



LIBRARY MANAGEMENT SYSTEM FOR STANFORD

SIMPLILEARN PROJECT FOR CBAP

BY
ZUHI FARZANA

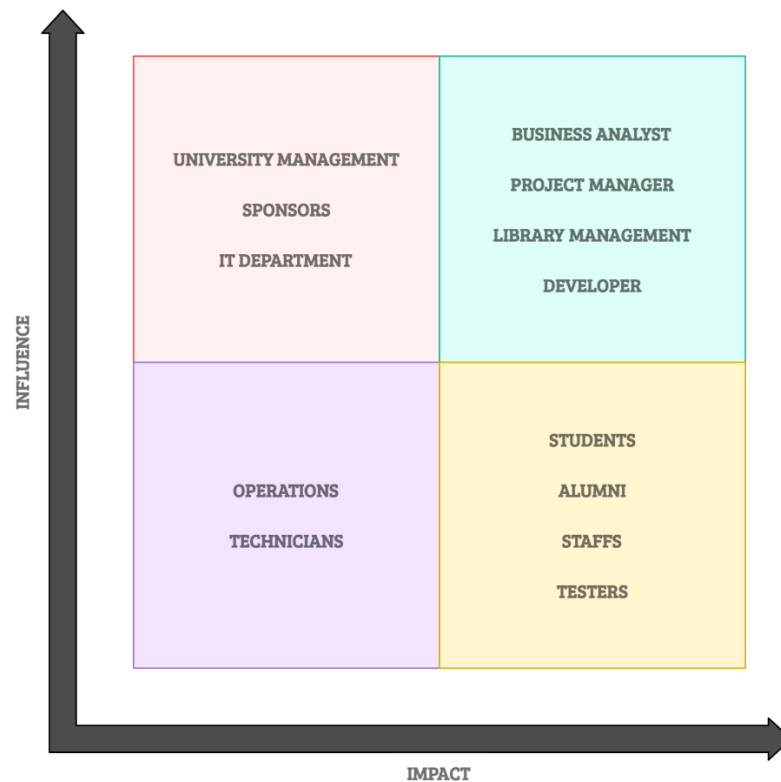
TABLE OF CONTENT

S.NO:	TOPIC	PG.NO:
1	PROJECT OVERVIEW	2
2	AS-IN PROCESS MAP	4
3	FUTURE PROCESS MAP	5
4	UML CASE DIAGRAM	6
5	MAIN FEATURES	6
6	IN SCOPE AND OUT OF SCOPE	7
7	DATA FLOW DIAGRAM	8
8	ER DIAGRAM	9
9	FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS	9
10	WIREFRAMES	10

PROJECT OVERVIEW (BACCM)

Question 1. Identifying stakeholders – Create a list of stakeholders (as taught in Business Analysis Planning and Monitoring Knowledge Area)

1. STAKEHOLDER



Question 2. Identify the problem statement in this system.

2. NEED / PROBLEM STATEMENT

- Time taken to manage the manual library is high.
- The number of employees needed to manage the library is high.
- Fine calculation is a tedious and time-consuming.
- No reports could be generated on books issued due to the manual system.
- It is difficult to manage 4 million books present in the library.
- Students could deposit the books only in the library timings.

Question 3. Identify advantages of the new Library Management System

3. VALUE / PROBLEM OBJECTIVE

- Reduce overheads and increase productivity of library staff
- Cost reduction
- Up-to-date records of all books, research papers, magazines, and other materials available in the library
- Improve student engagement in the library
- It will generate dynamic reports for better decision-making

4. CHANGE

A Library Management Software to automate their library's activities.

