

Software Design Description

On

LIBRARY MANAGEMENT SYSTEM

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1. INTRODUCTION

1.1 PURPOSE

- The purpose of this project is to provide a friendly environment to maintain the details of books and library members.
- The main purpose of this project is to maintain easy circulation system using computers and to provide different reports.
- The Library System is a package to be used by Libraries to improve the efficiency of Librarians, Library employees and Users.
- The system provides books catalogue and information to members and helps them decide on the books to borrow from the library.
- The Librarian can keep the books catalogue updated all the time so that the members (students and the professors) get the updated information all the time.

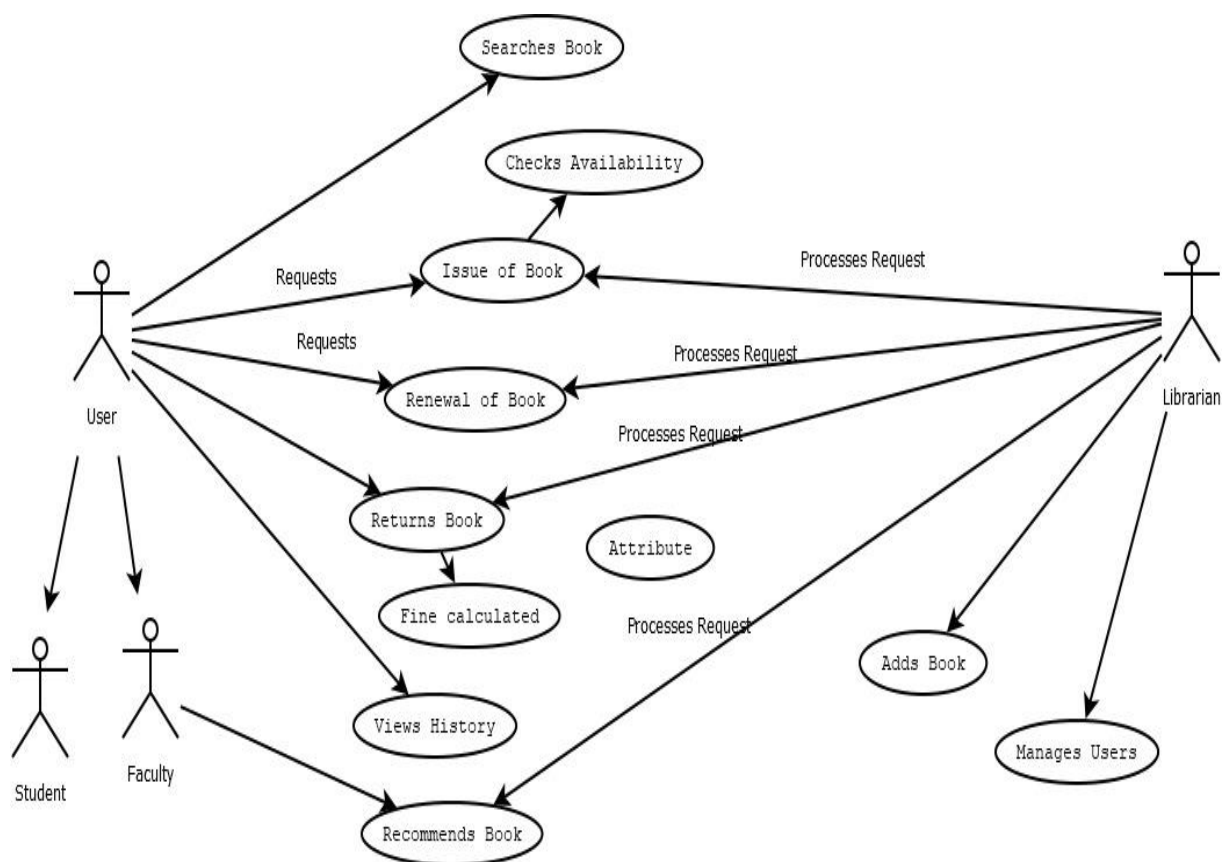
1.2 SCOPE

- The document only covers the requirements specifications for the Library Management System.
- This document does not provide any references to the other component of the Library Management System.
- All the external interfaces and the dependencies are also identified in this document.
- The overall scope of the feasibility study is to provide sufficient information to allow a decision to be made as to whether the Library Management System project should proceed and if so, its relative priority in the context of other existing Library Management Technology

