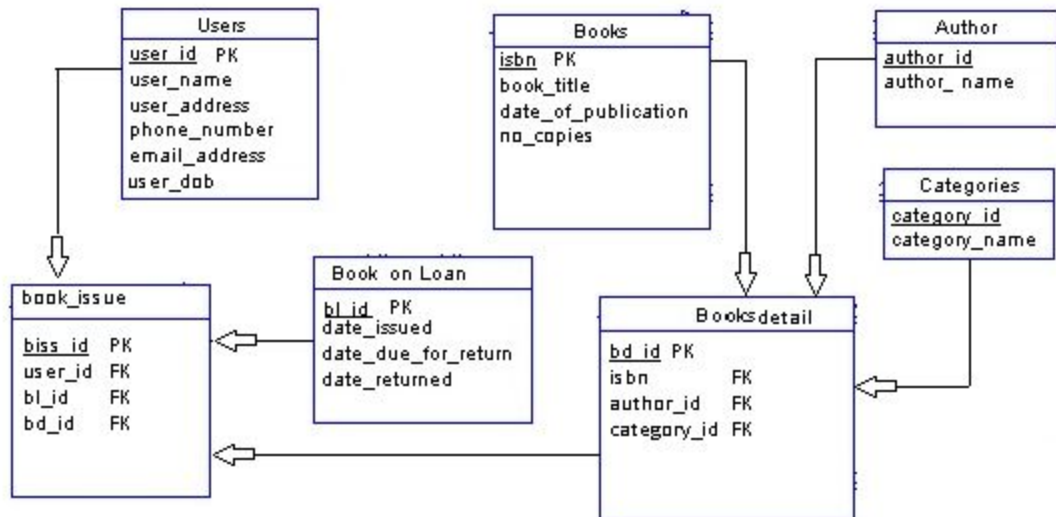# Conceptual Model of Library

Library Management

Group:- Ilavarasu, Shailendra, Shridhar

TABLE SCRIPTS

```
CREATE TABLE USER1
(       USER_ID     NUMBER(3) PRIMARY KEY,
        U_NAME      VARCHAR(20) NOT NULL,
        U_ADDRESS VARCHAR(20),
        EMAIL               VARCHAR(20) UNIQUE,
        PHONE       NUMBER(15),
        DOB         DATE,
        COUNTRY     VARCHAR(20) NOT NULL
);

INSERT INTO USER1
VALUES(100,'ILA','DELHI','ILA@GMAIL.COM',917829961666,'22-02-1995','INDIA');
INSERT INTO USER1
VALUES(101,'SHELLY','DELHI','SHELLY@GMAIL.COM',918505497895,'12-01-1996','INDIA');
INSERT INTO USER1
VALUES(102,'SHAILENDRA','BHOPAL','SHAILENDRA@GMAIL.COM',918806997895,'12-03-1
```

```
994','INDIA');
INSERT INTO USER1
VALUES(103,'SHRIDHAR','NOIDA','SHRIDHAR@GMAIL.COM',918516997895,'18-04-1997','IN
DIA');
INSERT INTO USER1
VALUES(104,'NAVEEN','CHENNAI','NAVEN@GMAIL.COM',918706997895,'23-05-1996','INDI
A');
INSERT INTO USER1
VALUES(105,'MIKE','DALLAS'','MIKE@GMAIL.COM',118506997235,'12-02-1990','USA');
INSERT INTO USER1
VALUES(106,'VOLGA','TEXAS','VOLGA@YAHOO.COM',118436997895,'26-07-1999','USA');
INSERT INTO USER1
VALUES(107,'ILA','DELHI','ILA@GMAIL.COM',918506997895,'12-02-1995','INDIA');
INSERT INTO USER1
VALUES(108,'BILL','NEWYORK','BILL@GMAIL.COM',91857866995,'30-08-1994','USA');
INSERT INTO USER1
VALUES(109,'SHAHBAZ','BANGALORE','SIDDESH@HOTMAIL.COM',918506997895,'20-02-1
992','INDIA');
INSERT INTO USER1
VALUES(110,'SIDDHESH','BANGALORE','SIDDHESH@GMAIL.COM',918506997895,'12-11-1
992','INDIA');
INSERT INTO USER1
VALUES(111,'MADHURI','TELANGANA','MADHURI@GMAIL.COM',918506997895,'12-02-199
5','INDIA');

CREATE TABLE BOOK_LOAN
(
        BL_ID              NUMBER(3) PRIMARY KEY,
        BOOKISUUE_DATE  DATE DEFAULT(SYSDATE),
        BOOK_DDATE        DATE,
        BOOK_RDATE        DATE
);

INSERT INTO BOOK_LOAN  VALUES(201,'20-MAR-2019','19-APR-2019','11-APR-2019');
INSERT INTO BOOK_LOAN  VALUES(202,'02-OCT-2019','01-NOV-2018','01-NOV-2018');
INSERT INTO BOOK_LOAN  VALUES(203,'15-JUN-2019','14-JUL-2019','20-MAR-2019');
INSERT INTO BOOK_LOAN  VALUES(204,'25-APR-2019','24-MAY-2019','20-MAY-2019');
INSERT INTO BOOK_LOAN  VALUES(205,'03-JUL-2019','02-AUG-2019','02-AUG-2019');
INSERT INTO BOOK_LOAN  VALUES(206,'20-MAR-2017','20-MAR-2017','20-MAR-2017');
INSERT INTO BOOK_LOAN  VALUES(207,'20-MAR-2018','20-MAR-2018','20-MAR-2018');
INSERT INTO BOOK_LOAN  VALUES(208,'20-JAN-2017','26-MAR-2017','20-MAR-2017');
INSERT INTO BOOK_LOAN  VALUES(209,'08-JAN-2018','04-MAR-2018','28-FEB-2017');
INSERT INTO BOOK_LOAN  VALUES(210,'08-JAN-2018','04-MAR-2018','28-FEB-2017');
```

```sql
INSERT INTO BOOK_LOAN  VALUES(211,'20-MAR-2016','19-APR-2016','11-APR-2016');
INSERT INTO BOOK_LOAN  VALUES(212,'02-OCT-2014','01-NOV-2014','01-NOV-2014');
INSERT INTO BOOK_LOAN  VALUES(213,'15-JUN-2012','14-JUL-2012','20-MAR-2012');
INSERT INTO BOOK_LOAN  VALUES(214,'25-APR-2015','24-MAY-2015','20-MAY-2015');
INSERT INTO BOOK_LOAN  VALUES(215,'03-JUL-2015','02-AUG-2015','02-AUG-2015');

CREATE TABLE BOOK
(
 BOOK_ID                NUMBER(3) PRIMARY KEY,
 BOOK_TITLE             VARCHAR2(30) NOT NULL,
 DATE_OF_PUBLICATION  DATE,
 NO_COPIES              NUMBER(3)
 );


INSERT ALL
   INTO BOOK  VALUES(100,'REVOLUTION 2020','20-MAR-2018',10)
   INTO BOOK  VALUES(101,'HIT REFRESH','23-DEC-2016',20)
   INTO BOOK  VALUES(102,'EXAM WARRIORS','30-MAR-2017',15)
   INTO BOOK  VALUES(103,'DREAMS FROM MY FATHER','17-JAN-2006',25)
   INTO BOOK  VALUES(104,'HALF-GIRLFRIEND','19-FEB-2015',25)
   INTO BOOK  VALUES(105,'UNIVERSE IN NUTSHELL','20-MAR-2015',10)
   INTO BOOK  VALUES(106,'THEORY OF RELATIVITY','20-MAR-2014',10)
   INTO BOOK  VALUES(107,'FILORY','04-MAR-2001',01)
   INTO BOOK  VALUES(108,'ESCAPE PLAN','20-SEP-2005',10)
   INTO BOOK  VALUES(109,'CODED LANGUAGE','15-JAN-2004',10)
   INTO BOOK  VALUES(110,'THE FUTURE','01-FEB-2010',10)
   INTO BOOK  VALUES(111,'BIBLE','',30)
   INTO BOOK  VALUES(112,'GEETA','',40)
   INTO BOOK  VALUES(113,'KURAN','',9)
SELECT * FROM DUAL;

CREATE TABLE AUTHOR (
AU_ID NUMBER(4) PRIMARY KEY,
AU_NAME VARCHAR2(20) );

INSERT ALL
   INTO AUTHOR VALUES(1000,'CHETAN BHAGAT')
   INTO AUTHOR VALUES(1001,'NARENDRA MODI')
   INTO AUTHOR VALUES(1002,'SATYA NADELLA')
   INTO AUTHOR VALUES(1003,'BARACK OBAMA')
   INTO AUTHOR VALUES(1004,'JK ROWLING')
   INTO AUTHOR VALUES(1005,'SHASHI THAROOR')
```

```sql
   INTO AUTHOR VALUES(1006,'STEPHEN HAWKING')
SELECT * FROM DUAL;


CREATE TABLE CATEGORIES
(
CATEGORY_ID        NUMBER(3) PRIMARY KEY,
CATEGORY_NAME   VARCHAR(20)
);

INSERT ALL
   INTO CATEGORIES VALUES(111,'Paranormal Romance')
   INTO CATEGORIES VALUES(112,'Prayer')
   INTO CATEGORIES VALUES(113,'Mystery')
   INTO CATEGORIES VALUES(114,'Memoir')
   INTO CATEGORIES VALUES(115,'Horror')
   INTO CATEGORIES VALUES(116,'Motivation')
   INTO CATEGORIES VALUES(117,'Biography')
   INTO CATEGORIES VALUES(118,'Fantasy')
SELECT * FROM DUAL;

drop table book_details;


CREATE TABLE BOOK_DETAILS(
BD_ID NUMBER(3) PRIMARY KEY,
BOOK_ID NUMBER(3) REFERENCES BOOK(BOOK_ID),
AU_ID NUMBER(4) REFERENCES AUTHOR(AU_ID) ,
CATEGORY_ID NUMBER(3) REFERENCES CATEGORIES(CATEGORY_ID));

DROP TABLE BOOK_DETAILS;

INSERT ALL
   INTO BOOK_DETAILS VALUES(1,100,1000,116)
   INTO BOOK_DETAILS VALUES(2,101,1002,117)
   INTO BOOK_DETAILS VALUES(3,102,1001,116)
   INTO BOOK_DETAILS VALUES(4,103,1003,117)
   INTO BOOK_DETAILS VALUES(5,104,1000,111)
   INTO BOOK_DETAILS VALUES(6,105,1000,113)
   INTO BOOK_DETAILS VALUES(7,106,1000,113)
   INTO BOOK_DETAILS VALUES(8,107,1000,115)
   INTO BOOK_DETAILS VALUES(9,108,1000,118)
   INTO BOOK_DETAILS VALUES(10,109,1000,118)
```

```
      INTO BOOK_DETAILS VALUES(11,110,1000,114)
      INTO BOOK_DETAILS VALUES(12,111,1000,112)
      INTO BOOK_DETAILS VALUES(13,112,1000,112)
      INTO BOOK_DETAILS VALUES(14,113,1000,112)
SELECT * FROM DUAL;


CREATE TABLE BOOK_ISSUE
(
      BI_ID        NUMBER(3) PRIMARY KEY,
      USER_ID      NUMBER(3) REFERENCES USER1(USER_ID),
      BL_ID        NUMBER(3) REFERENCES BOOK_LOAN(BL_ID),
      BD_ID        NUMBER(3) REFERENCES BOOK_DETAILS(BD_ID)
);



INSERT ALL
   INTO BOOK_ISSUE VALUES(500,100,201,5)
   INTO BOOK_ISSUE VALUES(501,100,202,12)
   INTO BOOK_ISSUE VALUES(502,100,203,6)
   INTO BOOK_ISSUE VALUES(503,100,204,11)
   INTO BOOK_ISSUE VALUES(504,100,205,8)
   INTO BOOK_ISSUE VALUES(505,100,206,1)
   INTO BOOK_ISSUE VALUES(506,100,207,2)
   INTO BOOK_ISSUE VALUES(507,100,208,10)
   INTO BOOK_ISSUE VALUES(508,102,209,3)
   INTO BOOK_ISSUE VALUES(509,103,210,4)
   INTO BOOK_ISSUE VALUES(510,104,211,5)
   INTO BOOK_ISSUE VALUES(511,105,212,7)
--    INTO BOOK_ISSUE VALUES(512,107,213,9)
   INTO BOOK_ISSUE VALUES(513,109,214,12)
   INTO BOOK_ISSUE VALUES(514,110,215,14)
SELECT * FROM DUAL;

COMMIT;
```

