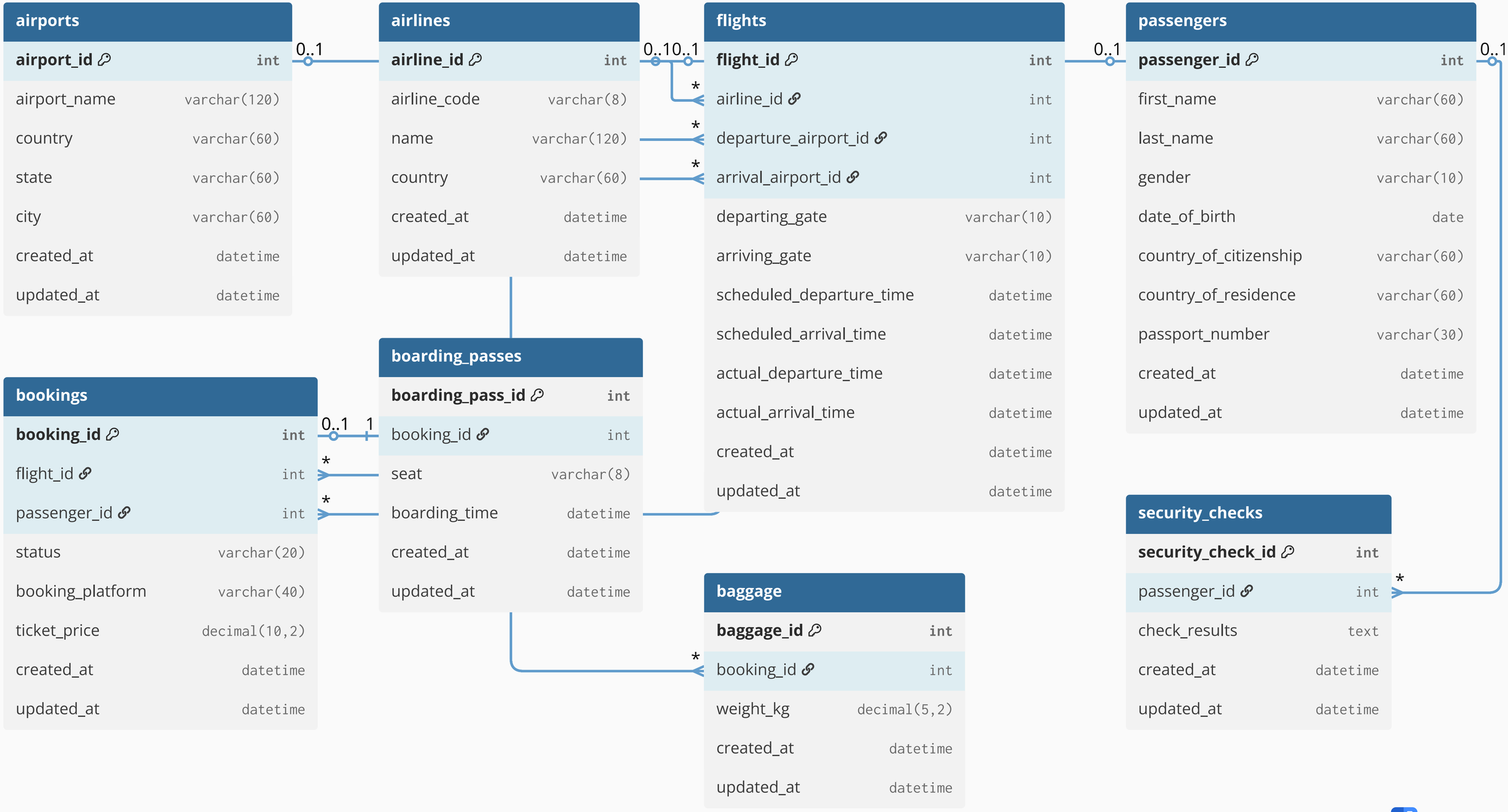
airports
airport_id int
airport_name varchar(120)
country varchar(60)
state varchar(60)
city varchar(60)
created_at datetime
updated_at datetime
0..1
airlines
airline_id int
airline_code varchar(8)
name varchar(120)
country varchar(60)
created_at datetime
updated_at datetime
0..1
0..1
flights
flight_id int
airline_id int
departure_airport_id int
arrival_airport_id int
departing_gate varchar(10)
arriving_gate varchar(10)
scheduled_departure_time datetime
scheduled_arrival_time datetime
actual_departure_time datetime
actual_arrival_time datetime
created_at datetime
updated_at datetime
0..1
passengers
passenger_id int
first_name varchar(60)
last_name varchar(60)
gender varchar(10)
date_of_birth date
country_of_citizenship varchar(60)
country_of_residence varchar(60)
passport_number varchar(30)
created_at datetime
updated_at datetime
0..1
boarding_passes
boarding_pass_id int
booking_id int
seat varchar(8)
boarding_time datetime
created_at datetime
updated_at datetime
0..1
1
bookings
booking_id int
flight_id int
passenger_id int
status varchar(20)
booking_platform varchar(40)
ticket_price decimal(10,2)
created_at datetime
updated_at datetime
baggage
baggage_id int
booking_id int
weight_kg decimal(5,2)
created_at datetime
updated_at datetime
security_checks
security_check_id int
passenger_id int
check_results text
created_at datetime
updated_at datetime
dbdiagram.io

This lab work includes the construction of an ERD diagram of the International Airport system .The purpose of the work is to design the database structure, define the main entities, their attributes and relationships to ensure the integrity and ease of data management.

Entities and Attributes

1. Airports – stores data about airports (id, name, country, state, city, creation and update dates).

2. Airlines – contains information about airlines (id, code, name, country, creation and update dates).

3. Flights – stores information about flights (id, airline, departure airport, arrival airport, gates, scheduled and actual departure and arrival times , creation and update dates).

4. Passengers – contains passenger data (id, first name, last name, date of birth, citizenship, passport, creation and update dates).

5. Bookings – stores booking details (id, flight, passenger, status, booking platform, ticket price, creation and update dates).

6. Boarding_passes – contains boarding pass details (id, booking, seat, boarding time, creation and update dates).

7. Baggage – stores baggage data (id, booking, weight, creation and update dates).

8. Security_checks – contains security check results (id, passenger, check result, creation and update dates).

Conclusion:
The developed ER diagram for the International Airport database reflects the key entities of the system and their relationships. This model ensures data integrity and enables efficient management of information on flights, passengers, reservations, baggage, and security screening.