5. SOLUTION

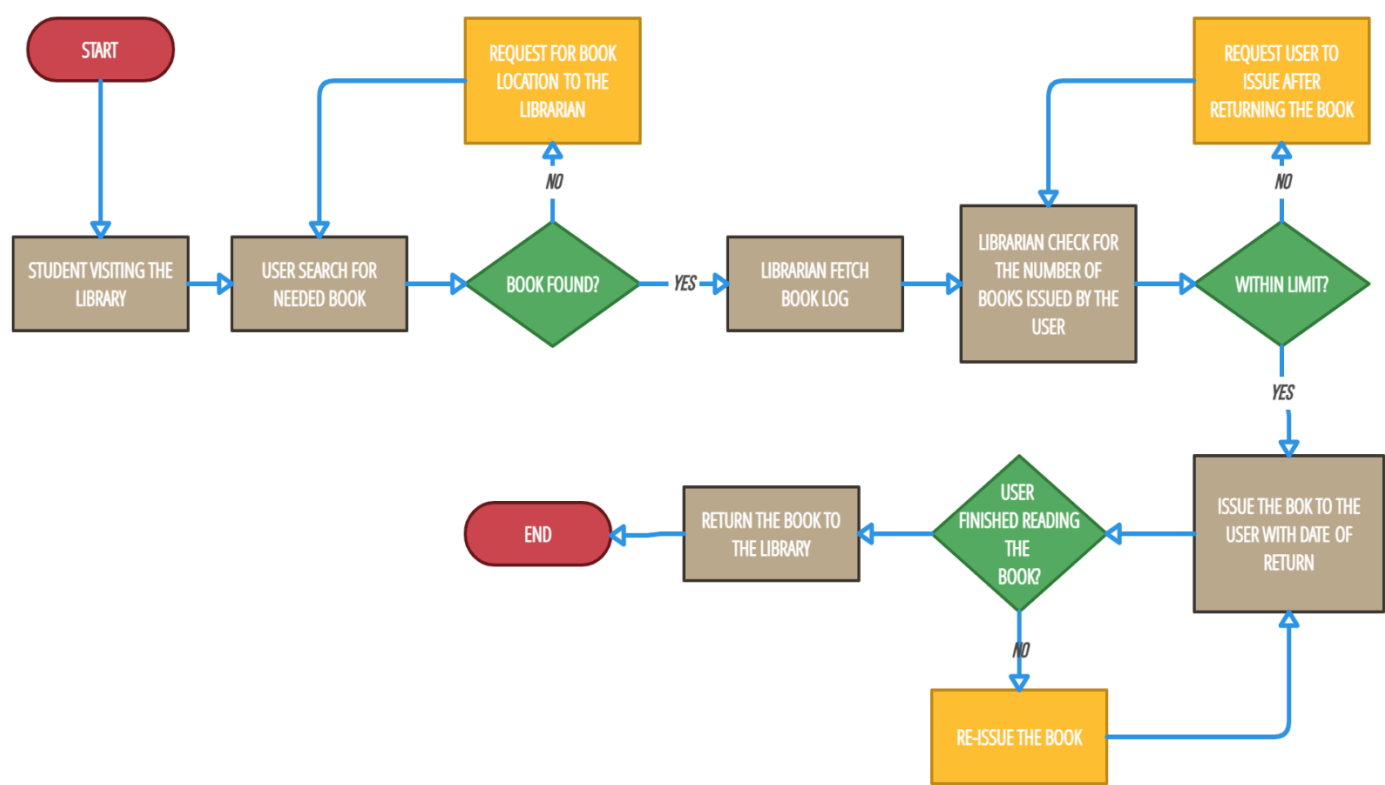
To automate their library's activities so one can, find books with a click, issue/reissue books quickly, and it will manage all the data efficiently using this system. It also provides immediate and accurate information regarding any type of book, magazine, or research paper, thereby saving a lot of time and efforts.

