

LIBRARY MANAGEMENT SYSTEM

SOFTWARE REQUIREMENTS SPECIFICATION

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Title: SOFTWARE REQUIREMENTS SPECIFICATION				
1. Introduction	1.1 Purpose of this Document : This document defines the requirements for a software system's functionality, serving as a guide for the development team.			
1.2 Scope of this Document : This document covers the functional, non-functional requirements of LMS, including design, system features and constraints. And also gives a overview of the project timeline and budgets estimated.	1.3 Overview : The LMS is a comprehensive software solution designed to streamline various operations like managing authorization, catalog management, department wise classification and so on.			
2. General Description :	2.1 User Objectives : The system will enable librarians to efficiently manage resources automatically, the check-in and borrow-out of catalog, generate report and Integrate seamlessly with existing systems.			
2.2 User Characteristics : The system will be used by different types of staff of library including students, teacher and so on. Therefore, it should provide a user-friendly interface for various characters.				
2.3 Features :				
o Booking Management : Allow users to borrow or cancel booking.				
o Publications : If new papers or journal to published, management of those stuffs.				
o Reporting and analyzing.				
2.4 Benefits : The system will overcome all type of traditional mode.				
3. Functional Requirements :				
o Membership management : Management of different categories of members.				
o Book Management : Management of books, if borrowed, returned or delayed.				
o Circulation Management : Based on book management, the circulation of book are managed.				
o Catalog management : Managing various types of books, journals, articles and so on.				

4. Interface Requirements :

4.1 User-Interface : Provides web-based UI accessible through both desktop and mobile.

5. Performance Requirements :

5.1 Booking processing speed ..

5.2 System availability ..

5.3 Reliability ..

6. Design Constraints :

6.1 Security compliance ..

6.2 Legal and Regulatory Requirements ..

7. Non-functional attributes:

7.1 Security ..

7.2 Reliability ..

7.3 Usability ..

7.4 Maintainability ..

8. Preliminary Schedule and Budget

8.1 Schedule : The project is estimated to take 5 months ;

o Requirements gathering (2 weeks)

o Design Phase (1 month)

o Development Phase (3 months)

o Testing phase (1 month)

o Deployment and Training (2 weeks)

o Post-deployment support (2 weeks)

