STAKEHOLDERS

ACTOR	What he can do on the Software Created
Student	● Login LMS portal ● Search Books and study materials ● Pay and buy the books and read ● Enter feedback about books and service
Library Staff	● Update arrival new study materials, ● Administrate and arranging category wise study materials inside the portal, ● Access feedback from user, ● Ask solution for bugs and issues.
Management	● Authorize materials as free and paid mode, ● Fix the issues reporting by staff and students, ● Record historical data and plan crystal decision.

PROBLEM DEFINITION AND SOLUTION

- Consuming the more time for arrange and organize manual system as well as take more time to search and find the study material for students,
- Record feedback from user is difficult,
- Find out issue and gather information about most liked and prefer reading materials data.

Advantages of LMS

Advantages of Library Management System:

- Reduced risk about manually arrange and increase fast and precise output,
- 24/7 engagement possible,
- Save cost considerably due to eliminate paper based system,
- Dynamic report generate from record for crystal decision.

EXISTING SYSTEM

How is the existing system? Does it have any of the mentioned features already?

- Existing system is manual, arranging and administration in paper based work,
- Library accessible timely based,
- More assistance requires for help the students to search and take the books.
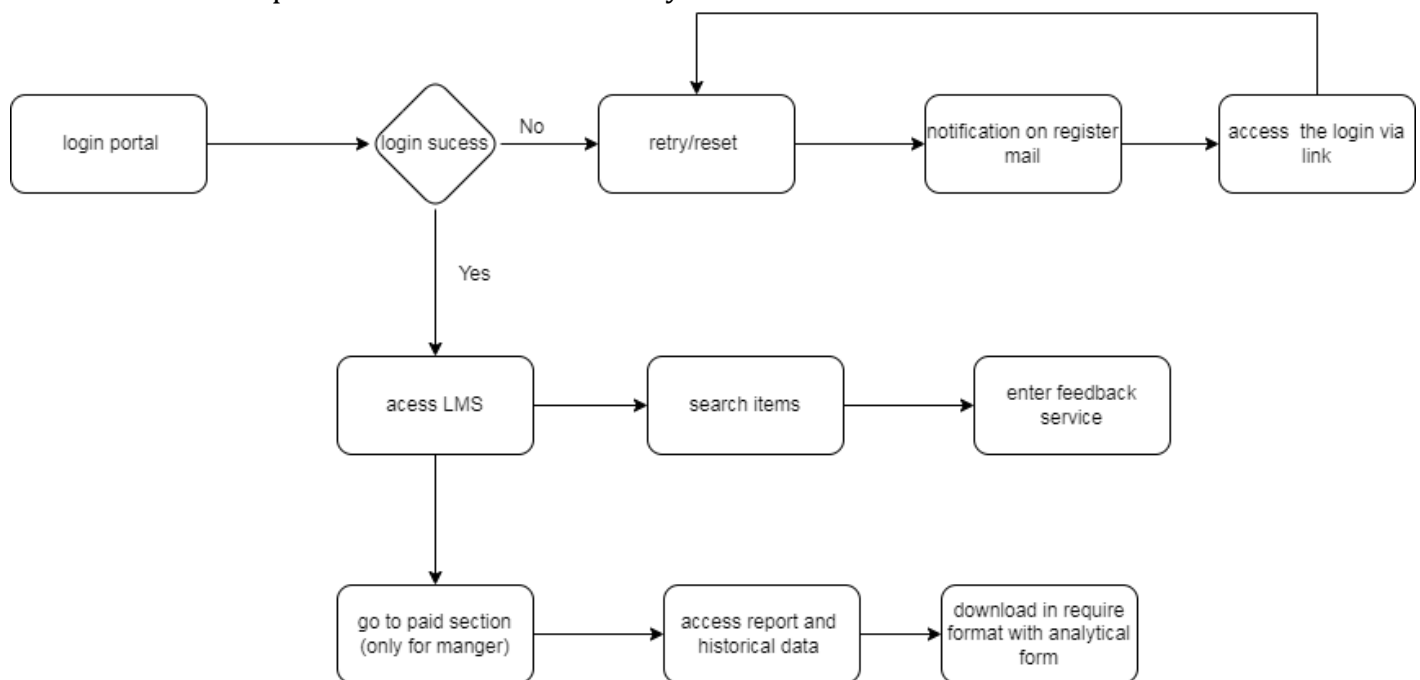
PROPOSED SYSTEM

What is the proposed solution or system? Mention in points how the system itself will be for the user. (Sample points given, you can add more to it)

