# Entities:

## 1. Airport

- airport_id (PK, INT)
- airport_name (VARCHAR)
- country (VARCHAR)
- state (VARCHAR)
- city (VARCHAR)
- created_at (TIMESTAMP)
- updated_at (TIMESTAMP)

## 2. Airline

- airline_id (PK, INT)
- airline_code (VARCHAR, UNIQUE)
- name (VARCHAR)
- country (VARCHAR)
- created_at (TIMESTAMP)
- updated_at (TIMESTAMP)

## 3. Flight

- flight_id (PK, INT)
- airline_id (FK → Airline.airline_id)
- departure_airport_id (FK → Airport.airport_id)
- arrival_airport_id (FK → Airport.airport_id)
- departing_gate (VARCHAR)
- arriving_gate (VARCHAR)
- scheduled_departure (TIMESTAMP)
- scheduled_arrival (TIMESTAMP)
- actual_departure (TIMESTAMP)
- actual_arrival (TIMESTAMP)
- created_at (TIMESTAMP)
- updated_at (TIMESTAMP)

## 4. Passenger

- passenger_id (PK, INT)
- first_name (VARCHAR)
- last_name (VARCHAR)

- gender (VARCHAR)
- date_of_birth (DATE)
- country_citizenship (VARCHAR)
- country_residence (VARCHAR)
- passport_number (VARCHAR, UNIQUE)
- created_at (TIMESTAMP)
- updated_at (TIMESTAMP)

## 5. Booking

- booking_id (PK, INT)
- flight_id (FK → Flight.flight_id)
- passenger_id (FK → Passenger.passenger_id)
- status (VARCHAR)
- booking_platform (VARCHAR)
- ticket_price (DECIMAL(10,2))
- created_at (TIMESTAMP)
- updated_at (TIMESTAMP)

## 6. Booking_Changes

- change_id (PK, INT)
- booking_id (FK → Booking.booking_id)
- change_description (TEXT)
- created_at (TIMESTAMP)
- updated_at (TIMESTAMP)

## 7. Boarding_Pass

- boarding_pass_id (PK, INT)
- booking_id (FK → Booking.booking_id)
- seat (VARCHAR)
- boarding_time (TIMESTAMP)
- created_at (TIMESTAMP)
- updated_at (TIMESTAMP)

## 8. Baggage

- baggage_id (PK, INT)
- booking_id (FK → Booking.booking_id)
- weight_kg (DECIMAL(5,2))
- created_at (TIMESTAMP)

- updated_at (TIMESTAMP)

**9. Baggage_Checking**

- baggage_checking_id (PK, INT)
- baggage_id (FK → Baggage.baggage_id)
- passenger_id (FK → Passenger.passenger_id)
- check_results (TEXT)
- created_at (TIMESTAMP)
- updated_at (TIMESTAMP)

**10. Security_Check**

- security_check_id (PK, INT)
- passenger_id (FK → Passenger.passenger_id)
- check_results (TEXT)
- created_at (TIMESTAMP)
- updated_at (TIMESTAMP)

# Relationships:

1. **Airport – Flight**

   Airport (1) → (N) Flight (departure_airport_id, arrival_airport_id)

2. **Airline – Flight**

   Airline (1) → (N) Flight (airline_id)

3. **Flight – Booking**

   Flight (1) → (N) Booking (flight_id)

4. **Passenger – Booking**

   Passenger (1) → (N) Booking (passenger_id)

5. **Booking – Booking_Changes**

   Booking (1) → (N) Booking_Changes (booking_id)

6. **Booking – Boarding_Pass**

   Booking (1) → (N) Boarding_Pass (booking_id)

7. **Booking – Baggage**

   Booking (1) → (N) Baggage (booking_id)

8. **Baggage – Baggage_Checking**

   Baggage (1) → (N) Baggage_Checking (baggage_id)

9. **Passenger – Baggage_Checking**

Passenger (1) → (N) Baggage_Checking (passenger_id)

10. **Passenger – Security_Check**

Passenger (1) → (N) Security_Check (passenger_id)

ER-Diagram