6. CONTEXT

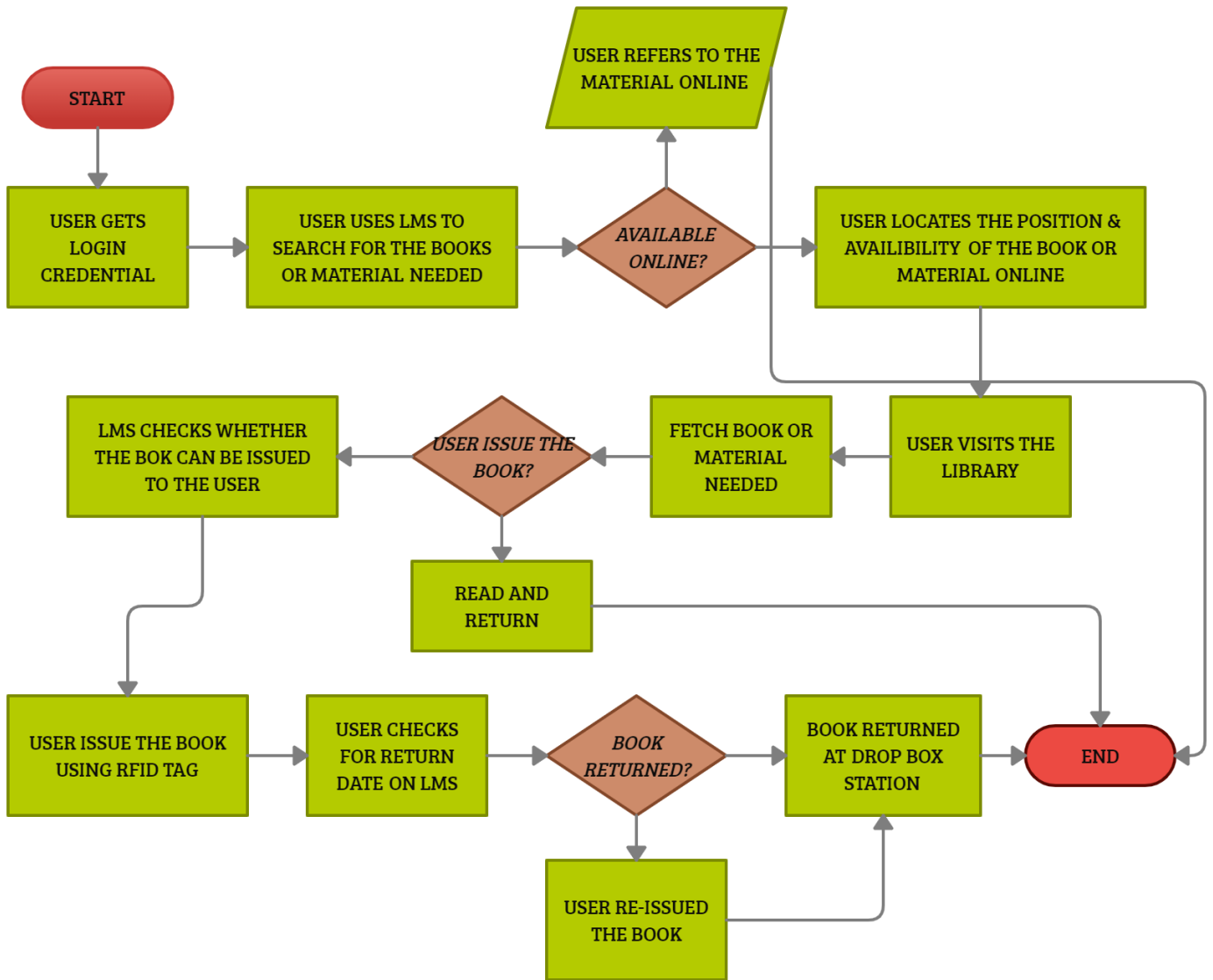
Using the software one can find books with a click, issue/reissue books quickly, and it will manage all the data efficiently using this system. It also provides immediate and accurate information regarding any type of book, magazine, or research paper, thereby saving a lot of time and efforts.

Question 4. Create as-is and future process map (using flowcharts).

AS IN FLOWCHART

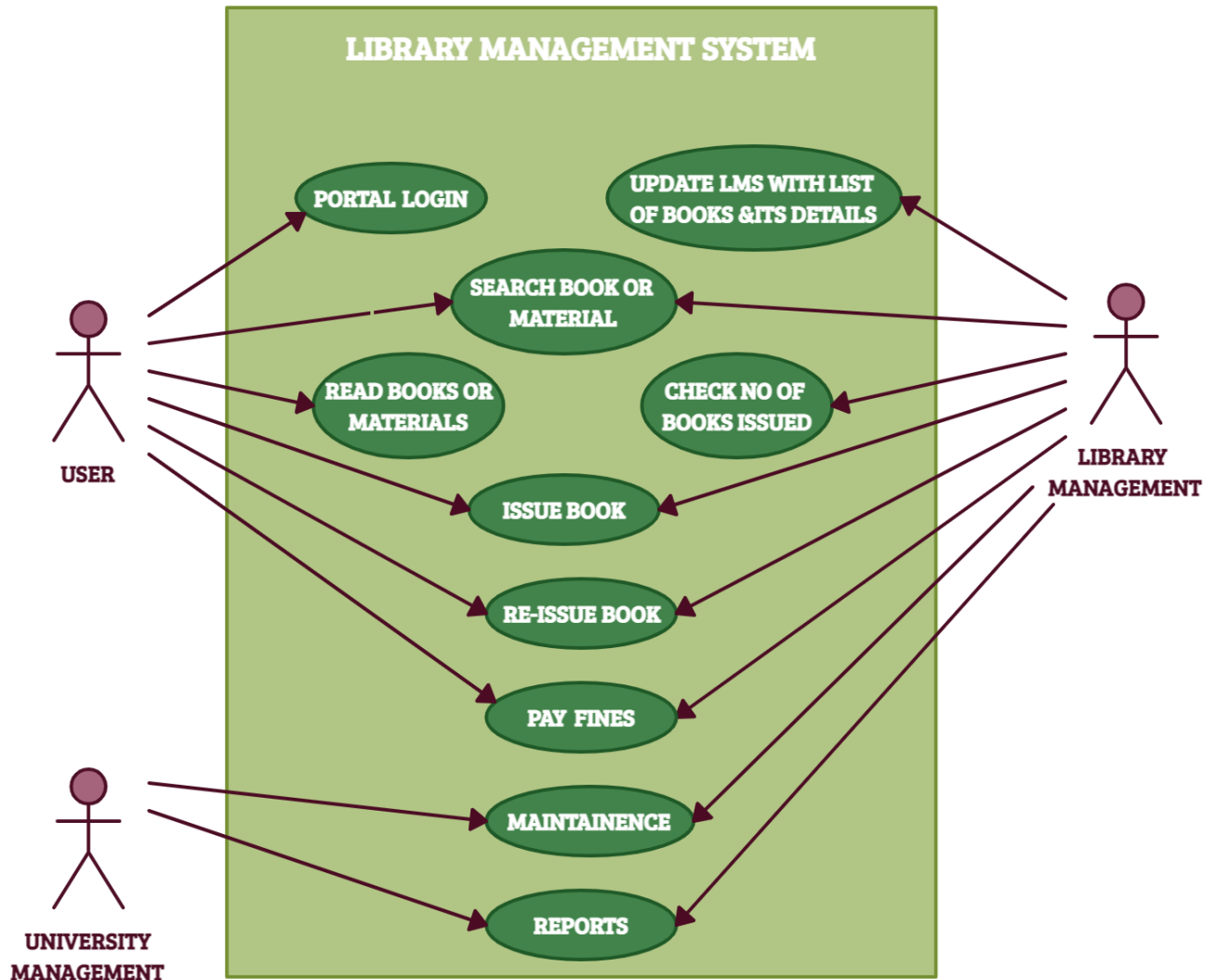


FUTURE FLOWCHART



Question 5. As a Business Analyst working on this project, find out the scope of the Library Management System. To find the scope you can use Use Case diagram (UML) or Context diagram

USE CASE DIAGRAM



Question 6. Write down the main features that need to be developed.

MAIN FEATURES TO BE DEVELOPED

- A LMS with records of different categories of material available in the library like books, magazines, research papers, journals, and newspapers.
- Classify books subject wise.
- Different issuing periods for books, magazines, research papers, journals, and newspapers.
- RFID tag on each reading material to record and store in the database.
- Author, book name, publisher name, book edition, date and year of publication, cost, and date of purchase to be recorded for each reading material.
- Student ID and RFID tag to be linked to issue books.

- Record the issue date and return date of the book.
- An automatic calculation of fines in case of delayed return of books.
- Search of books with their criteria
- User being able to check for date of return in the LMS website or app.
- E-Mail reminder 3days before the return date.
- Access to E-Resources.
- Install RFID based anti-theft system.
- Install drop box to return book with RFID Tag.
- Timely automated reports to the management.