- User friendly interference,
- Precise tracking,
- Cost effective,
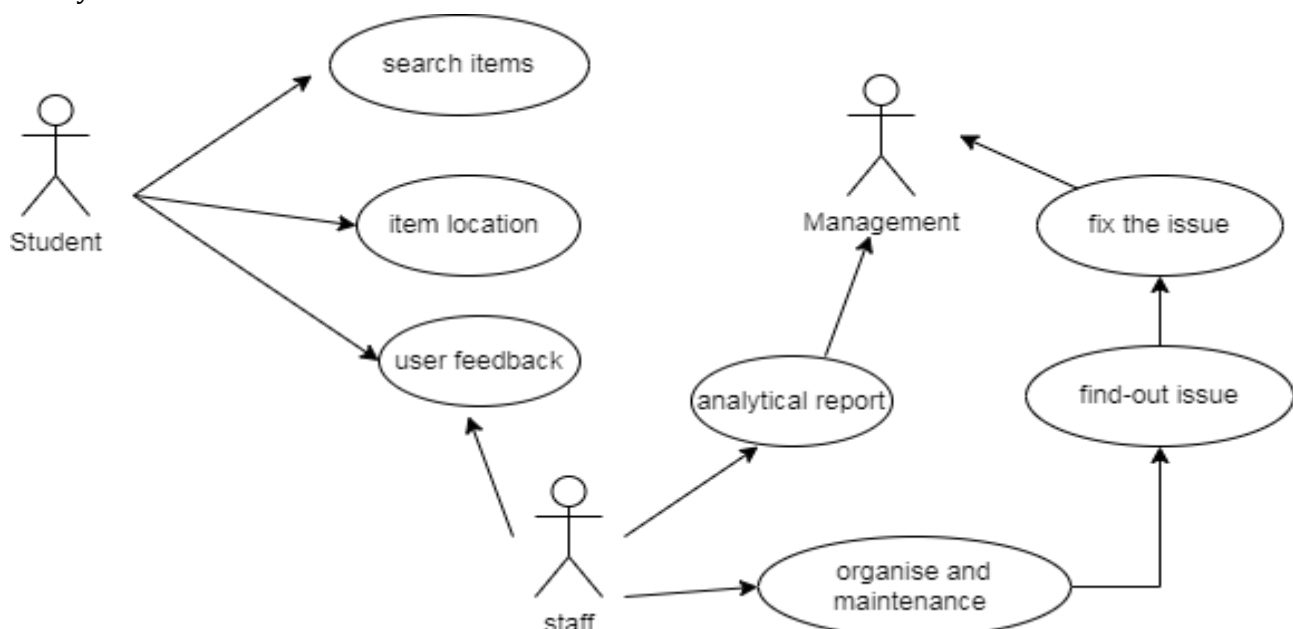- Improve productivity and work culture.

Flowchart for LMS

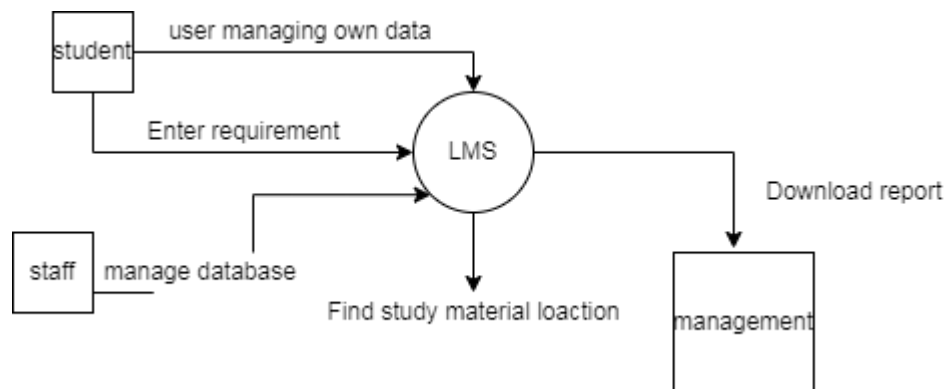Create and provide a flow chart for the system.

SCOPE using Use Case Diagram (UML)

Create a use case diagram including all the actors and processes for an end to end process of the system.

