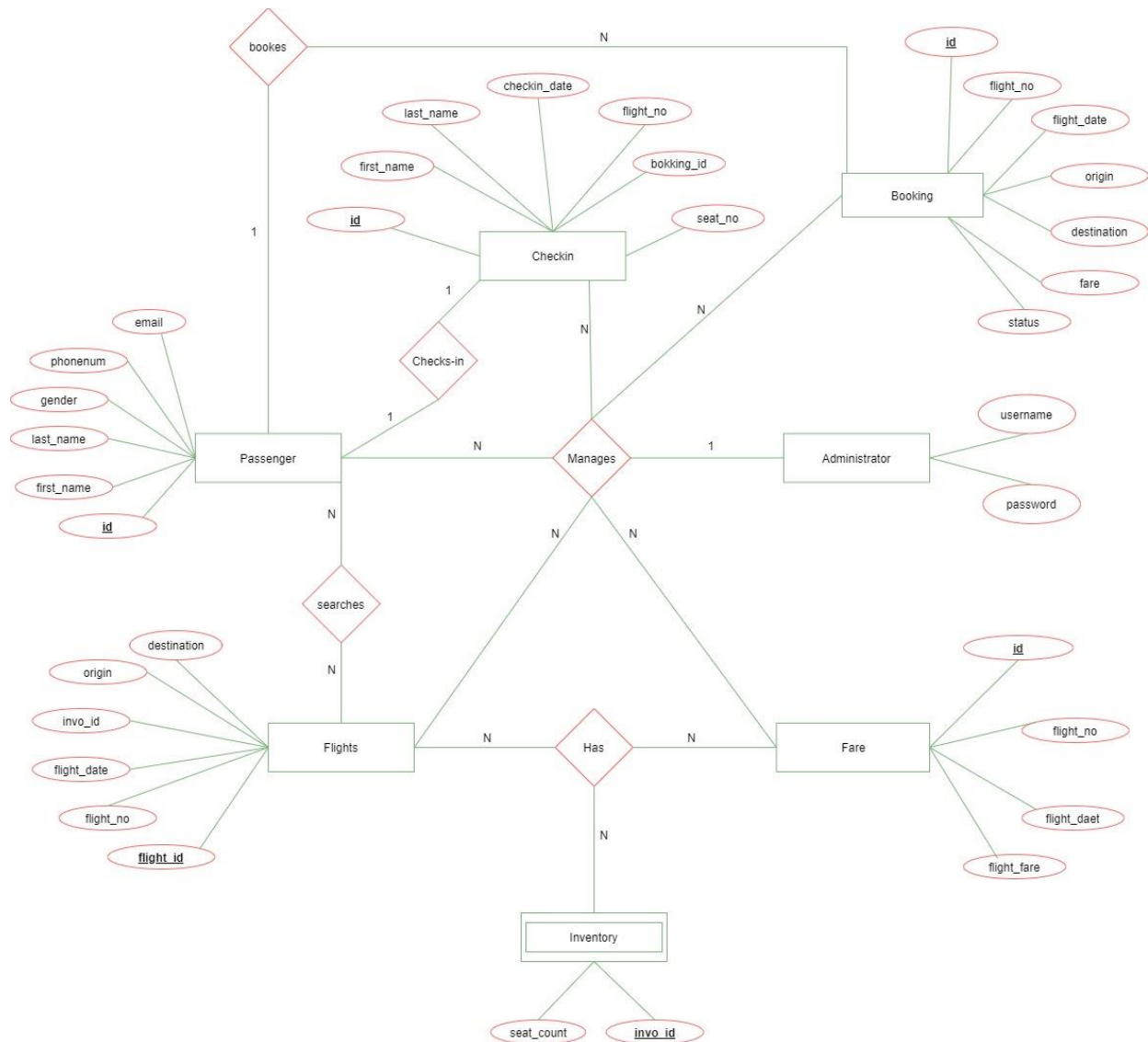


AIRLINE RESERVATION SCHEMA

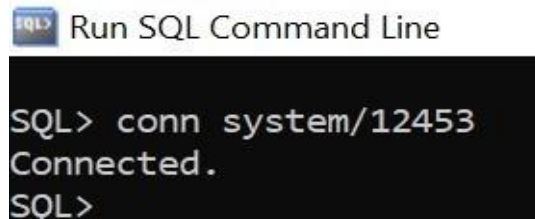
ER DIAGRAM:



CREATING FARE SCHEMA

1) CONNECTING TO THE DATABASE :->

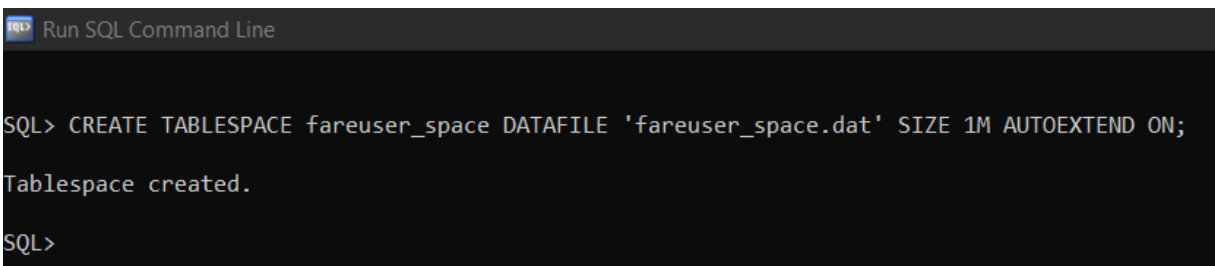
While connecting to the database you have to provide your credentials. And the command for connecting the database is, “conn username/password”.

A screenshot of a 'Run SQL Command Line' window. The window has a title bar with an 'SQL' icon and the text 'Run SQL Command Line'. The main area is a black terminal with white text. It shows the prompt 'SQL>' followed by the command 'conn system/12453', the response 'Connected.', and another 'SQL>' prompt.

```
SQL> conn system/12453
Connected.
SQL>
```

2) CREATING TABLESPACES :->

Here we are creating a TABLESPACE. These are used for dividing a single table data to multiple locations, so that in data loss we don't loss all of the data.

A screenshot of a 'Run SQL Command Line' window. The window has a title bar with an 'SQL' icon and the text 'Run SQL Command Line'. The main area is a black terminal with white text. It shows the prompt 'SQL>' followed by the command 'CREATE TABLESPACE fareuser_space DATAFILE 'fareuser_space.dat' SIZE 1M AUTOEXTEND ON;', the response 'Tablespace created.', and another 'SQL>' prompt.

```
SQL> CREATE TABLESPACE fareuser_space DATAFILE 'fareuser_space.dat' SIZE 1M AUTOEXTEND ON;
Tablespace created.
SQL>
```

3) CREATING USERS & GRANTING PERMISSION :->

Here we are creating a user credentials and assigning a TABLESPACE for the user. You can create multiple users in a database.

Create a new user in Oracle:


```
CREATE USER fareuser IDENTIFIED BY fareuser1 DEFAULT
TABLESPACE fareuser_space QUOTA unlimited on fareuser_space;
```

Note: In oracle, a schema is created when a user is created.

GRANT create session **TO** fareuser;

GRANT create table **TO** fareuser;

GRANT create sequence **TO** fareuser;

A screenshot of a 'Run SQL Command Line' window. The window has a title bar with an 'SQL' icon and the text 'Run SQL Command Line'. The main area is a black terminal with white text. It shows the prompt 'SQL>' followed by the command 'CREATE USER SEARCHUSER IDENTIFIED BY SEARCHUSER1 DEFAULT TABLESPACE SEARCHUSER_SPACE QUOTA UNLIMITED ON SEARCHUSER_SPACE;', the response 'User created.', another 'SQL>' prompt followed by 'GRANT CREATE SESSION TO SEARCHUSER;', and the response 'Grant succeeded.'.

```
SQL> CREATE USER SEARCHUSER IDENTIFIED BY SEARCHUSER1 DEFAULT TABLESPACE SEARCHUSER_SPACE QUOTA UNLIMITED ON SEARCHUSER_SPACE;
User created.
SQL> GRANT CREATE SESSION TO SEARCHUSER;
Grant succeeded.
```

4) DISCONNECT FROM SYSTEM ACCOUNT and CONNECT TO FAREUSER:->

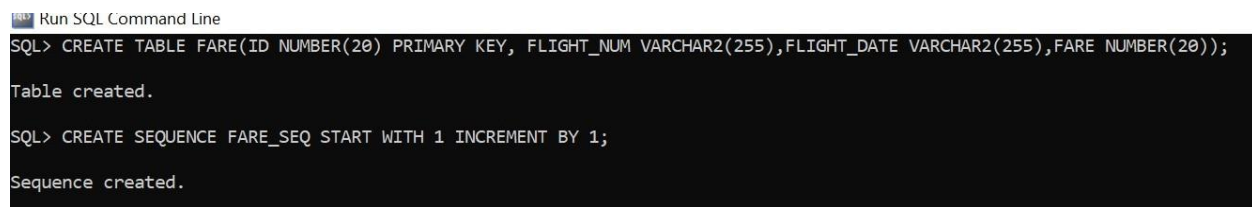
Sql>exit

C:\>sqlplus fareuser/fareuser1

5) CREATING TABLES & SEQUENCES :->

create table fare (id number(19) primary key, fare varchar2(255), flight_date varchar2(255), flight_number varchar2(255));

create sequence fare_sq start with 1 increment by 1;