8.2 Budget : The total estimated budget is \$ 150,000 ;

o Requirements gathering : \$ 15,000

o Design Phase : \$ 25,000

o Development Phase : \$ 80,000

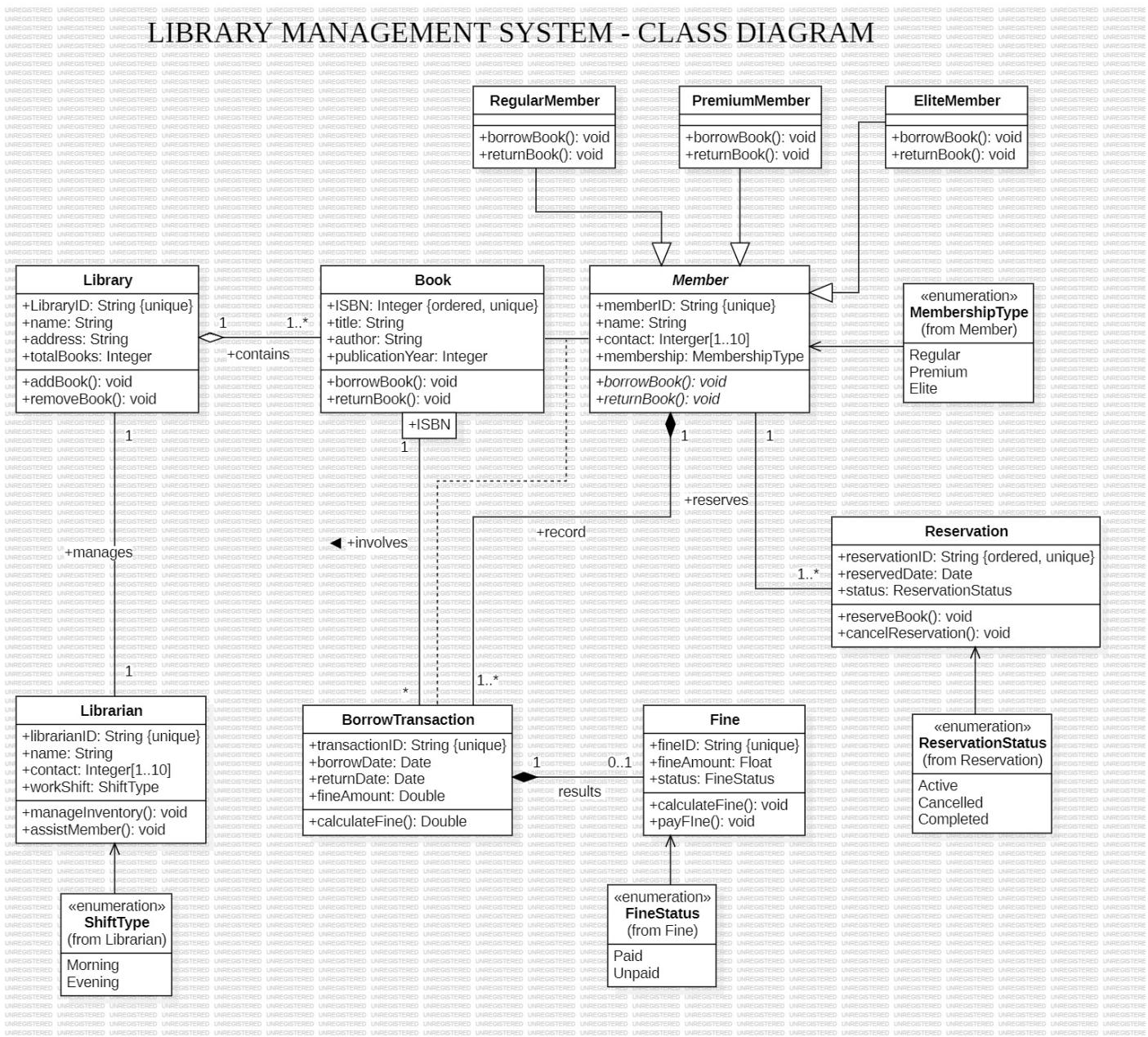
o Testing Phase : \$ 20,000