SCOPE using Context Diagram/ DATA FLOW DIAGRAM

IN SCOPE

Mention the name of features and what they are used for.

| Features	Uses
Login	Individual student and library staff able to login access the portal
Search	Study search by the student and find location
Manage LMS	As manager updated arrival materials and mange lending books.
Report generate	repute documents and historical information generate
Feedback enter	Student enter the comments about service

OUT OF SCOPE
What are the facilities or features—for the library and the students—the are out of scope or cannot be implemented now.

| Features	Uses
Open source account	Permit public out of community for interaction and upload and edit and read
Digital books	All books convert to digital format
Shipment to home	Buying paperback material from the portal

Wireframes:

Create sample wireframes for the system. Capture what screen will be show to the library employees to create records for each book and at what stage in the system.
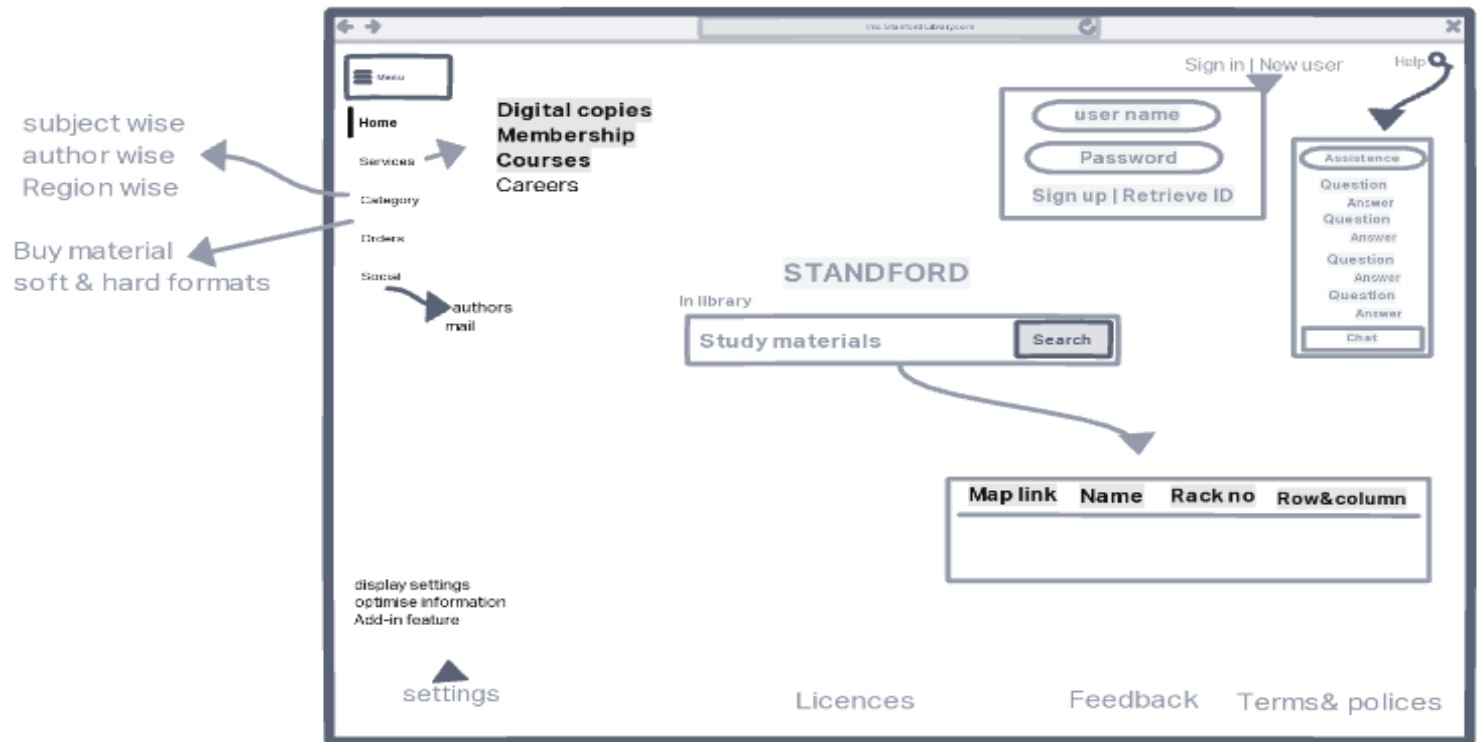
ER DIAGRAM FOR THE SOFTWARE