A screenshot of a SQL Command Line window. The title bar reads "Run SQL Command Line". The command prompt shows two SQL commands being executed. The first command is "SQL> CREATE TABLE FARE(ID NUMBER(20) PRIMARY KEY, FLIGHT_NUM VARCHAR2(255), FLIGHT_DATE VARCHAR2(255), FARE NUMBER(20));" followed by the response "Table created.". The second command is "SQL> CREATE SEQUENCE FARE_SEQ START WITH 1 INCREMENT BY 1;" followed by the response "Sequence created.".

```
SQL> CREATE TABLE FARE(ID NUMBER(20) PRIMARY KEY, FLIGHT_NUM VARCHAR2(255), FLIGHT_DATE VARCHAR2(255), FARE NUMBER(20));
Table created.

SQL> CREATE SEQUENCE FARE_SEQ START WITH 1 INCREMENT BY 1;
Sequence created.
```

6) INSERT DATA :->

insert into fare(id, fare, flight_date, flight_number) values (fare_sq.nextVal, '100', '22-JAN-16', 'BF100');

insert into fare(id, fare, flight_date, flight_number) values (fare_sq.nextVal, '101', '22-JAN-16', 'BF101');

insert into fare(id, fare, flight_date, flight_number) values (fare_sq.nextVal, '102', '22-JAN-16', 'BF102');

insert into fare(id, fare, flight_date, flight_number) values (fare_sq.nextVal, '103', '22-JAN-16', 'BF103');

insert into fare(id, fare, flight_date, flight_number) values (fare_sq.nextVal, '104', '22-JAN-16', 'BF104');

insert into fare(id, fare, flight_date, flight_number) values (fare_sq.nextVal, '105', '22-JAN-16', 'BF105');

insert into fare id, fare, flight_date, flight_number) values (fare_sq.nextVal, '106', '22-JAN-16', 'BF106');

commit;

```
SQL> INSERT INTO FARE VALUES(FARE_SEQ.NEXTVAL,'NYC100','25-JAN-2021',10000);
1 row created.

SQL> INSERT INTO FARE VALUES(FARE_SEQ.NEXTVAL,'DBC101','20-JAN-2021',8000);
1 row created.

SQL> INSERT INTO FARE VALUES(FARE_SEQ.NEXTVAL,'LAC102','22-JAN-2021',18000);
1 row created.

SQL> INSERT INTO FARE VALUES(FARE_SEQ.NEXTVAL,'SFC103','28-JAN-2021',15000);
1 row created.

SQL> INSERT INTO FARE VALUES(FARE_SEQ.NEXTVAL,'CAC104','23-JAN-2021',17000);
1 row created.
```

7) DROPPING USERS (Optional) :->

If required, we can drop the table and sequence

drop table fare cascade constraints; drop
sequence fare_seq;

```
SQL> DROP USER SEARCHUSER CASCADE;
User dropped.
```

CREATING SEARCH SCHEMA

1) CONNECTING TO THE DATABASE :->

Connect to database (ignore if already connected)

C:\>sqlplus system/manager@xe

OR

SQL> conn username/password;

2) CREATING TABLESPACES :->

Here we are creating a TABLESPACE. These are used for dividing a single table data to multiple locations, so that in data loss we don't loss all the data.

3) CREATING USERS & GRANTING PERMISSION :->

Here we are creating a user credentials and assigning a TABLESPACE for the user. You can create multiple users in a database.

