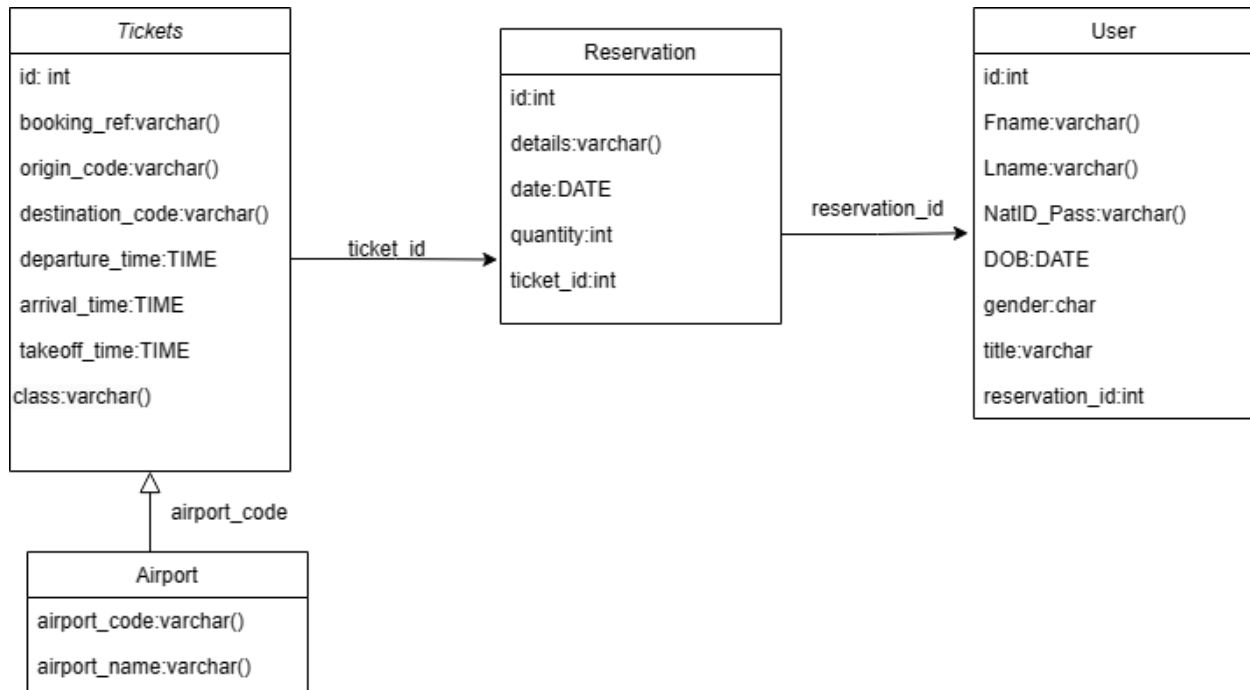# Lab 9: Airplane Reservation


```
# DDL - Create
create database airplaneReservation;

create table airport(
    airport_code varchar(10) primary key ,
    airport_name varchar(100) not null
);

create table tickets(
    id int primary key ,
    booking_ref varchar(3) not null unique,
    origin_code varchar(3) not null,
    foreign key (origin_code) references airport(airport_code),
    destination_code varchar(20) not null ,
    foreign key (destination_code) references airport(airport_code),
    departure_time TIME,
    arrival_time TIME,
    takeoff_time TIME,
    class varchar(5) not null unique

);

create table reservation(
    id int primary key ,
    ticket_details varchar(150) not null,
    date DATE,
    quantity int not null ,
```

```sql
    ticket_id int not null ,
    foreign key (ticket_id) references tickets(id)
);

create table user(
    id int primary key ,
    fname varchar(15) not null ,
    lname varchar(15) not null ,
    natID_Pass varchar(10) not null unique ,
    Dob DATE,
    gender char not null check ( gender='f' or gender='m' ),
    title varchar(4) not null check ( title='MR.'or title='MS.'or
title='MRS.'),
    reservation_id int not null ,
    foreign key (reservation_id) references reservation(id)
);
# ---------------------
# DDL - Alter
alter table tickets modify column booking_ref varchar(20);
alter table tickets modify column class varchar(20);
# ---------------------

# DQL - Select

select airport_code from airport;
select * from reservation;
select fname from user;
select departure_time from tickets;


# ---------------------
# DML - Insert
insert into airport values ('DMM','King Fahd Intl'),('RUH','King Khalid
Intl'),('JED','King Abdulaziz Intl');

insert into tickets values (1, 'ABC', 'DMM', 'RUH', '12:00:00', '14:00:00',
'11:45:00', 'Economy'),
      (2, 'DEF', 'RUH', 'JED', '15:00:00', '16:30:00', '14:45:00',
'Business'),
      (3, 'GHI', 'JED', 'DMM', '17:00:00', '19:00:00', '16:45:00', 'First');

insert into reservation values (1, 'plane going from DMM to RUH', '2024-03-
21', 1, 1),
      (2, 'plane going from RUH to JED', '2024-03-22', 2, 2),
      (3, 'plane going from JED to DMM', '2024-03-23', 1, 3);

insert into user values (1, 'Mansour', 'Alabbad', '1234567890', '1990-01-01',
'm', 'MR.', 1),
      (2, 'Amal', 'Alabbad', '0987654321', '1999-12-10', 'f', 'MS.', 2),
      (3, 'Nahj', 'Alabbad', '1357924680', '1988-12-15', 'f', 'MRS.', 3);
# ---------------------
# DML - Update
update user set natID_Pass=11069845135 where id=3;
# ---------------------
# DML - Delete
delete from user where reservation_id=3;
delete from reservation where id=3;
```