**AIRLINE RESERVATION SYSTEM**

**CREATING FARE SCHEMA**

**Step 1:** Connect to database

Open Run SQL Command Line

SQL> conn username/password;

OR

C:\>sqlplus system/manager@xe

**Step2:** Create tablespace

CREATE **TABLESPACE** fareuser\_space DATAFILE 'fareuser\_space.dat' SIZE 1M AUTOEXTEND ON;

**Step3:** 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.

**Step4:** Grant permissions

GRANT create session TO fareuser;

GRANT create table TO fareuser;

GRANT create sequence TO fareuser;

**Step5:** Disconnect from system account and connect to fareuser

Sql>exit

C:\>sqlplus fareuser/fareuser1

**Step6:** Create tables and 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;

**Step7:** Insert records

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;

**Step8:** Read data from FAREUSER schema

SELECT \* FROM "FAREUSER"."FARE";

|  |  |  |  |
| --- | --- | --- | --- |
| ID | FLIGHT\_NUMBER | FLIGHT\_DATE | FARE |
| 1 | BF100 | 22-JAN-16 | 100 |
| 2 | BF101 | 22-JAN-16 | 101 |
| 3 | BF102 | 22-JAN-16 | 102 |
| 4 | BF103 | 22-JAN-16 | 103 |
| 5 | BF104 | 22-JAN-16 | 104 |
| 6 | BF105 | 22-JAN-16 | 105 |
| 7 | BF106 | 22-JAN-16 | 106 |

**Step9(Optional):** If required, we can drop the table and sequence

drop table fare cascade constraints; drop sequence fare\_seq;

**CREATING SEARCH SCHEMA**

**Step1:** Connect to database (ignore if already connected)

C:\>sqlplus system/manager@xe

OR

SQL> conn username/password;

**Step2:** Create a new user in Oracle

CREATE USER searchuser IDENTIFIED BY searchuser1;

**Step3:** Grant permissions

GRANT create session TO searchuser;

GRANT create table TO searchuser;

GRANT create sequence TO searchuser;



**Step4:** Disconnect from system account and connect to searchuser

Sql>exit

SQL> conn searchuser/searchuser1;

**Step5:** Create tables and 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\_id number(19) primary key, currency varchar2(255), fare varchar2(255));

create table invo (inv\_id number(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\_id number(19) references fare(fare\_id), inv\_id number(19) references inventory(inv\_id));

**Step6:** Insert records

Inserting into the fare table.

insert into fare (currency, fare, fare\_id) values ('USD', 100, fare\_sq.nextVal);

insert into fare (currency, fare, fare\_id) values ('USD', 101, fare\_sq.nextVal);

insert into fare (currency, fare, fare\_id) values ('USD', 102, fare\_sq.nextVal);

insert into fare (currency, fare, fare\_id) values ('USD', 103, fare\_sq.nextVal);

insert into fare (currency, fare, fare\_id) values ('USD', 104, fare\_sq.nextVal);

insert into fare (currency, fare, fare\_id) values ('USD', 105, fare\_sq.nextVal);

insert into fare (currency, fare, fare\_id) values ('USD', 106, fare\_sq.nextVal);

Inserting into the invo table.

insert into invo (count, inv\_id) values (100, invo\_sq.nextVal);

insert into invo (count, inv\_id) values (100, invo\_sq.nextVal);

insert into invo (count, inv\_id) values (100, invo\_sq.nextVal);

insert into invo (count, inv\_id) values (100, invo\_sq.nextVal);

insert into invo (count, inv\_id) values (100, invo\_sq.nextVal);

insert into invo (count, inv\_id) values (100, invo\_sq.nextVal);

insert into invo (count, inv\_id) values (100, invo\_sq.nextVal);

Inserting into flight table.

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;

SELECT \* FROM "SEARCHUSER"."FARE"

|  |  |  |
| --- | --- | --- |
| FARE\_ID | FARE | CURRENCY |
| 1 | 100 | USD |
| 2 | 101 | USD |
| 3 | 102 | USD |
| 4 | 103 | USD |
| 5 | 104 | USD |
| 6 | 105 | USD |
| 7 | 106 | USD |

SELECT \* FROM "SEARCHUSER"."INVENTORY";

|  |  |
| --- | --- |
| INV\_ID | COUNT |
| 1 | 100 |
| 2 | 100 |
| 3 | 100 |
| 4 | 100 |
| 5 | 100 |
| 6 | 100 |
| 7 | 100 |

SELECT \* FROM "SEARCHUSER"."FLIGHT";

