**Ticket Booking System**

Task 1:

1. **Create the database ‘TicketBookingSystem’**

create database TicketBookingSystem;

1. **Write SQL scripts to create the mentioned tables with appropriate data types, constraints, and relationships.**

• **Venue**

**• Event**

**• Customers**

**• Booking**

**ANSWERS:**

• **Venue**

Create table Venue\_Tables (venue\_id int , venue\_name varchar(20) , address varchar(200));

alter table Venue\_Tables add constraint Tables\_venueid\_pk PRIMARY KEY (venue\_id);

desc Venue\_Tables;

+------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+------------+--------------+------+-----+---------+-------+

| venue\_id | int | NO | PRI | NULL | |

| venue\_name | varchar(20) | YES | | NULL | |

| address | varchar(200) | YES | | NULL | |

+------------+--------------+------+-----+---------+-------+

**• Event**

create table Event\_Table(event\_id int , event\_name varchar(30) , event\_date DATE , event\_time TIME , venue\_id int REFERENCES Venue\_Tables(venue\_id) , total\_seats int , available\_seats int , ticket\_price DECIMAL(10,2) , event\_type enum('Movie' , 'Sports' , 'Concert') , booking\_id int);

**• Customers**

create table Event\_Table(event\_id int , event\_name varchar(30) , event\_date DATE , event\_time TIME , venue\_id int , total\_seats int , available\_seats int , ticket\_price DECIMAL(10,2) , event\_type enum('Movie' , 'Sports' , 'Concert') , booking\_id int, CONSTRAINT Eventtable\_eventid\_pk PRIMARY KEY (event\_id));

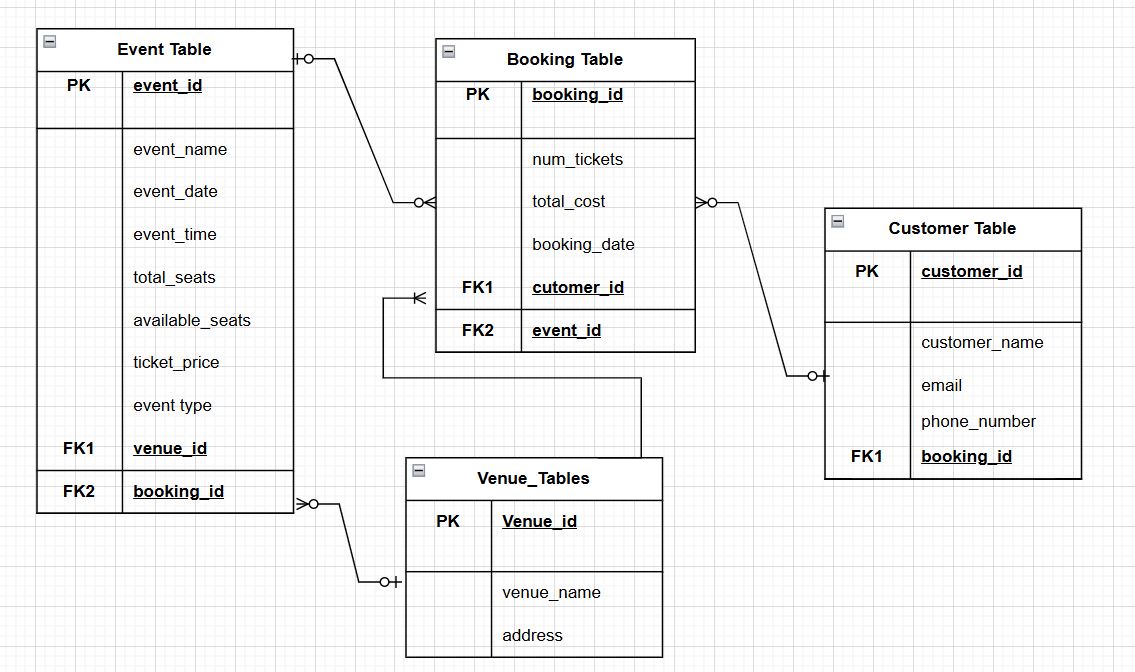
**• Customers**

create table Customer\_Table(customer\_id int , customer\_name varchar(20) , email varchar(200) , phone\_number int(15) , booking\_id int, CONSTRAINT customertable\_cid\_pk PRIMARY KEY (customer\_id) );

