**PROJECT**

**BOOKING CATALOG SYSTEM**

CREATE DATABASE PROJECTSQL;

USE PROJECTSQL;

CREATE TABLE Publishers (

publisher\_id INT PRIMARY KEY,

publisher\_name VARCHAR(50) NOT NULL

);

INSERT INTO Publishers VALUES(100,'Doubleday');

INSERT INTO Publishers VALUES(101,'Little, Brown and Company');

INSERT INTO Publishers VALUES(102,'Harper');

INSERT INTO Publishers VALUES(104,'HarperBusiness');

INSERT INTO Publishers VALUES(105,'Crown Business');

CREATE TABLE Categories (

category\_id INT PRIMARY KEY,

category\_name VARCHAR(50) UNIQUE NOT NULL

);

INSERT INTO Categories VALUES(11,'Fiction');

INSERT INTO Categories VALUES(12,'Fiction, Literary');

INSERT INTO Categories VALUES(13,'Non-Fiction, History');

INSERT INTO Categories VALUES(14,'Business, Management');

CREATE TABLE Users (

user\_id INT PRIMARY KEY,

user\_name VARCHAR(50) NOT NULL,

email VARCHAR(50) UNIQUE NOT NULL,

phone\_number BIGINT UNIQUE NOT NULL

);

INSERT INTO Users VALUES(1001,'Srikanth','abc@gmail.com',9277497575);

INSERT INTO Users VALUES(1002,'Sridevi','xyz@gmail.com',6277497565);

INSERT INTO Users VALUES(1003,'Karthik','dsp@gmail.com',8277497585);

CREATE TABLE Books (

book\_id INT PRIMARY KEY,

title VARCHAR(50) NOT NULL,

ISBN VARCHAR(50) UNIQUE NOT NULL,

publication\_year DATE NOT NULL,

publisher\_id INT,

category\_id INT,

auther\_name VARCHAR(50) CHECK(auther\_name IS NOT NULL),

FOREIGN KEY (publisher\_id) REFERENCES Publishers(publisher\_id) ON DELETE CASCADE,

FOREIGN KEY (category\_id) REFERENCES Categories(category\_id) ON DELETE CASCADE

);

INSERT INTO Books VALUES(1,'The Night Circus','9780385','2001-08-12',100,11,'Erin Morgenstern');

INSERT INTO Books VALUES(2,'The Goldfinch',9780316,'2002-08-12',101,13,'Donna Tartt');

INSERT INTO Books VALUES(3,'sapiens',9780067,'2003-08-17',102,12,'Yuval Noah Harari');

INSERT INTO Books VALUES(4,'Clean Code',9780132,'2008-03-18',104,12,'Robert C. Martin');

INSERT INTO Books VALUES(5,'The Lean Startup',9780307,'2007-04-21',105,14,'Eric Ries');

CREATE TABLE Borrowings (

borrow\_id INT PRIMARY KEY,

user\_id INT,

book\_id INT,

borrow\_date DATE NOT NULL,

return\_date DATE NOT NULL,

FOREIGN KEY(user\_id) REFERENCES users (user\_id) ON DELETE CASCADE,

FOREIGN KEY(book\_id) REFERENCES books (book\_id) ON DELETE CASCADE

);

INSERT INTO Borrowings VALUES(1832,1001,1,'2001-08-12','2001-08-18');

INSERT INTO Borrowings VALUES(1834,1002,2,'2004-07-23','2004-07-30');

INSERT INTO Borrowings VALUES(1836,1003,3,'2011-08-22','2011-09-12');

SELECT \*

FROM Books b

LEFT JOIN Publishers p ON b.publisher\_id = p.publisher\_id

LEFT JOIN Categories c ON b.category\_id = c.category\_id

LEFT JOIN Borrowings br ON b.book\_id = br.book\_id

LEFT JOIN Users u ON br.user\_id = u.user\_id

UNION

SELECT \*

FROM Books b

RIGHT JOIN Publishers p ON b.publisher\_id = p.publisher\_id

RIGHT JOIN Categories c ON b.category\_id = c.category\_id

RIGHT JOIN Borrowings br ON b.book\_id = br.book\_id

RIGHT JOIN Users u ON br.user\_id = u.user\_id;