o Deployment and Training : \$ 7,500

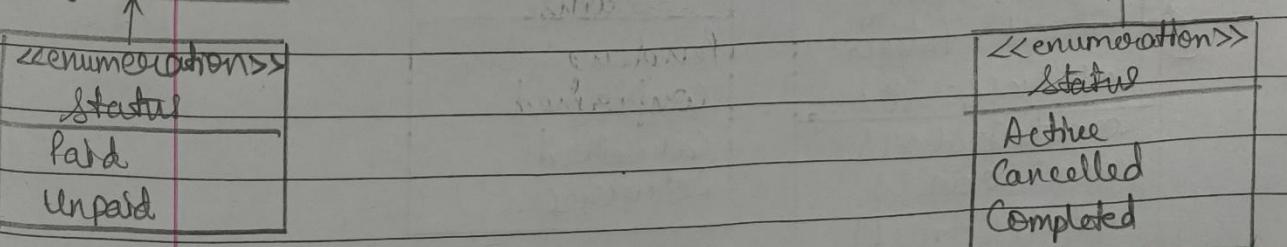
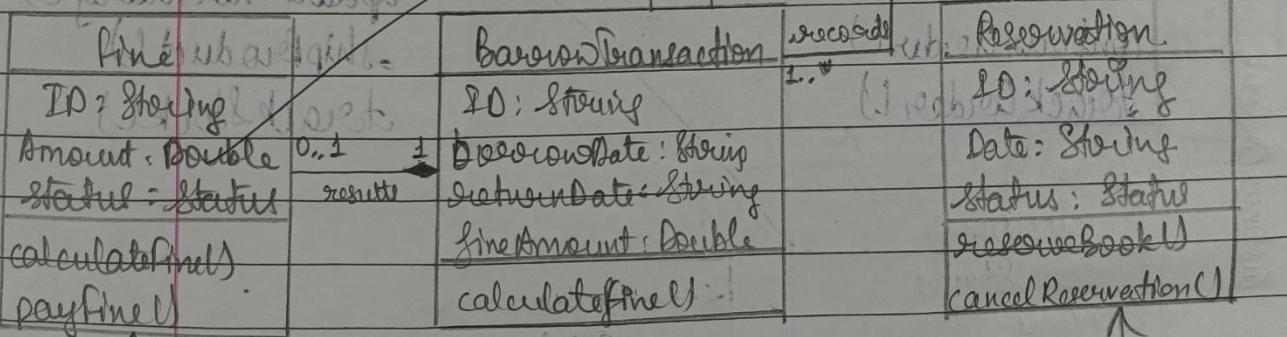
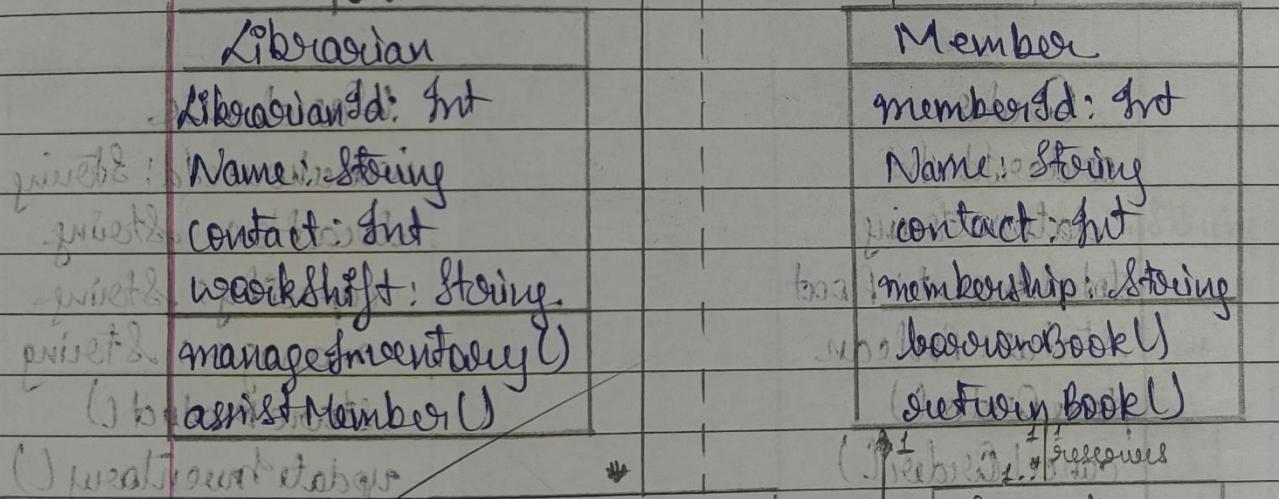
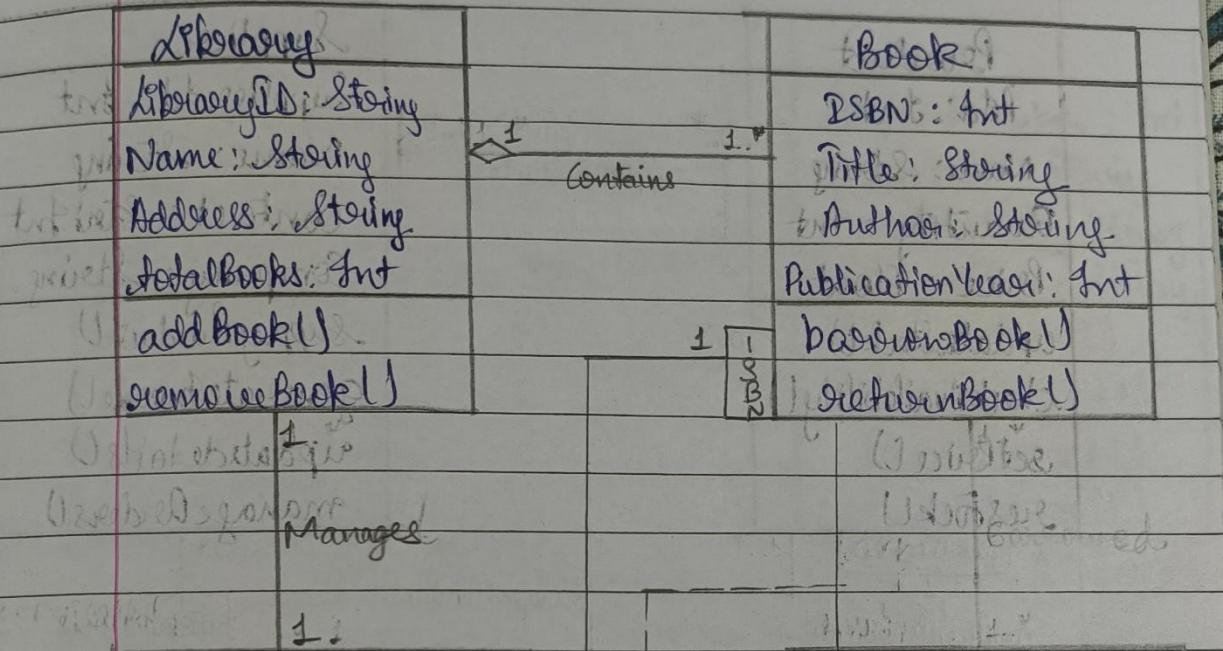
o Post-deployment support : \$ 2800