**• Booking**

create table Booking\_Table(booking\_id int , customer\_id int , event\_id int , num\_tickets int , total\_cost DECIMAL(10,2) , boking\_date DATE , CONSTRAINT bookingid\_pk PRIMARY KEY (booking\_id));

1. **Create an ERD (Entity Relationship Diagram) for the database.**

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1. **Create appropriate Primary Key and Foreign Key constraints for referential integrity.**

**Adding foreign key to the tables.**

**• Event\_Tables**

1.alter table Event\_Table add constraint eventtable\_eventid\_pk primary key (event\_id);

2.alter table Event\_Table add constraint venueid\_fk FOREIGN KEY (venue\_id) references Venue\_Tables(venue\_id);

3.alter table Event\_Table add constraint custable\_bid\_fk FOREIGN KEY (booking\_id) references Booking\_Table(booking\_id);

4.desc Event\_Table;

+-----------------+----------------------------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-----------------+----------------------------------+------+-----+---------+-------+

| event\_id | int | NO | PRI | NULL | |

| event\_name | varchar(30) | YES | | NULL | |

| event\_date | date | YES | | NULL | |

| event\_time | time | YES | | NULL | |

| venue\_id | int | YES | MUL | NULL | |

| total\_seats | int | YES | | NULL | |

| available\_seats | int | YES | | NULL | |

| ticket\_price | decimal(10,2) | YES | | NULL | |

| event\_type | enum('Movie','Sports','Concert') | YES | | NULL | |

| booking\_id | int | YES | MUL | NULL | |

+-----------------+----------------------------------+------+-----+---------+-------+

**• Customers\_Table:**

1.alter table Customer\_Table add CONSTRAINT bookingid\_fk FOREIGN KEY (booking\_id) references Booking\_Table(booking\_id);

2.desc Customer\_Table;

+---------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+---------------+--------------+------+-----+---------+-------+

| customer\_id | int | NO | PRI | NULL | |

| customer\_name | varchar(20) | YES | | NULL | |

| email | varchar(200) | YES | | NULL | |

| phone\_number | int | YES | | NULL | |

| booking\_id | int | YES | MUL | NULL | |

+---------------+--------------+------+-----+---------+-------+

**• Booking\_Table:**

1.alter table Booking\_Table add CONSTRAINT bookingtable\_cid\_fk FOREIGN KEY (customer\_id) references Customer\_Table(customer\_id);

2.alter table Booking\_Table add CONSTRAINT bookingtable\_eid\_fk FOREIGN KEY (event\_id) references Event\_Table(event\_id);

3.desc Booking\_Table;

+-------------+---------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------------+---------------+------+-----+---------+-------+

| booking\_id | int | NO | PRI | NULL | |

| customer\_id | int | YES | MUL | NULL | |

| event\_id | int | YES | MUL | NULL | |

| num\_tickets | int | YES | | NULL | |

| total\_cost | decimal(10,2) | YES | | NULL | |

| boking\_date | date | YES | | NULL | |

+-------------+---------------+------+-----+---------+-------+

**5.To insert all the values in the table**

**Venue\_Tables:**

insert into Venue\_Tables(venue\_id, venue\_name, address) values (1 , 'Theatre Arena' , ' chennai') , (2 , 'Silver Screen' , 'chennai') , (3 , 'Movie magic' , 'chennai') , (4 ,'Music Venue' , 'chennai') , (5 , 'sound stage' , 'chennai' ) , (6 , 'Classic Fusion' , 'chennai') , (7 , 'Game Stadium' , 'chennai') , (8 , 'Sports Venue' , 'chennai') , (9 , 'playground Arena' , 'chennai') , (10, 'champion field' , 'chennai');