Create a new user in Oracle

```
CREATE USER searchuser IDENTIFIED BY searchuser1;
```

Grant permissions

```
GRANT create session TO searchuser;
```

```
GRANT create table TO searchuser;
```

```
GRANT create sequence TO searchuser;
```

4) DISCONNECT FROM SYSTEM ACCOUNT and CONNECT TO SEARCH USER:->

```
Sql>exit
```

```
SQL> conn searchuser/searchuser1;
```

5) CREATING TABLES & SEQUENCES :->

```
create sequence fare_sq start with 1 increment by 1; create sequence  
flight_sq start with 1 increment by 1; create sequence invo_sq start with  
1 increment by 1;
```

```
create table fare (fare_idnumber(19) primary key, currency varchar2(255),  
fare varchar2(255));
```

```
create table inv (inv_idnumber(19) primary key, count number(10) not  
null);
```

```
create table flight (id number(19) primary key, origin varchar2(255),  
destination varchar2(255), flight_number varchar2(255), flight_date  
varchar2(255),
```

```
fare_idnumber(19) references fare(fare_id), inv_id number(19) references  
inventory(inv_id));
```

6) INSERT DATA :->

```
insert into invo (seat count, inv_id) values (100,  
invo_sq.nextVal);
```

```
insert into invo (seat count, inv_id) values (100,  
invo_sq.nextVal);
```

```
insert into invo (seat count, inv_id) values (100,  
invo_sq.nextVal);
```

```
insert into invo (seat count, inv_id) values (100,  
invo_sq.nextVal);
```

```
insert into invo (seat count, inv_id) values (100,  
invo_sq.nextVal);
```

```
insert into invo (seat count, inv_id) values (100,  
invo_sq.nextVal);
```

```
insert into invo (seat count, inv_id) values (100,  
invo_sq.nextVal);
```

```
insert into flight (id, flight_number, origin, destination, flight_date,  
fare_id, inv_id) values (flight_seq.nextVal, 'BF100', 'SEA', 'SFO', '22-  
JAN-16', 1, 1);
```

```
insert into flight (id, flight_number, origin, destination, flight_date,  
fare_id, inv_id) values (flight_seq.nextVal, 'BF101', 'NYC', 'SFO', '22-  
JAN-16', 2, 2);
```

```
insert into flight (id, flight_number, origin, destination, flight_date,  
fare_id, inv_id) values (flight_seq.nextVal, 'BF102', 'CHI', 'SFO', '22-  
JAN-16', 3, 3);
```

Here we can insert as much data as we want.

commit;

7) PRINTING TABLES :->

```
SELECT * FROM "SEARCH USER"."INVENTORY";
```

```
SQL> Run SQL Command Line
Connected.
SQL> select * from inventory;

  INV_ID      COUNT
-----
        1         100
        2         100
        3         100
        4         100
        5         100
        6         100
        7         100

7 rows selected.
```

SELECT * FROM "SEARCHUSER"."FLIGHT";

Results Explain Describe Saved SQL History

ID	ORIGIN	DESTINATION	FLIGHT_NUMBER	FLIGHT_DATE	FARE_ID	INV_ID
1	SEA	SFO	BF100	22-JAN-16	1	1
2	NYC	SFO	BF101	22-JAN-16	2	2
3	CHI	SFO	BF102	22-JAN-16	3	3
4	HOU	SFO	BF103	22-JAN-16	4	4
5	LAX	SFO	BF104	22-JAN-16	5	5
6	NYC	SFO	BF105	22-JAN-16	6	6

8) DROPPING USERS :->

drop table fare cascade constraints;
drop table invo cascade constraints;
drop table flight cascade constraints;
drop sequence fare_sq;
drop sequence flight_sq;
drop sequence invo_sq;

CREATING BOOKING SCHEMA

1) CONNECTING TO THE DATABASE :->

Connect to database (ignore if already connected)

```
C:\>sqlplus system/manager@xe
```

OR

```
SQL> conn username/password;
```

2) CREATING TABLESPACES :->

Here we are creating a TABLESPACE. These are used for dividing a single table data to multiple locations, so that in data loss we don't loss all the data.

3) CREATING USERS & GRANTING PERMISSION :->

Here we are creating a user credentials and assigning a TABLESPACE for the user. You can create multiple users in a database.

Create a new user in Oracle

```
CREATE USER bookinguser IDENTIFIED BY bookinguser1;
```

Grant permissions

```
GRANT create session TO bookinguser;
```

```
GRANT create table TO bookinguser;
```

```
GRANT create sequence TO bookinguser;
```

4) DISCONNECT FROM SYSTEM ACCOUNT and CONNECT TO SEARCH USER:->

```
Sql>exit
```

```
C:\>sqlplus bookinguser/bookinguser1;
```

5) CREATING TABLES & SEQUENCES :->

```
create sequence booking_sq start with 1 increment by 1;
```

```
create sequence invo_sq start with 1 increment by 1;
```

```
create sequence passenger_sq start with 1 increment by 1;
```



```
create table booking_record (id number(19) primary key, booking_date
timestamp, destination varchar2(255), fare varchar2(255), flight_date
varchar2(255), flight_number varchar2(255), origin varchar2(255), status
varchar2(255));
```

```
create table passenger (id number(19) primary key, first_name
varchar2(255), gender varchar2(255), last_name varchar2(255), booking_id
number(19) references booking_record(id));
```