UML DIAGRAMS

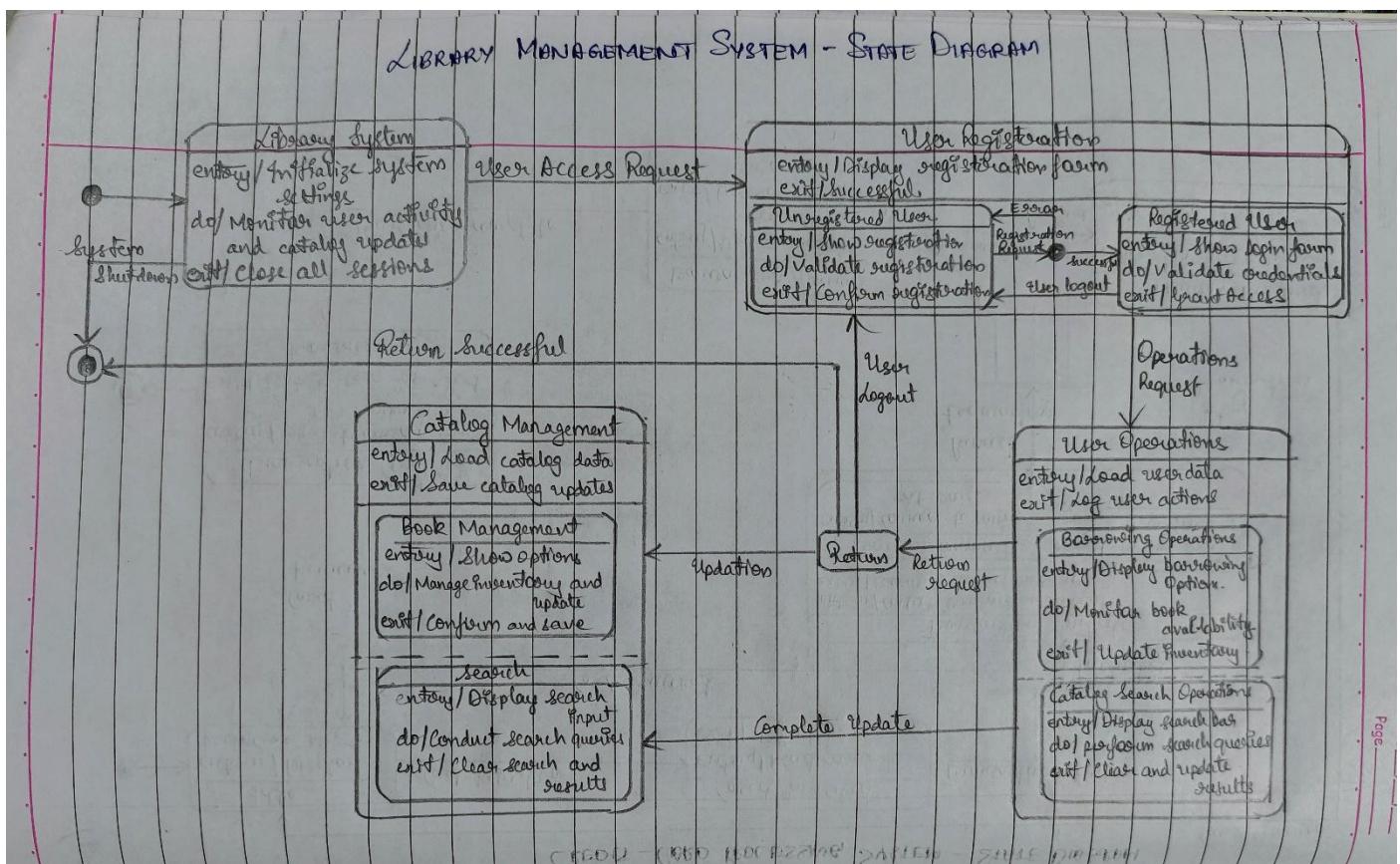
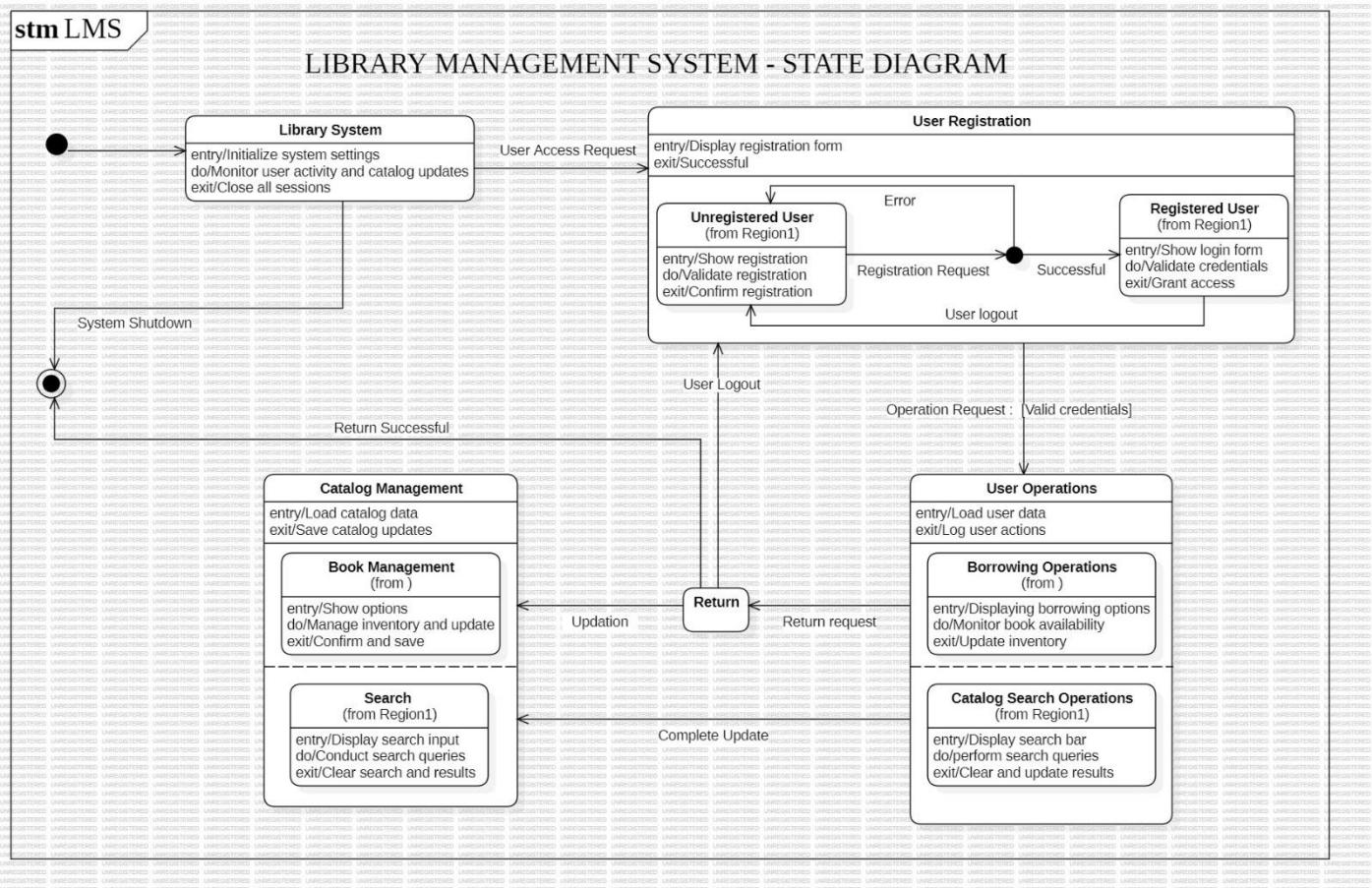
CLASS DIAGRAM



