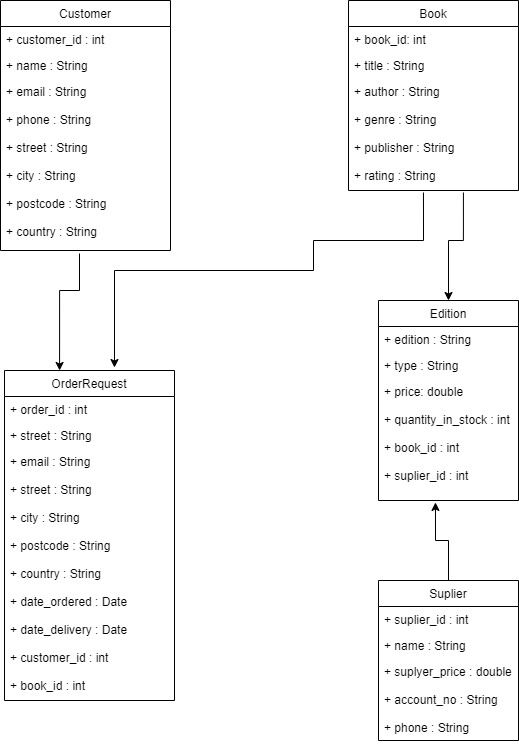
Database management with SQLite

Database Management Systems

1. Database Schema



1. SQLite database

Here we are creating the SQLite database

create table Customer(

customer\_id number primary key,

name varchar(20),

email varchar(20),

phone varchar(12),

street varchar(20),

city varchar(20),

postcode varchar(6),

country varchar(20)

);

In this Customer table customer\_id is **primary key**.

create table Book(

book\_id number primary key,

title varchar(20),

author varchar(20),

genre varchar(20),

publisher varchar(20),

rating varchar(20)

);

In this Book table book\_id is **primary key**.

create table OrderRequest(

order\_id number primary key,

street varchar(20),

city varchar(20),

postcode varchar(6),

country varchar(20),

date\_ordered date,

date\_delivered date,

customer\_id number,

book\_id number,

FOREIGN KEY (customer\_id) REFERENCES Customer(customer\_id),

FOREIGN KEY (book\_id) REFERENCES Book(book\_id)

);

In this OrderRequest table order\_id is **primary key** and customer\_id, book\_id are **Foreign Key**.

create table Suplier(

suplier\_id number primary key,

name varchar(20),

supplyer\_price number,

account\_no varchar(20),

phone varchar(12)

);

In this Suplier table suplier\_id is **primary key** .

create table Edition(

edition varchar(20),

type varchar(20),

price number,

quantity\_in\_stock number,

book\_id number,

suplier\_id number,

FOREIGN KEY (suplier\_id) REFERENCES Suplier(suplier\_id),

FOREIGN KEY (book\_id) REFERENCES Book(book\_id)

);

In this Edition table suplier\_id, book\_id are **Foreign Key**.

inserts data into tables

1. insert data into Suplier table.

insert into Suplier values (300,'aditya',280,'899899000','9098789098');

insert into Suplier values (301,'aditya',280,'899899000','9098789098');

insert into Suplier values (302,'aditya',280,'899899000','9098789098');

insert into Suplier values (303,'aditya',280,'899899000','9098789098');

insert into Suplier values (304,'aditya',280,'899899000','9098789098');

insert into Suplier values (305,'aditya',280,'899899000','9098789098');

insert into Suplier values (306,'aditya',280,'899899000','9098789098');

1. insert data into Suplier table.

insert into Customer values (1,'raj','abc@gmail.com','9090987656','sheohar','sheohar','843334','india');

insert into Customer values ( 2,'raju','abc@gmail.com','9090987656','sheohar','sheohar','843334','india');

insert into Customer values ( 3,'ram','abc@gmail.com','9090987656','sheohar','sheohar','843334','india');

insert into Customer values ( 4,'raman','abc@gmail.com','9090987656','sheohar','sheohar','843334','india' );

insert into Customer values ( 5,'shayam','abc@gmail.com','9090987656','sheohar','sheohar','843334','india' );

1. insert data into OrderRequest table.

insert into OrderRequest values (200,'sas','raipur','898767','india','jan 1 2009','jan 1 2009',1,100);

insert into OrderRequest values (201,'sas','raipur','898767','india','jan 1 2020','jan 5 2020',2,101);

insert into OrderRequest values (202,'sas','raipur','898767','india','may 1 2020','may 5 2020',3,102);

insert into OrderRequest values (203,'sas','raipur','898767','india','april 1 2020','april 6 2020',4,103);

insert into OrderRequest values (204,'sas','raipur','898767','india','feb 5 2020','feb 10 2020',5,104);

insert into OrderRequest values (205,'sas','raipur','898767','india','jan 10 2020','jan 15 2020',6,105);

1. insert data into Book table.

insert into Book values (100,'math','r.s.aggarwal','Science and Technology','Ultimate Books','4');

insert into Book values (101,'physics','gosdd','Science and Technology','Ultimate Books','4');

insert into Book values (102,'c','hsdf','Science and Technology','Ultimate Books','4');

insert into Book values (103,'chemistry','r.s.aggarwal','Science and Technology','Ultimate Books','4');

insert into Book values (104,'cpp','raman','Science and Technology','Ultimate Books','4');

insert into Book values (105,'java','gosling','Science and Technology','Ultimate Books','4');

1. insert data into Book table.

insert into Edition values ('2005','math',304,10,100,300);

insert into Edition values ('2004','physics',35,10,101,301);

insert into Edition values ('2005','chemistry',304,14,102,302);

insert into Edition values ('2003','c',302,5,103,303);

insert into Edition values ('2005','cpp',354,4,104,304);

insert into Edition values ('2008','java',234,10,105,305);

1. SQL Data Manipulation

1. List all books published by “Ultimate Books” which are in the “Science and Technology” genre;

Query:- select \* from book where publisher='Ultimate Books' AND genre='Science and Technology';

2. List all orders placed by customers with addresses in the city of Edinburgh, since 2016, in order of date, latest first;

Query:- select \* from customer where city='Edinburgh' AND customer\_id in (select customer\_id from OrderRequest where date\_ordered>=2016);

3. List all book editions which have less than 5 items in stock, together with the name, account number and supply price of the minimum priced supplier for that edition.

Query:- select edition,name,supplyer\_price,account\_no from Suplier INNER JOIN Edition Where Suplier.suplier\_id=Edition.suplier\_id;