Create an ER Diagram for the system you have designed.
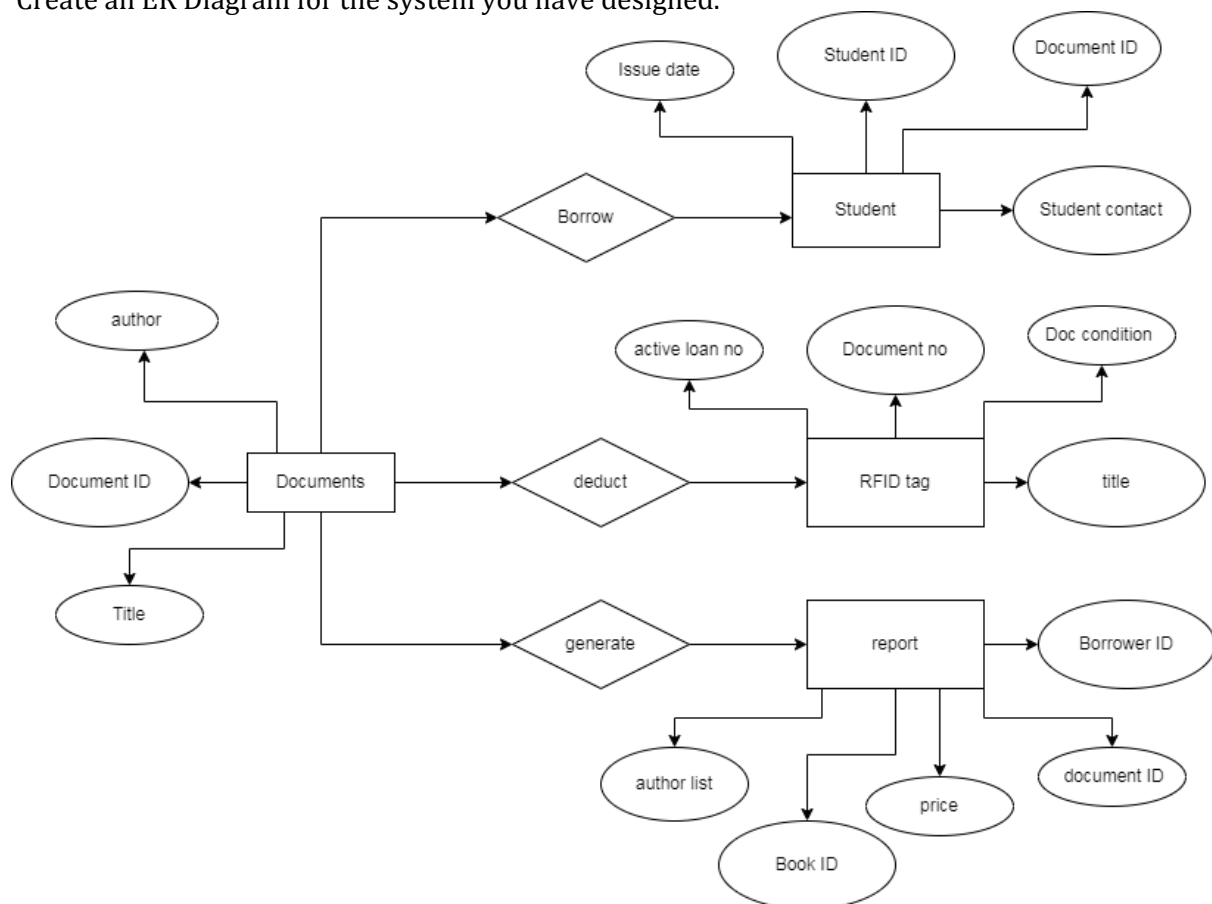
FUNCTIONAL REQUIREMENTS

Write down all the functional requirements for the system in a list format.

- set rules and regulation about digital library system and LMS access,
- borrower transaction corrections, adjustments and cancellations,
- Task and responsibilities determine to respective stakeholders,
- Legal licences and certification author permission, patent,
- Save and trace historical data about order and other function and generate dynamic data.

NON-FUNCTIONAL REQUIREMENTS

Write all the non-functional requirements for the system.

- Able to handle feedback, consistent performance of system,
- Ensure error free system, use environment for consistent and user-friendly performance,
- Types of payments immediate payment via online and monthly membership method,
- performance must be fast and accurate,
- system must be able to handle large amount of data

System Requirement:

- LMS can be used on any Windows and Mac OS run computers

- Users will need an active internet connection.

- It will be RFID ready (NCIP 2.0 HTTP server available)

- Auto scheduled tasks like emails and database maintenance

- Data should be stored in cloud

- Highly secure, scalable, and reliable

Usability: The screens should be self-explanatory and very user friendly.

Environments

We are going to be creating and maintaining the program in Java. We chose Java because it will not change much over time and if we make it well, there will be very little maintenance to be done on the code.