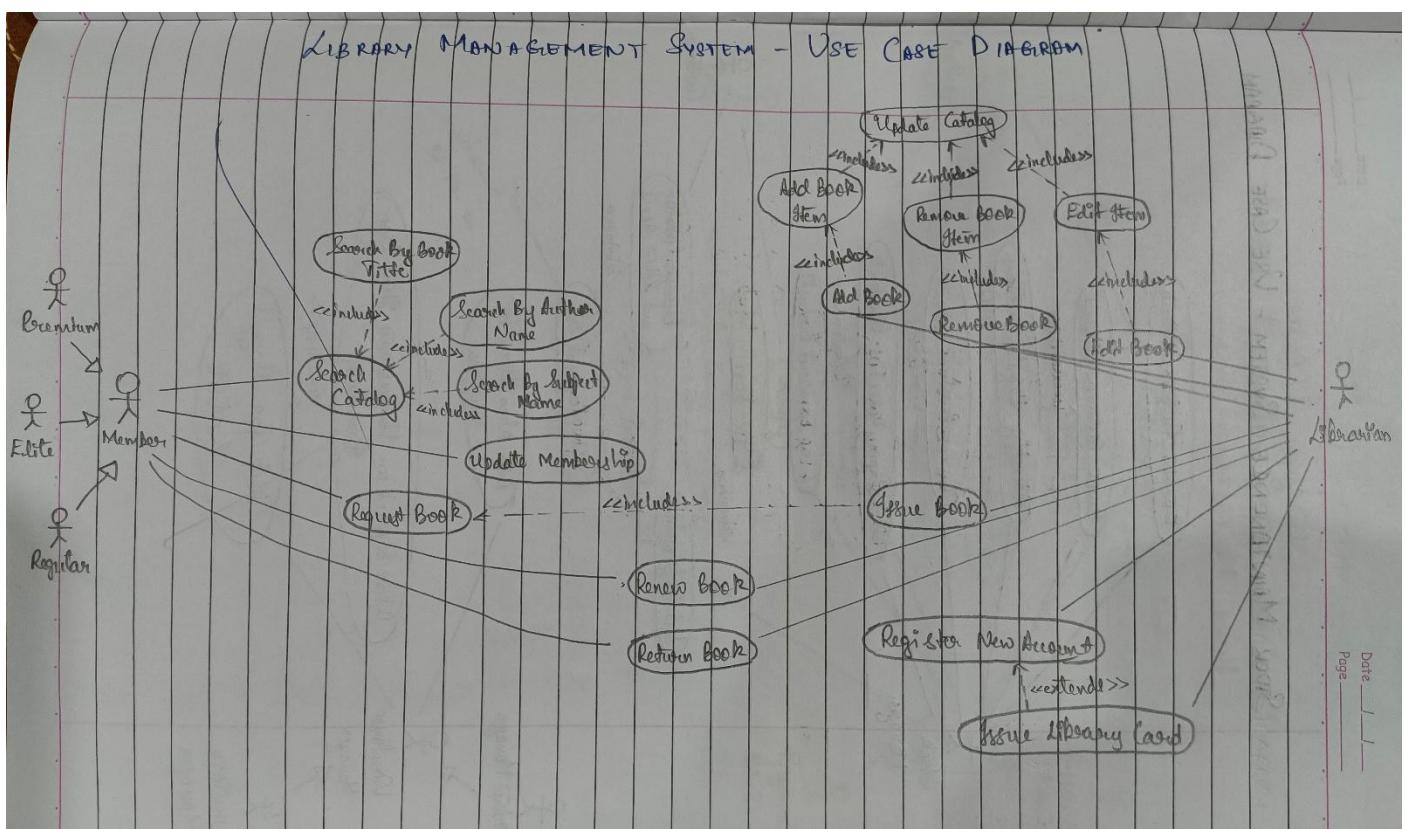
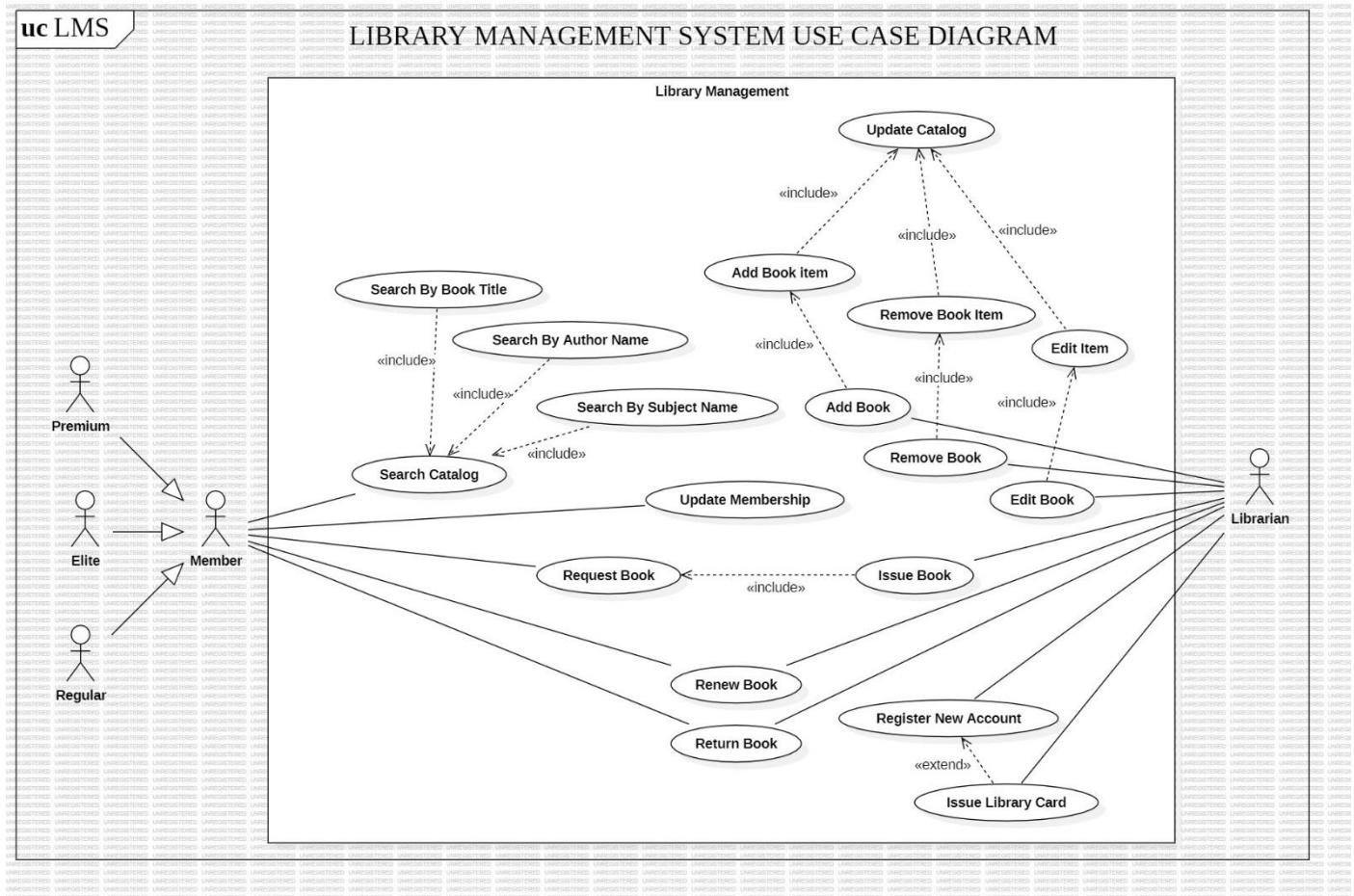
M3: LIBRARY MANAGEMENT SYSTEM