6) INSERT DATA :->

```
insert into booking_record (id number, booking_date , destination , fare ,
flight_date , flight_number, origin , status)values(1,'2017-06-
06','nyc','sfo',101,'22-jan-16','BF-101','BOOKING CONFIRMED');
```

```
insert into passenger (id, first_name , gender , last_name,booking_id)
values (1,'Gean','Franc','Male',1);
```

```
commit;
```

7) PRINTING TABLES :->

Read data from BOOKINGUSER schema

Results	Explain	Describe	Saved SQL	History
ID	AVAILABLE	FLIGHT_DATE	FLIGHT_NUMBER	
1	100	22-JAN-16	BF100	
2	100	22-JAN-16	BF101	
3	100	22-JAN-16	BF102	
4	100	22-JAN-16	BF103	
5	100	22-JAN-16	BF104	
6	100	22-JAN-16	BF105	
7	100	22-JAN-16	BF106	

7 rows returned in 0.00 seconds [CSV Export](#)

```
SELECT * FROM "BOOKINGUSER"."BOOKING_RECORD";
```

ID	BOOKING_DATE	ORIGIN	DESTINATION	FARE	FLIGHT_DATE	FLIGHT_NUMBER	STATUS
1	2017-06-06 20:46:01	NYC	SFO	101	22-JAN-21	BF101	BOOKING_CONFIRMED

```
SELECT * FROM "BOOKINGUSER"."PASSENGER";
```

ID	FIRST_NAME	LAST_NAME	GENDER	BOOKING_ID
1	NITISH	SINGH	Male	1

CREATING CHECKIN SCHEMA

1) CONNECTING TO THE DATABASE :->

Connect to database (ignore if already connected)

```
C:\>sqlplus system/manager@xe
```

OR

```
SQL> conn username/password;
```

2) CREATING TABLESPACES :->

Here we are creating a TABLESPACE. These are used for dividing a single table data to multiple locations, so that in data loss we don't loss all the data.

3) CREATING USERS & GRANTING PERMISSION :->

Here we are creating a user credentials and assigning a TABLESPACE for the user. You can create multiple users in a database.

Create a new user in Oracle

```
CREATE USER checkinuser IDENTIFIED BY checkinuser1;
```

Grant permissions

GRANT create session TO checkinuser;

GRANT create table TO checkinuser;

GRANT create sequence TO checkinuser;

4) DISCONNECT FROM SYSTEM ACCOUNT and CONNECT TO SEARCH USER :->

Sql>exit

C:\>sqlplus checkinuser/checkinuser1;

5) CREATING TABLES & SEQUENCES :->

create sequence checkin_seq start with 1 increment by 1;

create table check_in_record (id number(19)primary key,
booking_id number(19) not null, check_in_time timestamp,
first_name varchar2(255), flight_date varchar2(255),
flight_number varchar2(255), last_name varchar2(255),
seat_number varchar2(255));

6) INSERT DATA :->

No need to insert data manually

7) PRINTING TABLES :->

Read data from CHECKINUSER schema

SELECT * FROM "CHECKINUSER"."CHECK_IN_RECORD";

ID	BOOKING_ID	CHECK_IN_TIME	FIRST_ NAME	LAST_NAME	FLIGHT_DATE	FLIGHT_NUMBER	SEAT_NUMBER
1	1	2017-06-06 21:18:46	Gean	Franc	22-JAN-16	BF101	28A

FORMS

FLIGHT

Flight date	:	<input type="text"/>
Flight number	:	<input type="text"/>
ID	:	<input type="text"/>
Fare	:	<input type="text"/>
Inv_ID	:	<input type="text"/>

BOOKING RECORD

Id	:	<input type="text"/>
Booking date	:	<input type="text"/>
Destination	:	<input type="text"/>
Fare	:	<input type="text"/>
Flight Date	:	<input type="text"/>
Flight Number	:	<input type="text"/>
Origin	:	<input type="text"/>
Status	:	<input type="text"/>

Submit

PASSENGER

Id :

First Name :

Gender : ☒ male ☐ female

Last Name :

Booking Id :

Booking Record :

Submit

CHECKIN RECORD

Id :

Booking Id :

Checkin Time :

First Name :

Last Name :

Flight Date :

Flight Number :

Seat Number :

Submit