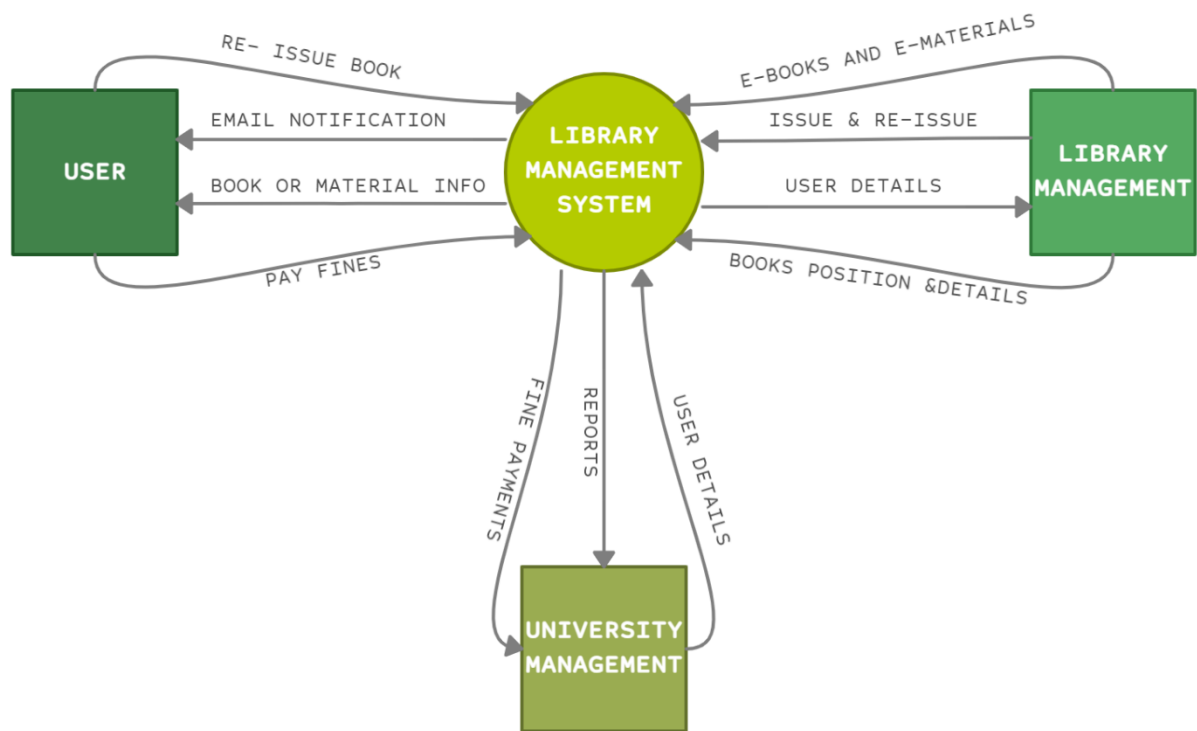
Question 7. Write the in-scope and out-of-scope items for this software.

IN SCOPE & OUT OF SCOPE

INSCOPE	OUT OF SCOPE
<ul style="list-style-type: none"> - CREATE LMS SOFTWARE - PROVIDE ACCESS TO ELIGIBLE USERS - INSTALL RFID TAGS -INSTALL DROP BOXES - FREE ACCESS TO E-JOURNAL & E-BOOKS - INSTALL RFID READERS AT THE ENTRANCE - ISSUE AND RE-ISSUE BOOK - COLLECT FINES - EMAIL REMINDER 	<ul style="list-style-type: none"> - BOOKS FOR SALE - LENDING NEWSPAPER - ACCESS FOR OUTSIDERS - MEMBERSHIPS - SHORT SUMMARY OF THE BOOKS - MOBILE APP - USER DONATION OF BOOKS