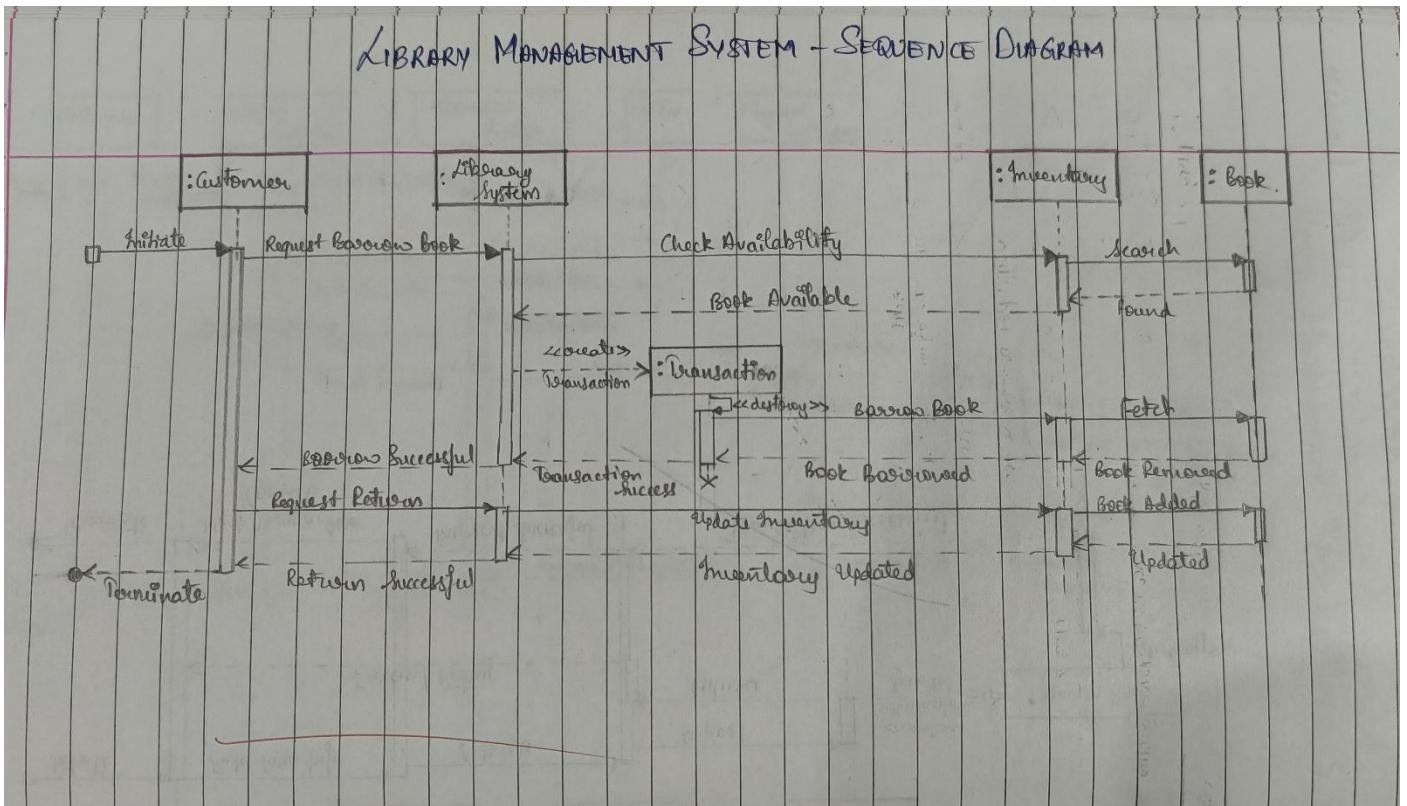
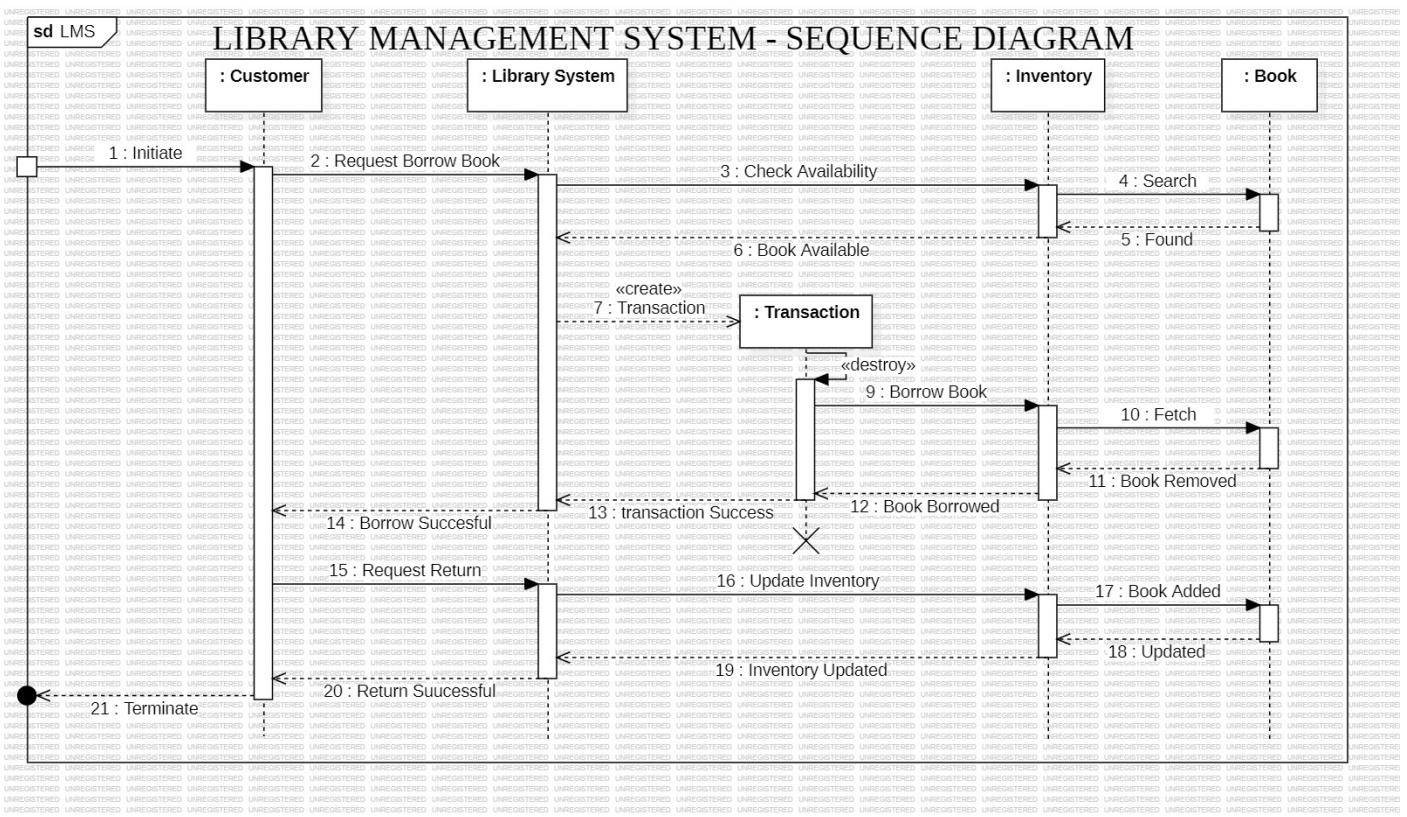
STATE DIAGRAM