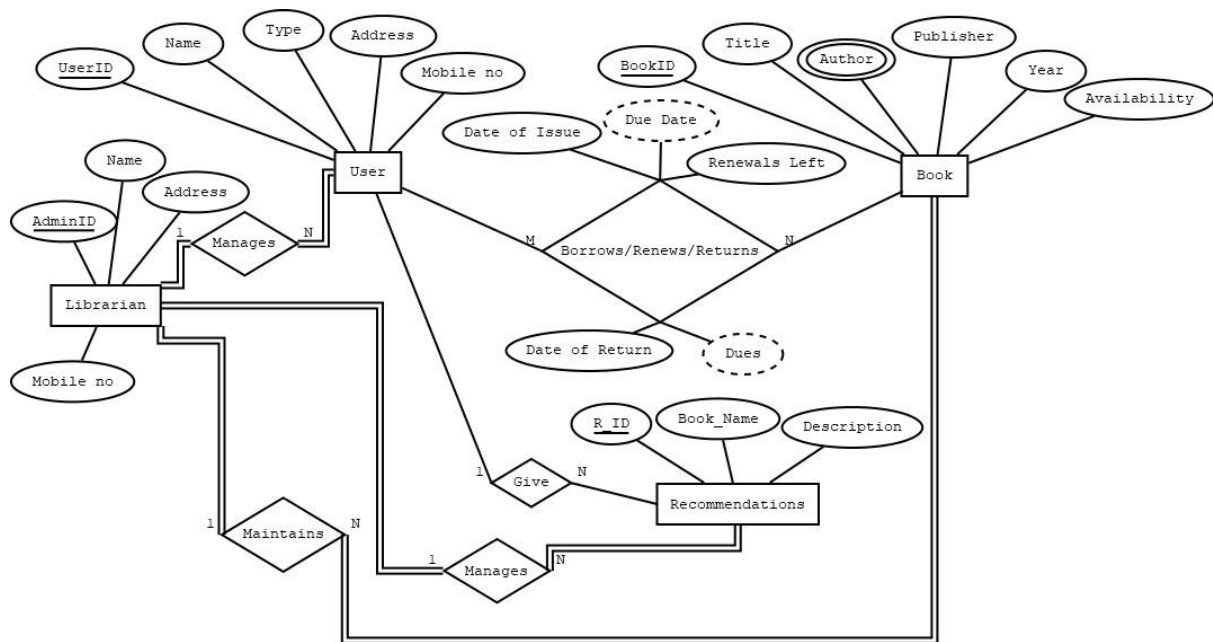
1.3 REFERENCES

- Fundamentals of Database System by Elmasri
- Fundamentals of Software Engineering by Rajib Mall

