

### 3.2 Schema and ER Diagram:

The description of database is called the database schema, which is specified during database design and is not expected to change frequently. Most data models have certain conventions for displaying schemas as diagrams. A displayed schema is called a schema diagram. The relationship between entities and attributes is given by the ER Diagram.

#### ER DIAGRAM:

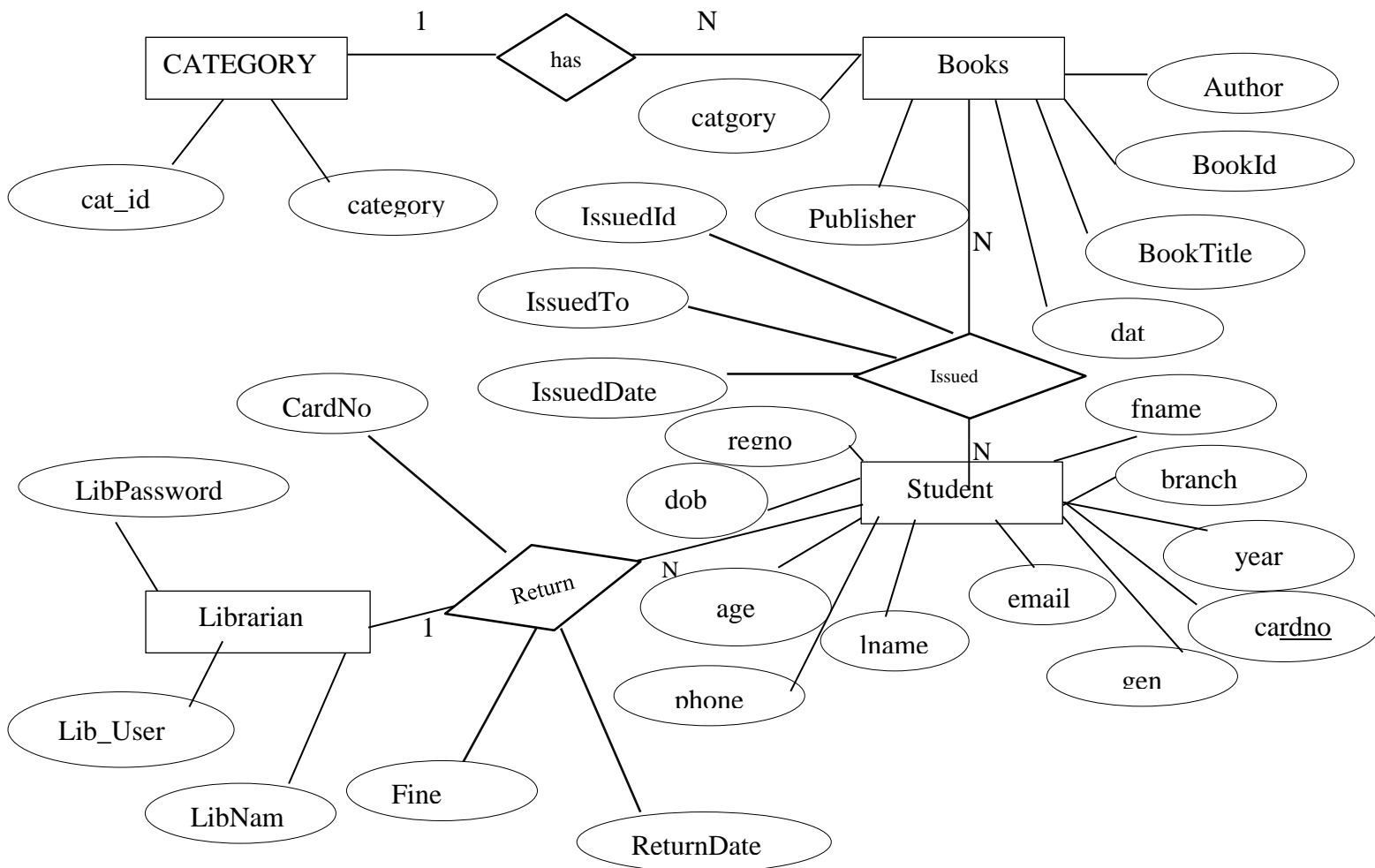


Fig.3.2: ER Diagram for Library Management System

**5.3 Tables:****Librarian:**

NAME	NULL?	TYPE
Lib_Name	Not null	Varchar(20)
Lib_UserName	Not null	Varchar(20)
Lib_Password	Not null	Varchar(20)

Table 3.3.1: Librarian**STUDENT:**

NAME	NULL?	TYPE
Card_No	Not null	Varchar(30)
FirstName	Not null	Varchar(30)
LastName	Not null	Varchar(30)
RegNo	Not null	Varchar(30)
Year	Not null	Varchar(30)
Branch	Not null	Varchar(30)
Gender	Not null	Varchar(30)
Age	Not null	Varchar(30)
Phone_No	Not null	Varchar(30)
DOB	Not null	Date
Email	Not null	Varchar(30)

Table 3.3.2: Student**BOOKS:**

NAME	NULL?	TYPE
Book_Id	Not null	Int(20)
Book_Title	Not null	Varchar(30)
Publisher	Not null	Varchar(30)
Author_Name	Not null	Varchar(30)
Category_Name	Not null	Varchar(30)
Quantity	Not null	Int(20)

Table 3.3.3: Books

**CATEGORY:**

NAME	NULL?	TYPE
Category_Id	Not null	Varchar(40)
Category_Name	Not null	Varchar(40)

Table 3.3.4: Category**ISSUED:**

NAME	NULL?	TYPE
IssuedId	Not null	int(30)
Card_No	Not null	Varchar(30)
Issued_Date	Not null	date
Issued_By	Not null	Varchar(30)
Issued_To	Not null	Varchar(30)
Issued_Book	Not null	Varchar(30)

Table 3.3.5: Issued**RETURN DETAILS:**

NAME	NULL?	TYPE
<u>Return_Id</u>	Not null	int(10)
ReturnBy	Not null	Varchar(30)
ReturnDate	Not null	Varchar(30)
ReturnBook	No null	date
Fine	Not null	int(10)

Table 3.3.6: Return Details

## 3.3 Relational Diagram:

