

2. Library Management System

a. SRS Document:

6/10/24

Library Management System:

1. Introduction:

- 1.1 Purpose of this document to provide insights in library management system.
- 1.2 Scope of this document The document provides description about library management system and it must be completed in 15 days.
- 1.3 Overview:
The system keeps the track of people who have borrowed book with books ID and borrower ID.

2. General Description:

borrower authorization:- The Librarian should enter valid credential and details of the borrower that is borrower ID, Book ID, Book Title, Date of issue, and date of return, and mobile number. The system should generate an SMS reminder to the registered mobile number.

3. Functional requirement:

- The Librarian must be able to retrieve the details of borrower.
- The Librarian must be able to register a new user.
- The system should have record of borrower and the availability of book.

4. Interface requirement:

- The system should have text field where they can search for a book.
- The details of book like Title, author and description should be seen.

5. Performance Requirement:

The system should not exceed 1 sec of response time and must be able to run on 8gb and 16gb ram and 1000 system.

6. Design constraints:

User-friendly UI and MongoDB should be used for database.

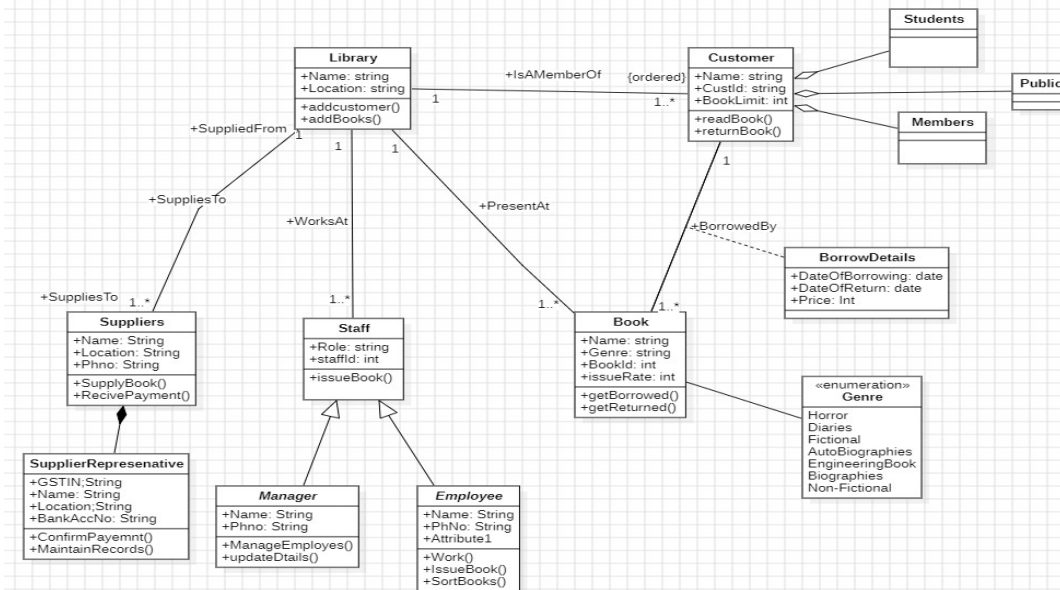
7. Non-functional requirement

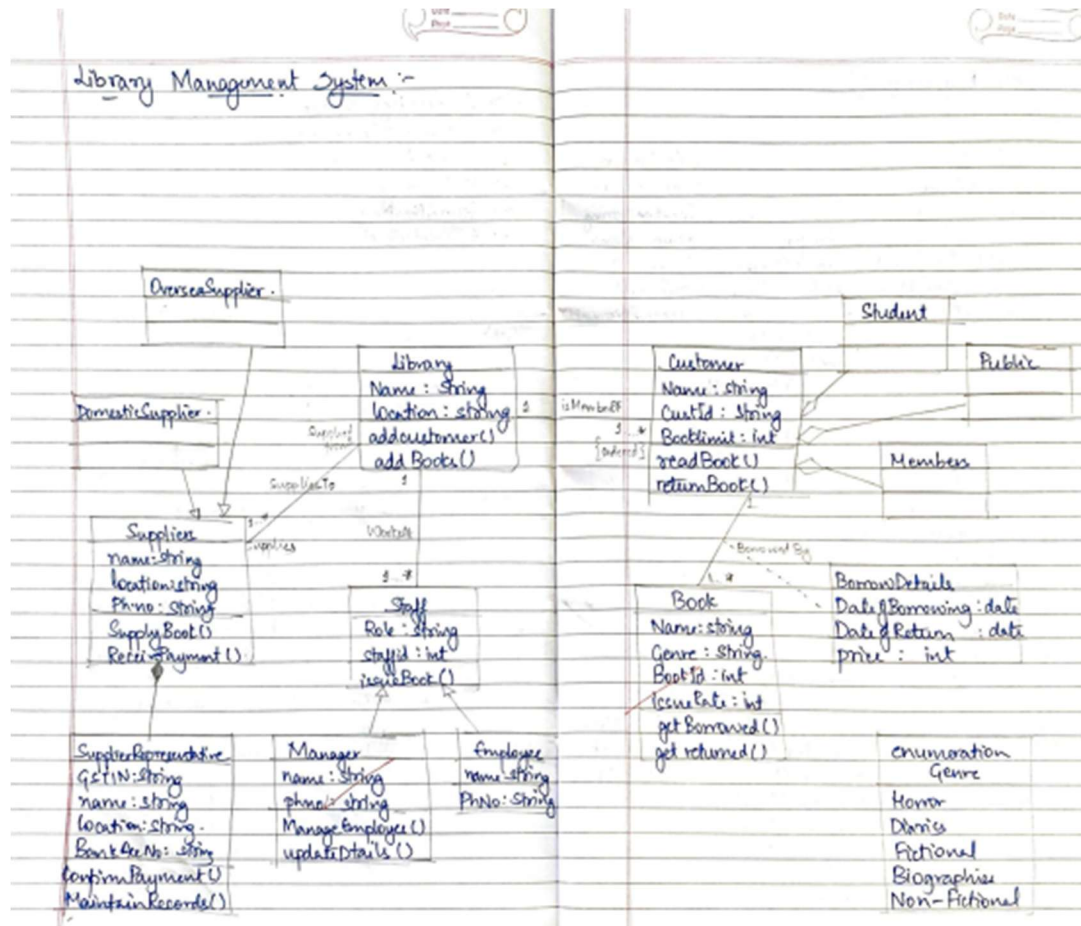
- The system must work on both macOS and windows.
- Accessible at all time.

8. Preliminary Schedule and Budget:

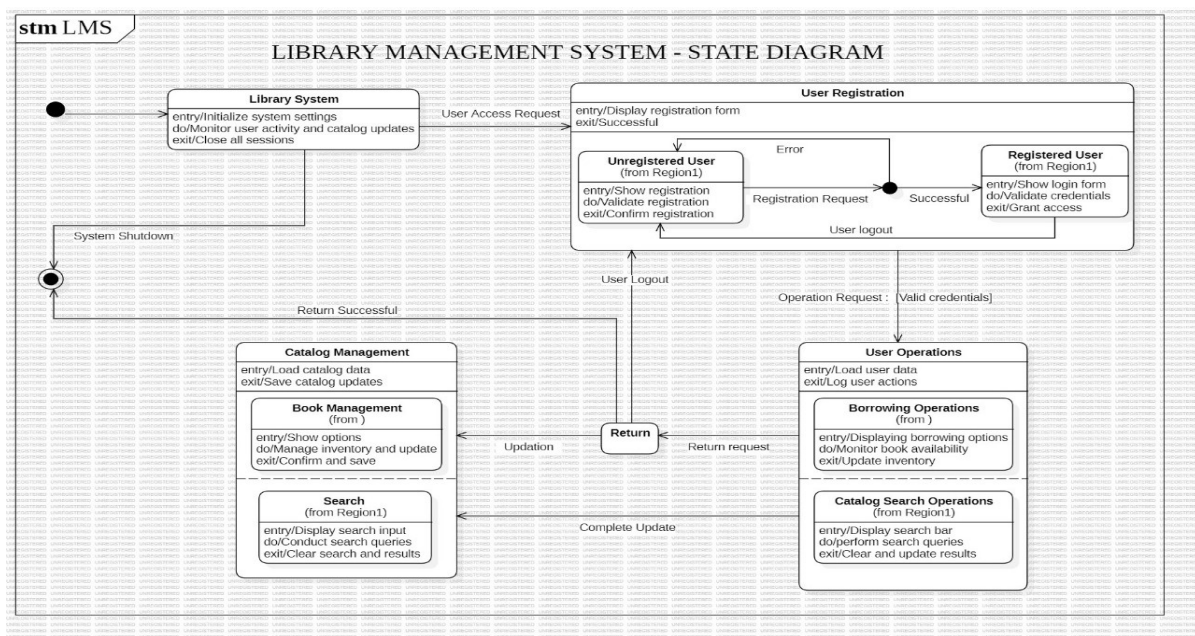
The project must be completed within 15 days.
Total budget is 100000.