**Event\_Table:**

insert into Event\_Table values ( 201 , 'Avengers The End Game' ,'2025-03-02' , '09:00:00' , 1 , 300 , 300 , 200 , 'Movie' , null) , (203 , 'Fault in our stars' ,'2025-03-05' , '09:00:00' ,3, 200 ,200, 250 , 'Movie' , null) , (204 , 'Folk' , '2025-03-06' , '10:00:00' , 4 , 400 , 400 , 150 , 'Concert' , null ) ,(205 , 'Melody Evening' , '2025-03-08' , '17:00:00' , 5 , 300 , 300 , 250 , 'Concert' , null) , (206 , 'Rythm Party' , '2025-03-09' , '16:00:00' , 6 , 250 , 250 , 150 , 'Concert',null ) , (207 , 'Basket Ball' , '2025-03-08' , '13:00:00' , 7 , 400 , 400, 350 , 'Sports',null ), (208 , 'Fun Run Challenge' , '2025-03-09' , '13:00:00' , 8 , 500 , 500, 300, 'Sports' , null ) , (209 , 'Cricket' , '2025-03-10' , '13:00:00' , 9 , 1000 , 100, 600, 'Sports' , null ) , (210 , 'Football' , '2025-03-11' , '10:00:00' , 10 , 500 , 500, 300, 'Sports' , null);

**Customer\_Table:**

insert Customer\_Table values (301 , 'priya' , 'priya12@gamil.com' , 34556780, null ), (302 , 'preethi' , 'preethi12@gamil.com' , 34556450,null) , (303, 'ram' , 'ram12@gamil.com' , 3458975,null) , (304 , 'raghul' ,' raghul23@gmail.com' , 4568975,null) ,(305 , 'raj' ,' rajl23@gmail.com' , 4568764,null),(306 , 'ramya' ,' ramya233@gmail.com' , 2345987,null) , (307 , 'anjali' ,' anjali3@gmail.com' , 3455782,null),(308 , 'harish' ,' harish33@gmail.com' , 558462076,null) , (309 , 'arjun' ,' arjun3@gmail.com' , 54638262,null), (310 , 'ramesh' ,' ramesh33@gmail.com' , 5584658,null);

**Booking\_Table:**

insert into BOOKING\_Table values (401 , 301 , 201 , 1 ,1000, '2025-02-20') , (402 , 302 , 202 , 2 , 4000, '2025-02-21'), (403 , 303 , 203 , 3 , 12000 , '2025-02-21') , (404 , 304 , 204 , 1 , 6000 , '2025-02-21') , (405 , 305 , 205 , 4 , 6000, '2025-02-22') , (406 , 306 , 206 , 2 , 6000 , '2025-02-23') , (407 , 307 , 207 , 1 , 2500 , '2025-02-26') , (408 , 308 , 208 , 5 , 17500 , '2025-02-28') , (409 , 309 , 209 , 1 ,500 , '2025-02-28') , (410 , 310 , 210 , 2 , 9000, '2025-02-27');

update Event\_Table set booking\_id = case when event\_id = 201 then 401 when event\_id = 202 then 402 when event\_id = 203 then 403 when event\_id = 204 then 404 when event\_id = 205 then 405 when event\_id = 206 then 406 when event\_id = 207 then 407 when event\_id = 208 then 408 when event\_id = 209 then 409 when event\_id = 210 then 410 else booking\_id end where booking\_id is null;

update Customer\_Table set booking\_id = case when customer\_id = 301 then 401 when customer\_id = 302 then 402 when customer\_id = 303 then 403 when customer\_id = 304 then 404 when customer\_id = 305 then 405 when customer\_id = 306 then 406 when customer\_id = 307 then 407 when customer\_id = 308 then 408 when customer\_id = 309 then 409 when customer\_id = 310 then 410 else booking\_id end where booking\_id is null;