

# DBMS PROJECT

# TRAVEL PORTAL SCHEMA

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## Functions of Travel Portal -

1. Passenger searches for flights with date of travel, time, destination and budget as filters.
2. Airlines schedule flights with specific date of travel, origin and destination. Each flight has a unique flight number.
3. Passenger after selecting the flight can book the ticket.
4. The passenger makes a transaction for the booking of ticket.
5. The flight shows the number of available seats.
6. The passenger can only book ticket if there are seats available in the flight chosen.
7. One booking can only be made to one seat in any flight.
8. Passenger can make any number of bookings
9. There is one transaction per booking
10. Booking date cannot be greater than flight date and in case of same date the time of booking should be 2 hours less than the time of departure.

## Travel Portal Schema -

- Airline (  
Airline Code: **VARCHAR(10) PRIMARY KEY NOT NULL**,  
Name: **CHAR(20) NOT NULL**,  
Number of flights: **INTEGER**,  
Headquarters: **VARCHAR(50)**  
)
- Flight (  
Flight Number: **INTEGER PRIMARY KEY NOT NULL**,  
Airline Code: **VARCHAR(10) NOT NULL FOREIGN KEY**,  
Origin: **CHAR(20) NOT NULL**,  
Destination: **CHAR(20) NOT NULL**,  
Price: **INTEGER NOT NULL**,  
Departure Time: **TIME**,  
Arrival Time: **TIME**,

Days: **VARCHAR(7)**,  
Seats Available: **INTEGER NOT NULL**

)

- Passenger (  
Passenger ID: **VARCHAR(10) PRIMARY KEY NOT NULL**,  
First Name: **CHAR(10) NOT NULL**,  
Last Name: **CHAR(10)**,  
Age: **INTEGER NOT NULL**,  
Sex: **CHAR(1) NOT NULL**,  
Origin: **CHAR(20)**,  
Destination: **CHAR(20)**,  
Phone number: **INTEGER CHECK** (Phone number <= 9999999999 **AND** Phone number >= 0000000000),  
Date of Travel: **DATE**,  
Budget: **INTEGER**

)

- Booking (  
Booking ID: **VARCHAR(10) PRIMARY KEY NOT NULL**,  
Booking Time: **TIME NOT NULL**,  
Booking Date: **DATE NOT NULL**,  
Transaction ID: **VARCHAR(10) NOT NULL FOREIGN KEY**,  
Flight Number: **INTEGER FOREIGN KEY NOT NULL**,  
Passenger ID: **VARCHAR(10) FOREIGN KEY NOT NULL**

)

- Transaction (  
Booking ID: **VARCHAR(10) FOREIGN KEY NOT NULL**,  
Transaction ID: **VARCHAR(10) NOT NULL PRIMARY KEY**,  
Passenger ID: **VARCHAR(10) FOREIGN KEY NOT NULL**,  
Amount: **INTEGER NOT NULL**

)