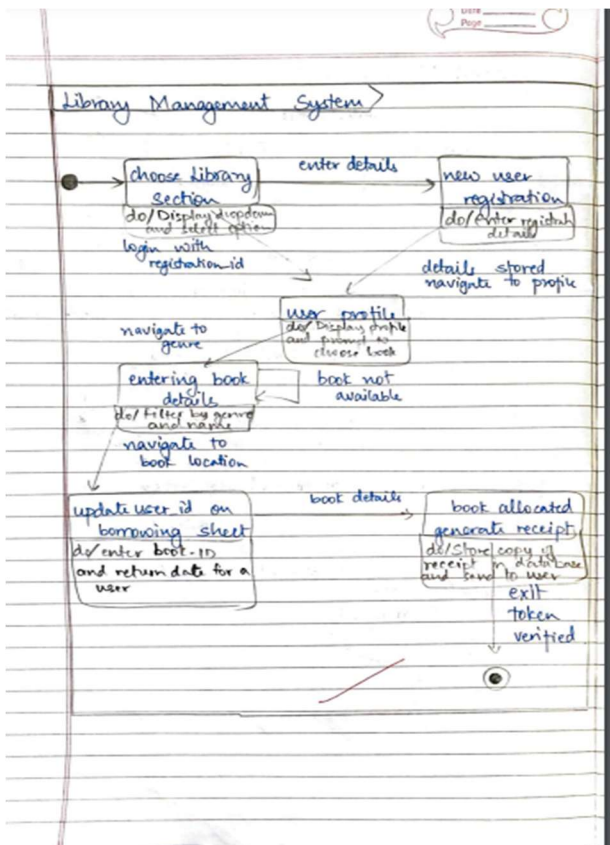
b. Advanced Class Diagram:



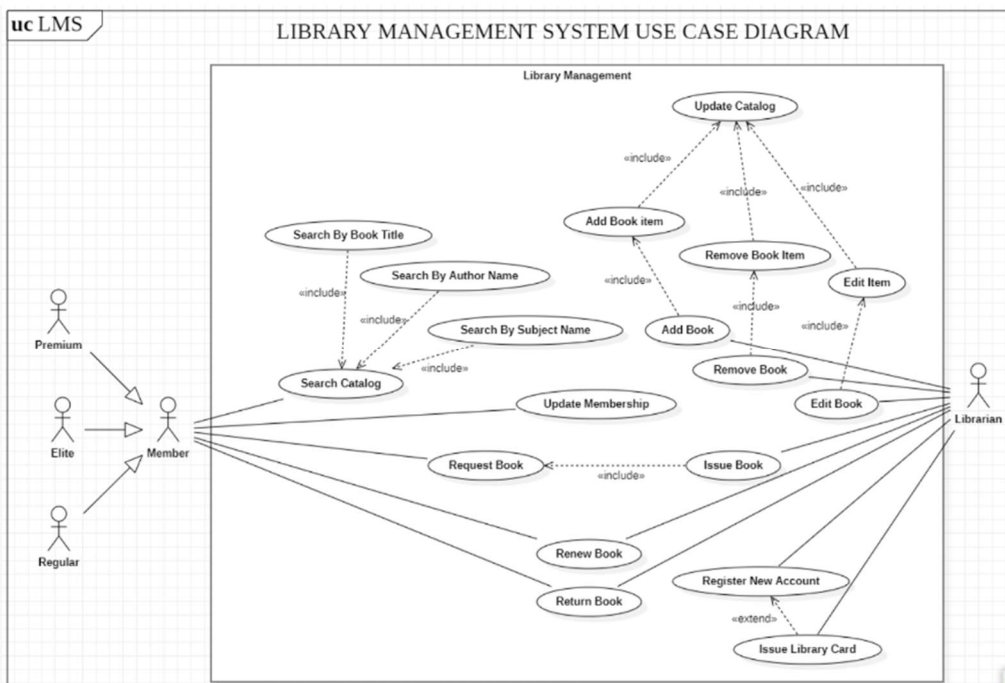


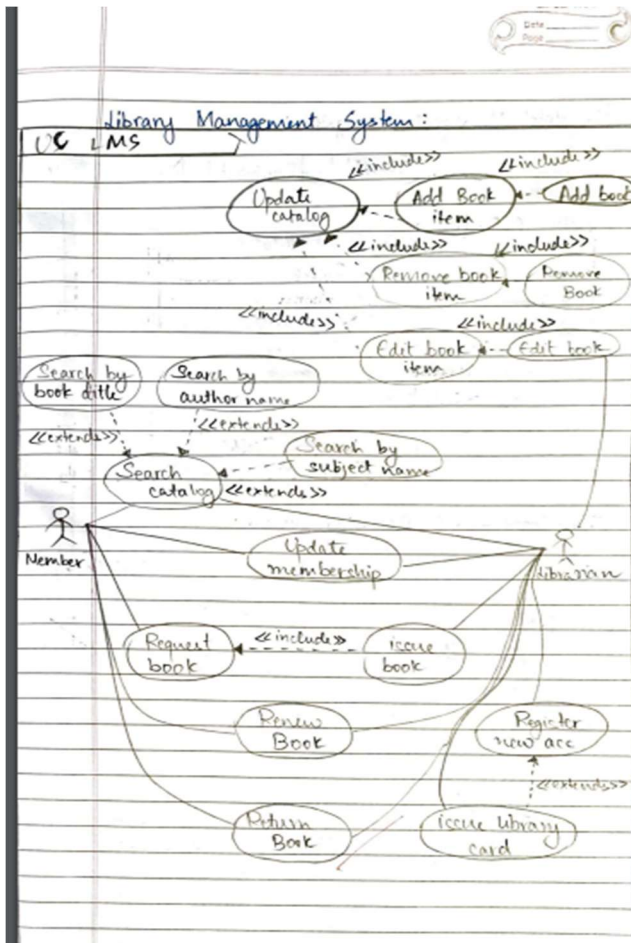
c. Advanced State Diagram:



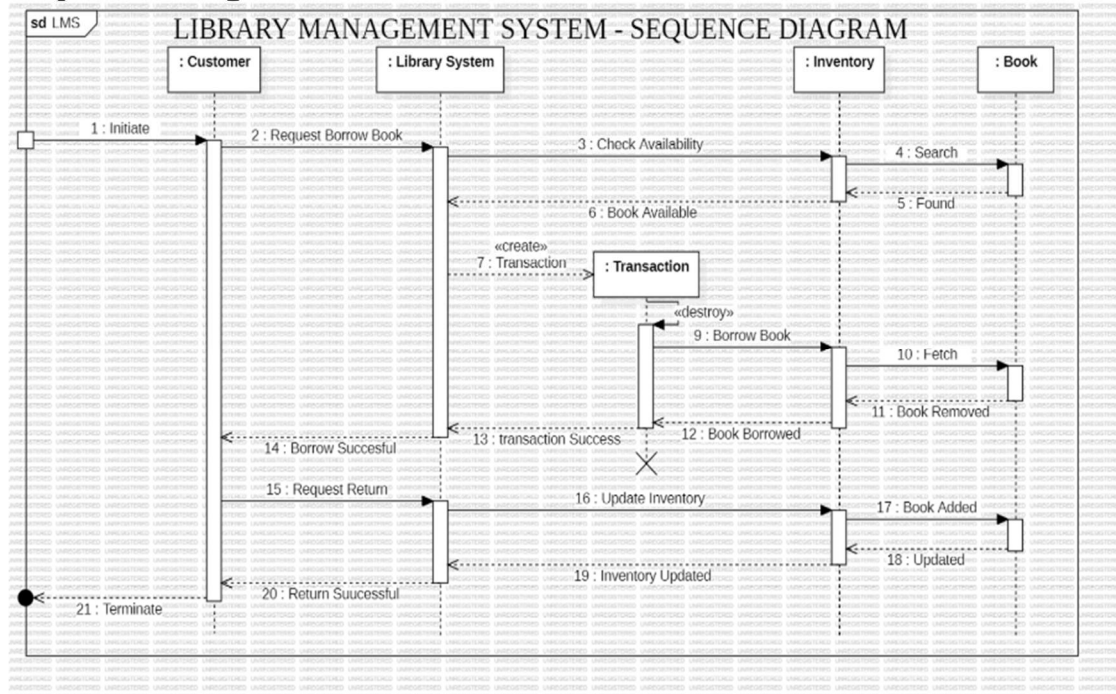


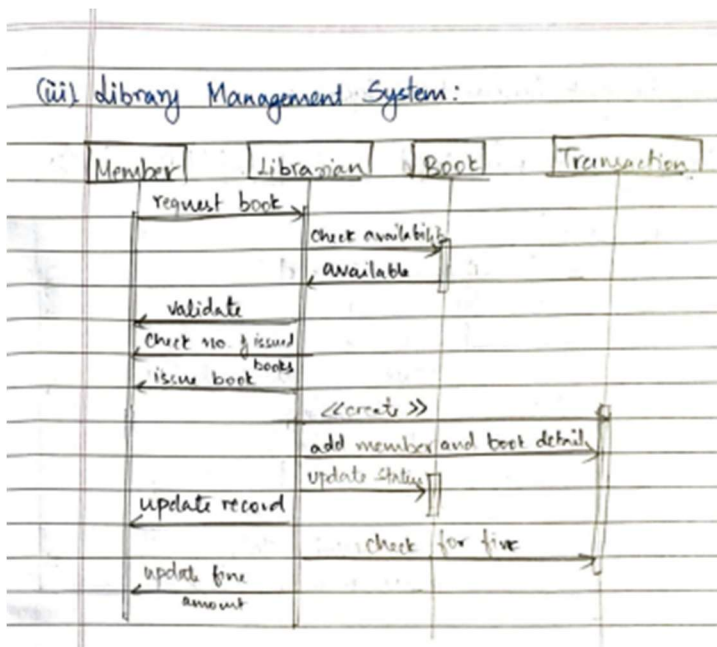
d. Use Case Diagram:



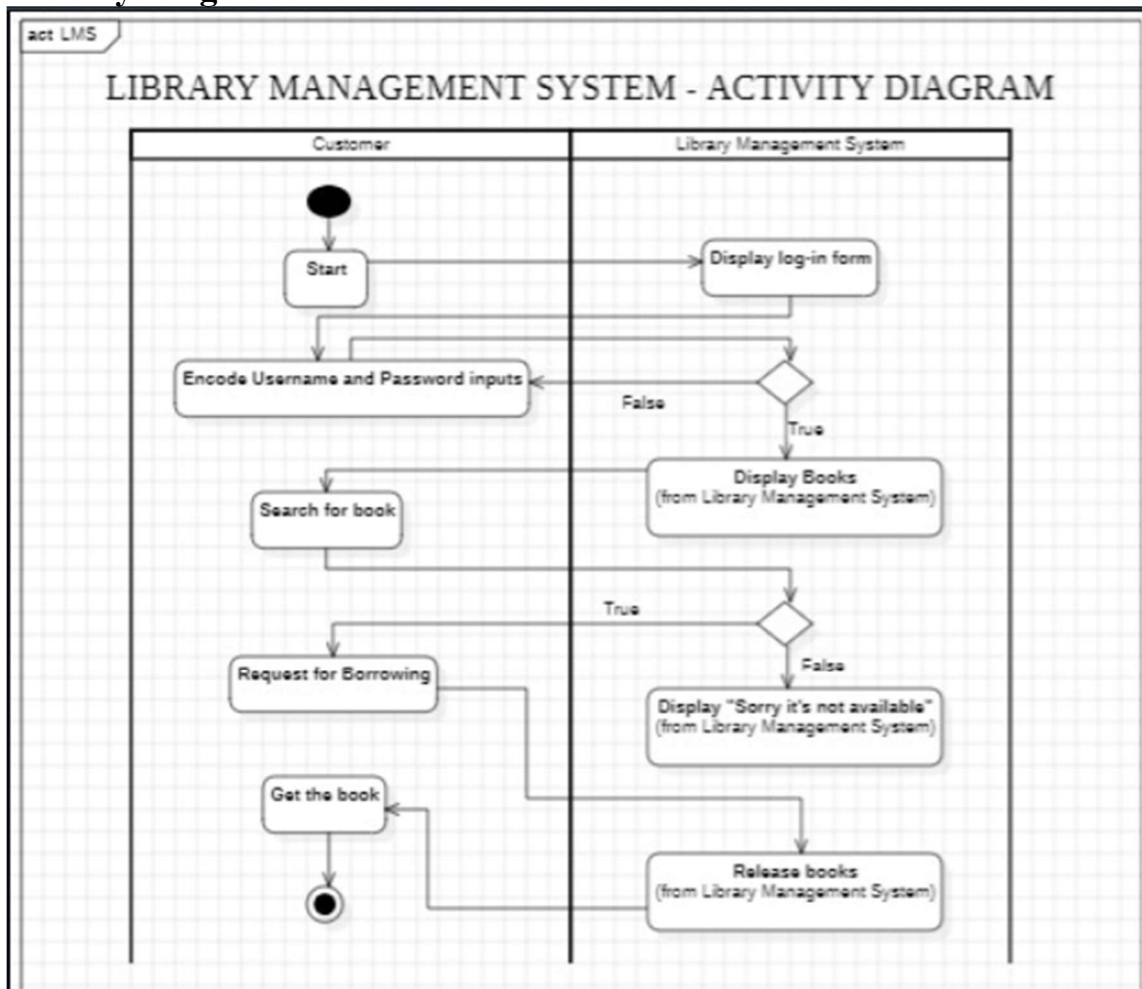


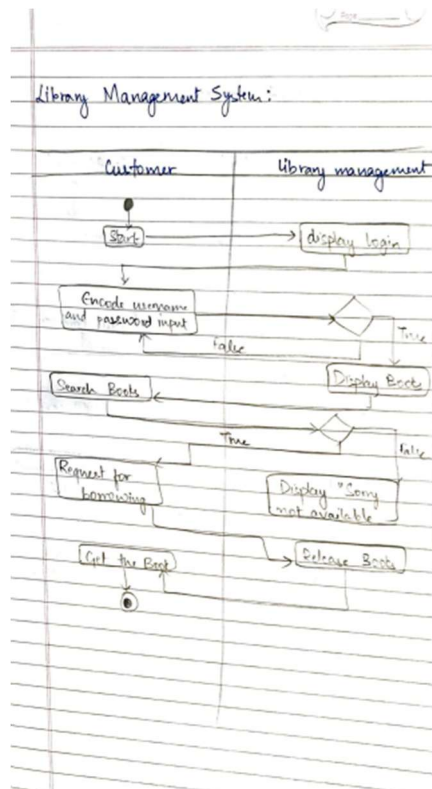
e. Sequence Diagram:





f. Activity Diagram:





3. Credit Card Management System

a. SRS Document:

Credit card processing System:

Introduction

1.1 Purpose of this Document

To provide insights on credit card processing system's requirements and attributes and budget.

1.2 Scope of this document

The document provides a comprehensive description of the CCP and it must be completed in 30 days.

1.3 Overview

The system allows business to accept credit card payment from customers.

General Description

Payment authorization: The customer should enter valid credentials.

Transaction submission: The site must securely connect with the respective bank status notification. The business site must be able to send sms to registered mobile.

Functional requirement

The credit card processing system must be implemented as shown and described in the general description.

Maintain record history.

Process multiple transaction for efficiency, authenticate transaction.

4. Interface requirement:

The payment authorization must have text field for every ~~one~~ detail of the credit card.

Transaction submission must have a simple buffering page.

Status notification must display a static page saying it has forwarded.

The interface must use React framework.

5. Performance Requirements

The system should not exceed 4 secs of response time and must be able to run response time on 8 gb and 256 gb ram and ram system.

6. Design constraints

The system must use only DES algorithm for detecting the valid users in the database and it must use only Node.js 11.5 version.

7. Non-functional Attributes

The system must work only on apple macos, it must be compatible for all macos versions and must use a DES encryption standard.

8. Preliminary Schedule and Budget

The project must be completed in 3 months of time and a total of \$500k dollars to be allotted to it.