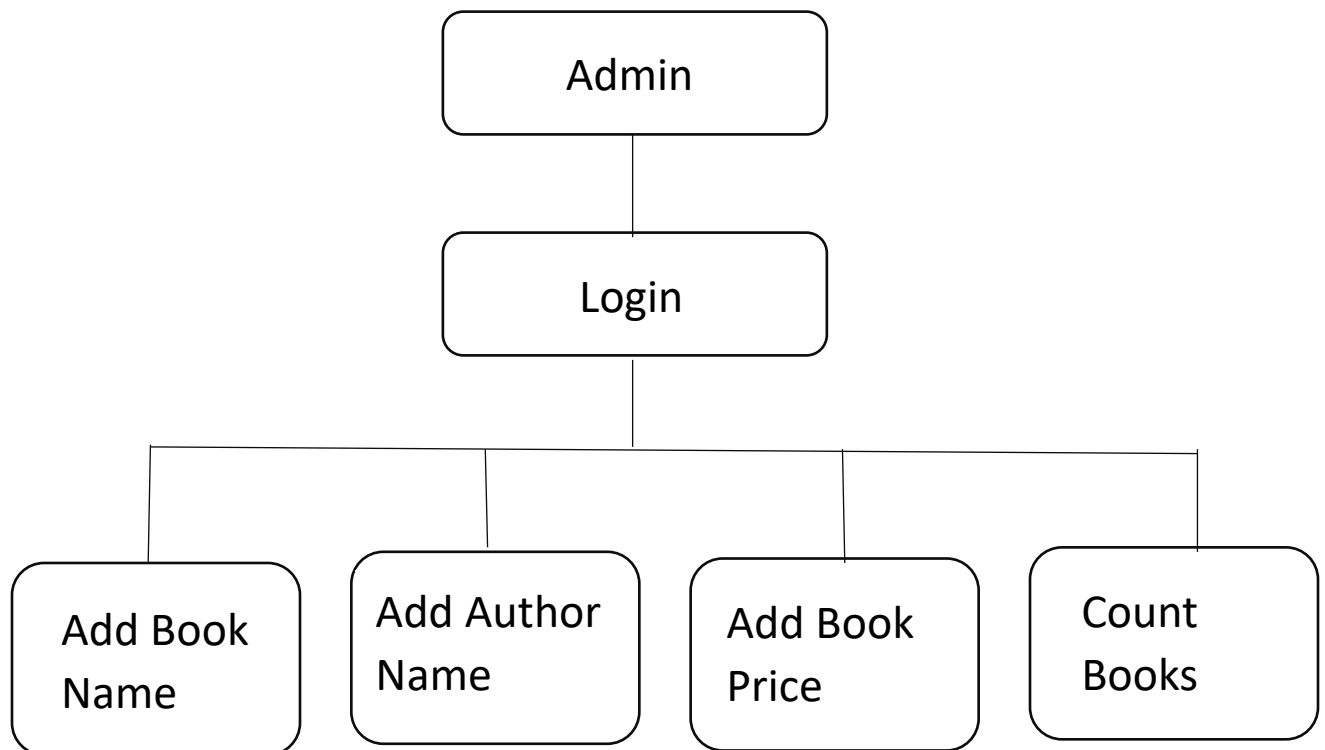
### **SYSTEM DESIGN**

#### USE CASE DIAGRAM FOR USER



After entering to the system, student can choose the USER LOGIN option where he/she can enter the system with his/her username and password, and is he/she is valid user then the system will be showed a success message.

## USE CASE DIAGRAM FOR ADMIN



## **CHAPTER 6**

### **CONCLUSION AND FUTURE SCOPE**

This system provides a computerized version of Library Management System which will benefit the students. It makes entire process online where students can search books. It also has facility for student login where student can login and can see students of books.

## **CHAPTER 7**

### **REFERENCES**

- [http://www.w3schools.com/c/c\\_intro.php](http://www.w3schools.com/c/c_intro.php)