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ID | FLIGHT\_NUMBER | FLIGHT\_DATE | ORIGIN | DESTINATION | FARE\_ID | INV\_ID |
|  |  |  |  |  |  |  |
| 1 | BF100 | 22-JAN-16 | SEA | SFO | 1 | 1 |
| 2 | BF101 | 22-JAN-16 | NYC | SFO | 2 | 2 |
| 3 | BF102 | 22-JAN-16 | CHI | SFO | 3 | 3 |
| 4 | BF103 | 22-JAN-16 | HOU | SFO | 4 | 4 |
| 5 | BF104 | 22-JAN-16 | LAX | SFO | 5 | 5 |
| 6 | BF105 | 22-JAN-16 | NYC | SFO | 6 | 6 |
| 7 | BF106 | 22-JAN-16 | NYC | SFO | 7 | 7 |

**Step9(Otional):** Dropping the table and sequences;

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**

**Step 1:** Connect to database (ignore if already connected)

C:\>sqlplus system/manager@xe

OR

SQL> conn username/password;

**Step2:** Create a new user in Oracle

CREATE USER bookinguser IDENTIFIED BY bookinguser1;

**Step3:** Grant permissions

GRANT create session TO bookinguser;

GRANT create table TO bookinguser;

GRANT create sequence TO bookinguser;

**Step4:** Disconnect from system account and connect to bookinguser

Sql>exit

C:\>sqlplus bookinguser/bookinguser1;

**Step5:** Create tables and 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 invo (id number(19) primary key, available number(10) not null, flight\_date varchar2(255), flight\_number 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));

**Step6:** Insert records

insert into invo (flight\_number, flight\_date, available, id) values ('BF100', '22-JAN-16', 100, invo\_sq.nextVal);

insert into invo (flight\_number, flight\_date, available, id) values ('BF101', '22-JAN-16', 100, invo\_sq.nextVal);

insert into invo (flight\_number, flight\_date, available, id) values ('BF102', '22-JAN-16', 100, invo\_sq.nextVal);

commit;

**Step7:** Read data from BOOKINGUSER schema

SELECT \* FROM "BOOKINGUSER"."INVENTORY";

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | FLIGHT\_NUMBER |  | FLIGHT\_DATE | AVAILABLE |
| 1 | BF100 |  | 22-JAN-16 | 100 |
| 2 | BF101 |  | 22-JAN-16 | **99** |
| 3 | BF102 |  | 22-JAN-16 | 100 |
| 4 | BF103 |  | 22-JAN-16 | 100 |
| 5 | BF104 |  | 22-JAN-16 | 100 |
| 6 | BF105 |  | 22-JAN-16 | 100 |
| 7 | BF106 |  | 22-JAN-16 | 100 |

SELECT \* FROM "BOOKINGUSER"."BOOKING\_RECORD";

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ID | BOOKING\_DATE | ORIGIN | DESTINATION | FARE | FLIGHT\_DATE | FLIGHT\_NUMBER | STATUS |
|  |  |  |  |  |  |  |  |
| 1 | 2017-06-06 | NYC | SFO | 101 | 22-JAN-16 | BF101 | **BOOKING\_CONFIRMED** |
|  | 20:46:01 |  |  |  |  |  |  |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | FIRST\_NAME | LAST\_NAME | GENDER | BOOKING\_ID |
| 1 | Gean | Franc | Male | 1 |

**CREATING CHECKIN SCHEMA**

**Step 1:** Connect to database (ignore if already connected)

C:\>sqlplus system/manager@xe

OR

SQL> conn username/password;



**Step2:** Create a new user in Oracle

CREATE USER checkinuser IDENTIFIED BY checkinuser1;

**Step3:** Grant permissions

GRANT create session TO checkinuser;

GRANT create table TO checkinuser;

GRANT create sequence TO checkinuser;

**Step4:** Disconnect from system account and connect to checkinuser

Sql>exit

C:\>sqlplus checkinuser/checkinuser1;

**Step5:** Create tables and 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\_numbervarchar2(255));

**Step6:** Insert records

No need to insert data manually

**Step7:** Read data from CHECKINUSER schema

SELECT \* FROM "CHECKINUSER"."CHECK\_IN\_RECORD";

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ID | BOOKING\_ID | CHECK\_IN\_TIME | FIRST\_ | LAST\_NAME | FLIGHT\_DATE | FLIGHT\_NUMBER | SEAT\_NUMBER |
|  |  |  | NAME |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 1 | 1 | 2017-06-06 | Gean | Franc | 22-JAN-16 | BF101 | 28A |
|  |  | 21:18:46 |  |  |  |  |  |

