### 3. library management system

**1 Introduction**

* Purpose :- The purpose of this document is to specify the requirements of the library management system it outlines the system functionalities, constraints and interface.

* Scope :- The LMS is a web - based application for library patrons to browse, reserve book and manage accounts with administrative functions for staff

* overview :- This document outlines the feautres constraints and functionalities of the LMS, providing a comprensive guide for development and implementation.

### 2. General description

* Features :-
- user registration, login
- browsing, searching catalog
- viewing book detail, availability
- Managing user accounts
- Admin functions for books, user, reservation

### 3. Functional requirements

* User Registration and login
* Browsing and searching
* viewing book details
* Reserving books
* Managing user accounts
* Functionality of admin

4. Interface Requirements

* User interface :- intuitive and user-friendly with clear navigation and search.

* performance requirements :- System should respond to user actions within a few seconds.

5. Performance requirements

* Response time :- The system should respond to user actions (eg: searches, reservations) within a few seconds.

6. Design constraints

* Security :- The system should implement secure practices, such as encryption for sensitive data and protetion against injection attacks.

7. Non-functional Attributes

* Usability :- The system should be easy to use, with clear instructions and error messages.

8. Preliminary Schedule and budget

* Schedule :- The development of the LMS is expected to take approximately 6 months with testing and deployment following shortly after.

* Budget :- The budget for the project includes development costs, hosting fees and any additional expenses.