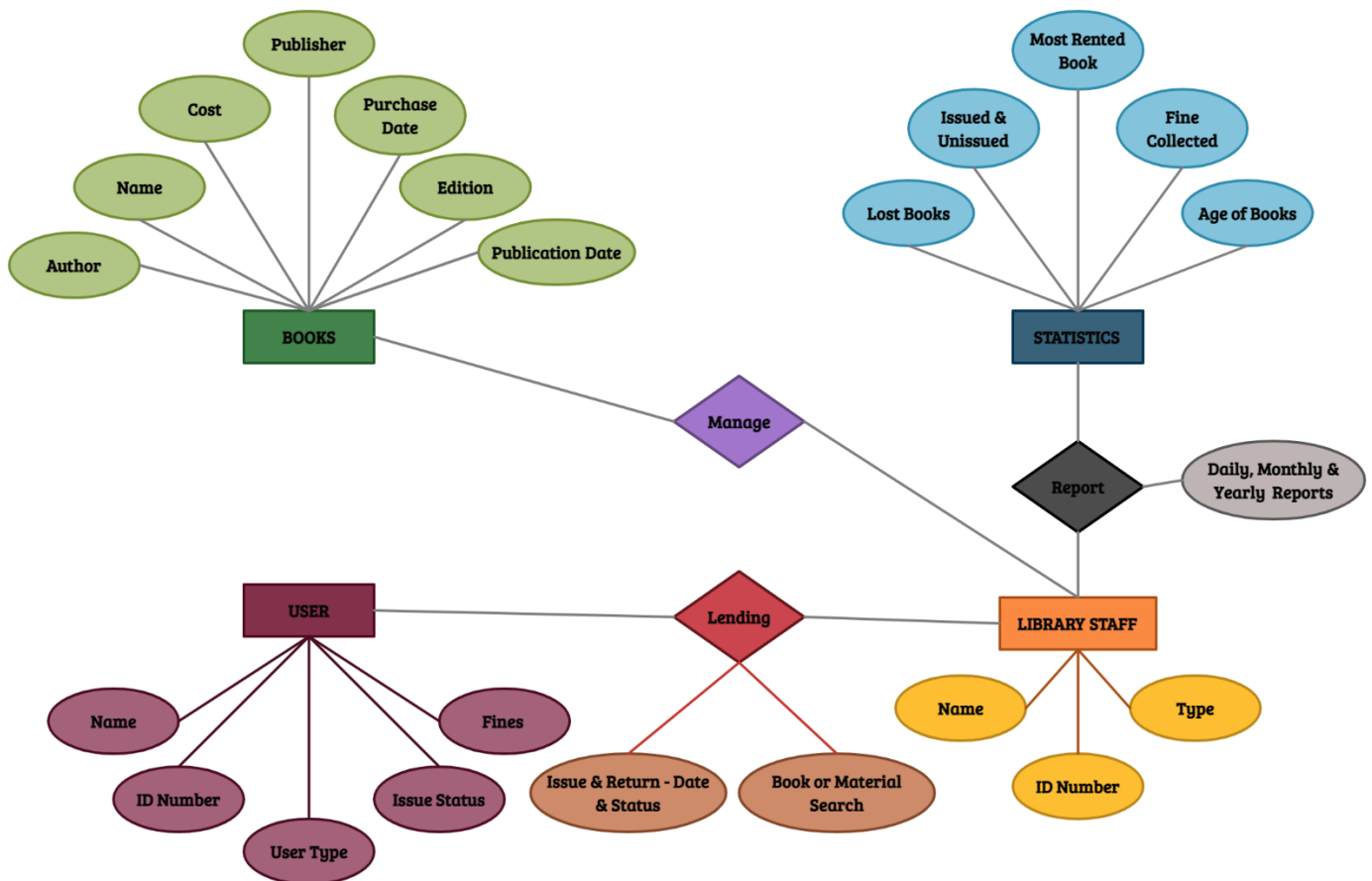
Question 8. Draw a data flow diagram for the system.

DATA FLOW DIAGRAM – CONTEXT DIAGRAM



Question 9. Draw an ER diagram of the system.

ER DIAGRAM



Question 10. Write out the Business Requirements, both Functional and Non-functional Requirements.

FUNCTIONAL REQUIREMENT

- Records of different categories of material available.
- Classify books subject wise.
- Set issuing period for each type of material.
- Tangible resources fixed with RFID tag containing all data about the resource.
- Facility to link student ID and RFID tag to issue.
- Automatic calculation & update of return date and fine.
- Find books with their criteria.
- Automated user reminder.
- Anti-theft system using RFID technology.
- Drop box station.
- Automated statistics.

NON - FUNCTIONAL REQUIREMENT

Environments

- Create and maintain program in JAVA.

System Requirement:

- LMS can be used on any Windows and MacOS 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:

- Self-explanatory and very user-friendly screen.

Question 11. Draw wireframes or mock screens for any 2 of the features namely book record creation and any other feature as deemed fit by the student.