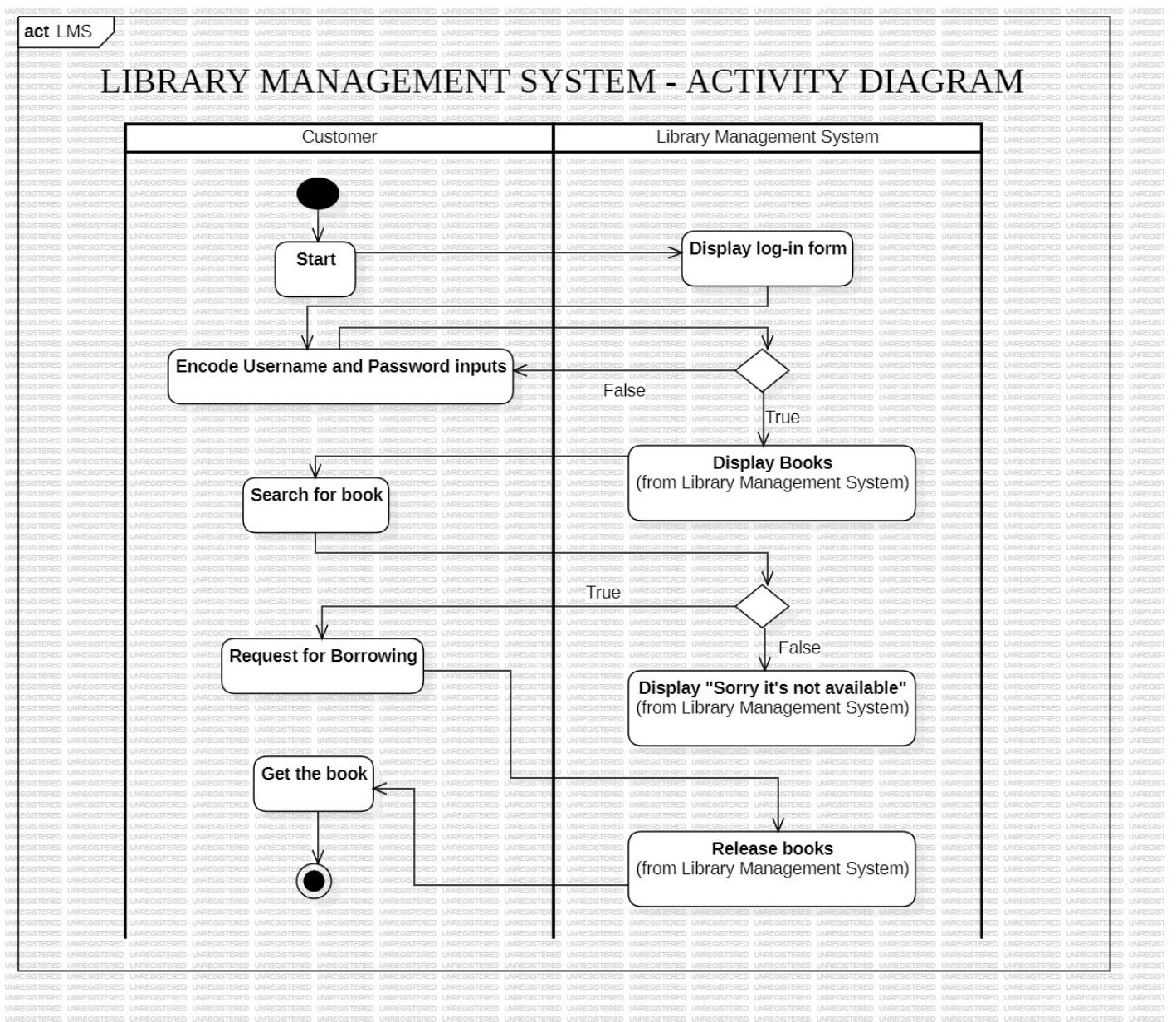
USE CASE DIAGRAM



SEQUENCE DIAGRAM



ACTIVITY DIAGRAM



LIBRARY MANAGEMENT SYSTEM - ACTIVITY DIAGRAM