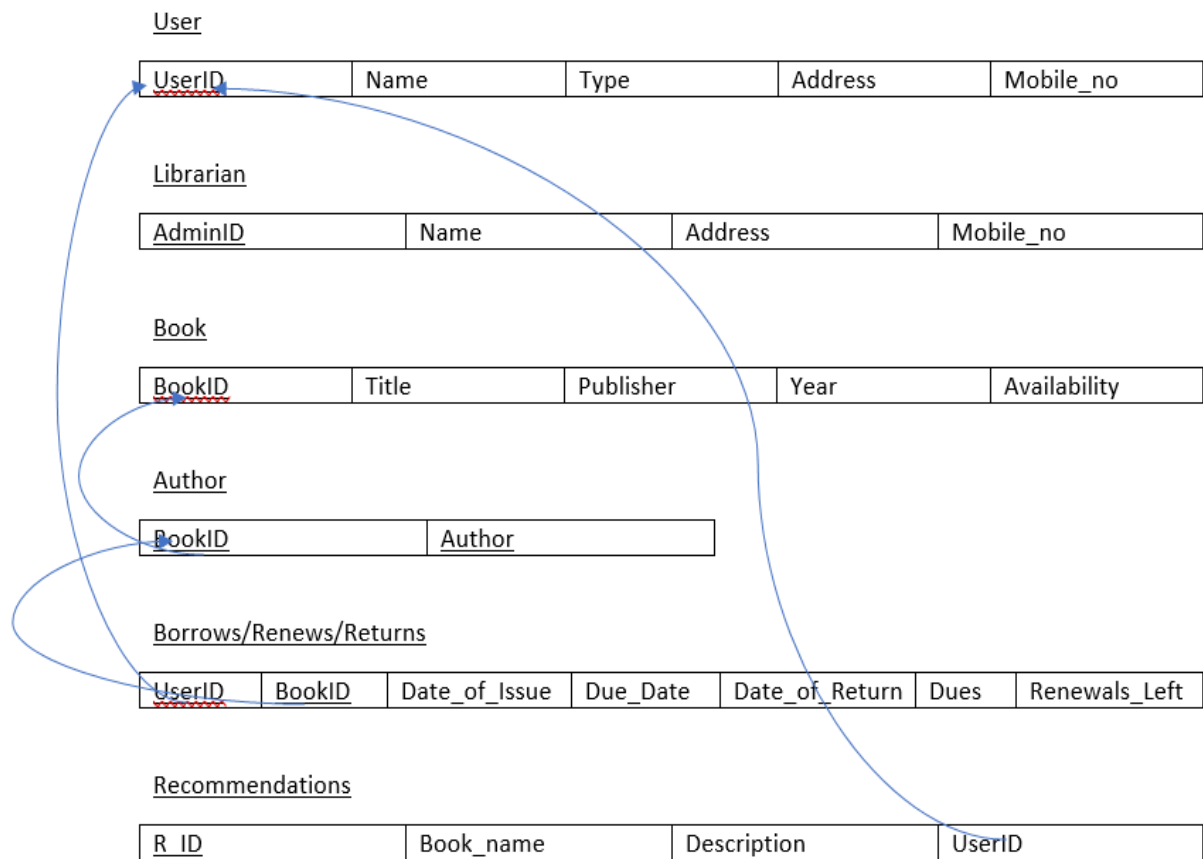
2. CONTROL FLOW DIAGRAM OF LIBRARY MANAGEMENT SYSTEM



3. ENTITY RELATIONSHIP DIAGRAM



4. ENTITY RELATIONSHIP MODEL



5. ENTITY DESCRIPTION

USER

Field	Data type	Default	Key
UserID	VARCHAR(20)	Not NULL	Primary key
Name	VARCHAR(255)	NULL	
Type	VARCHAR(255)	NULL	
Address	TEXT	NULL	
Mobile_no	CHAR(10)	NULL	

LIBRARIAN

Field	Data type	Default	Key
AdminID	VARCHAR(20)	Not NULL	Primary Key
Name	VARCHAR(255)	NULL	
Address	VARCHAR(255)	NULL	
Mobile_no	CHAR(10)	NULL	

BOOK

Field	Data type	Default	Key
BookID	VARCHAR(20)	Not NULL	Primary key
Title	VARCHAR(255)	NULL	
Publisher	VARCHAR(255)	NULL	
Year	YEAR(4)	0000	
Availability	TINYINT(100)	0	

AUTHOR

Field	Data type	Default	Key
BookID	VARCHAR(20)	Not NULL	Foreign key
Author	VARCHAR(20)	Not NULL	

BOOK RECORD

Field	Data type	Default	Key
UserID	VARCHAR(20)	Not NULL	Foreign Key
BookID	VARCHAR(20)	Not NULL	Foreign Key
Date_Of_Issue	DATE	1000-01-01	
Due_Date	DATE	1000-01-01	
Date_Of_Return	DATE	1000-01-01	
Dues	SMALLINT(10000)	0	
Renewals_Left	TINYINT(10)	0	

RECOMMENDATIONS

Field	Data type	Default	Key
R_ID	VARCHAR(20)	Not NULL	Primary Key
Book_Name	VARCHAR(255)	NULL	
Description	TEXT	NULL	
UserID	VARCHAR(20)	Not NULL	Foreign Key