Questions

1. Write a query to display users who have books under category fantasy and author is not chetan bhagat.

2. Write a query to modify the column name user_address to user_city.

3. Write a query to display user name and maximum number of books in each category.

4. Write a query to display the youngest user who has books from the horror category.

5. Write a query to the user whose returned date was in the previous year and author name is 'JK Rowling'.

6. Write a query to display the book name which was issued in the previous month, but not in the current month staying in the same city.

7. Write a query to update the phone no. whose phone no. starting with 91 and belongs to USA then change it to 11.

8. Write a query to display user name author wise.

9. Write a query to display books name category wise which is more than 3.

10. Write a query to display books which are issued in the month before previous month and issued at least twice.

11. Write a query to update username whose name and user_name of email_id doesn't match and replace the name with user_name from email.

12. Write a query to display all the users who have a birthday in the 4th week of month and the issued book category is 'horror'.

13. Write a query to display users who have similar interests but it should be in sorted interest wise.

14. Write a query to display books whose publish date is within the previous 2 years and author name is 'BARACK OBAMA'.

15. Write a query to display books which were published before 'THE FUTURE' and after 'ESCAPE PLAN'.

16. Write a query to display user name and number of books in category.

17. Display the author_name who has his books present in more than one category.

18. Write a query to update the age column in the user table and update age of all.

19. Write a query to display book names who published year before last year and have the users present in both USA or INDIA and have the author 'STEPHEN HAWKING' or 'CHETAN BHAGAT'.

20. Write a query to display user names who have more than two vowels in their name as well as book names.

21.WQTD the user name who has studied from all categories of books.

22. Write a query to display the category name which book does not have a publication date.