Requirements for the Library Management System

Learn about all requirements of the library management system.

We'll cover the following

In this lesson, we will list the requirements of our library management system. This is a very crucial step as requirements define the scope of a problem, so getting them right from the interviewer and understanding them well will make the system designing process smooth and easy.

We'll use the notational convention to identify each requirement with a unique label "Rn", where "R" is short for Requirement and "n" is a natural number.

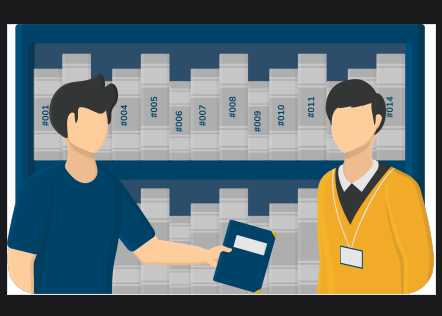
Requirement collection

For LMS (Library Management System), the requirements have been defined below:

R1: The system should be able to store the information about books and members of the library. Moreover, the complete log of the book borrowing process should also be stored.

R2: Every book is supposed to have a unique identification number and other details including a rack number to help locate the book physically.

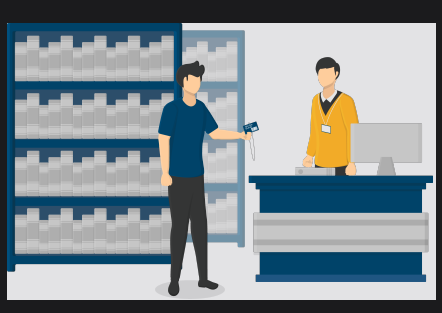
R3: Every book should have an associated ISBN, title, author name, subject, and publication date.



R4: There can be multiple copies of the book. Each copy will be recognized as a book item.

R5: There can be two types of users, i.e., the librarian and the members.

R6: Every user must have a library card with a unique card number.

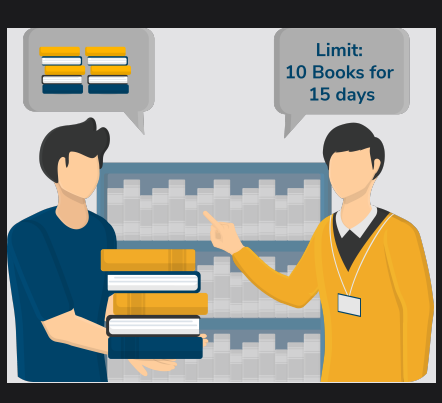


R7: One member can issue a maximum of 10 books at a time.

R8: The member can issue a book for a maximum of 15 days.

R9: Each book item can only be reserved by a single member.

R10: The system should be able to keep a record of who issued or reserved a particular book and on which date.

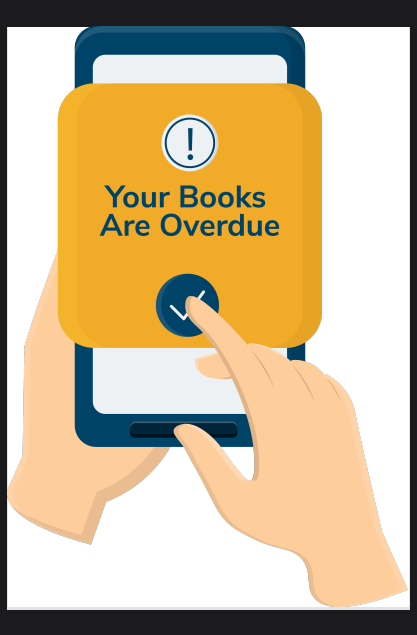


R11: The system should allow the user to renew the reserved book.

R12: The system should send a notification if the book is not returned within the due date.

R13: If the book is currently not available, then the member should be able to reserve it for whenever it is available.

R14: The system should allow the user to search a book by its title, author name, subject, or publication date.



We've identified our requirements for the problem, and in the next lesson, we will define different use cases of our library management system.