1.10.24

Generate SRS

② Library Management:

1 (i) problem statement-
Current library system relies on manual processes
which leads to inefficiencies in book tracking, lending
and returns. Searching for books, staff struggle
with managing and handling transactions.

(ii) Scope -
The library system will facilitate user management,
catalog updation, borrowing & returning books,
search functionality, reporting and notifications

2 General Description-
↳ User Objectives - members aim to search, borrow, return
books. staff aim to manage inventory & user accounts.
↳ benefits - increased efficiency, enhanced user satisfication.

3 Functional Requirements-
① User Registration and authentication- users can create
accounts & login while admins can manage user
accounts.
② book catalog management :- admins can add, update
or remove book records.
③ Search functionality :- Users can perform simple
searches and they can be filtered.
④ notification system :- Automated Reminders for
due dates & active book loans.
⑤ book Management :- managing borrowing & returning
books.

4. Interface Requirements :-

(1) User Interface [UI] - UI accessible from various devices. clean & user friendly design for easy navigation.

(2) Database Interface - SQl based interaction.

(3)

5. performance Requirements :-

(1) Response time - search results to be displayed within 2 seconds under normal load

(2) Concurrent users - system should support multiple users.

(3) Data storage - must handle upto 50,000 book Records.

(4) Error Rate - maximum allowable error rate should be less

6. Design Constraints :-

(1) Hardware limitations - must operate on standard library servers hardware specifications.

(2) Complexity in Realtime updates - continuous/simultaneous editing & live notifications require more advanced technologies.

7. Non-functional Attributes :-

(1) Security - user data should be secured.

(2) Reliability - uptime to be increased.

(3) Portability - system should be deployable.

(4) Scalability - ability to scale to accomodate more users.

(8) preliminary Schedule & budget :

Timeline : 6 months (approx)
    ↳ Requirement -- 1 month
    ↳ Design - 1 month.
    ↳ Development - 3 months
    ↳ Testing - 1 month.