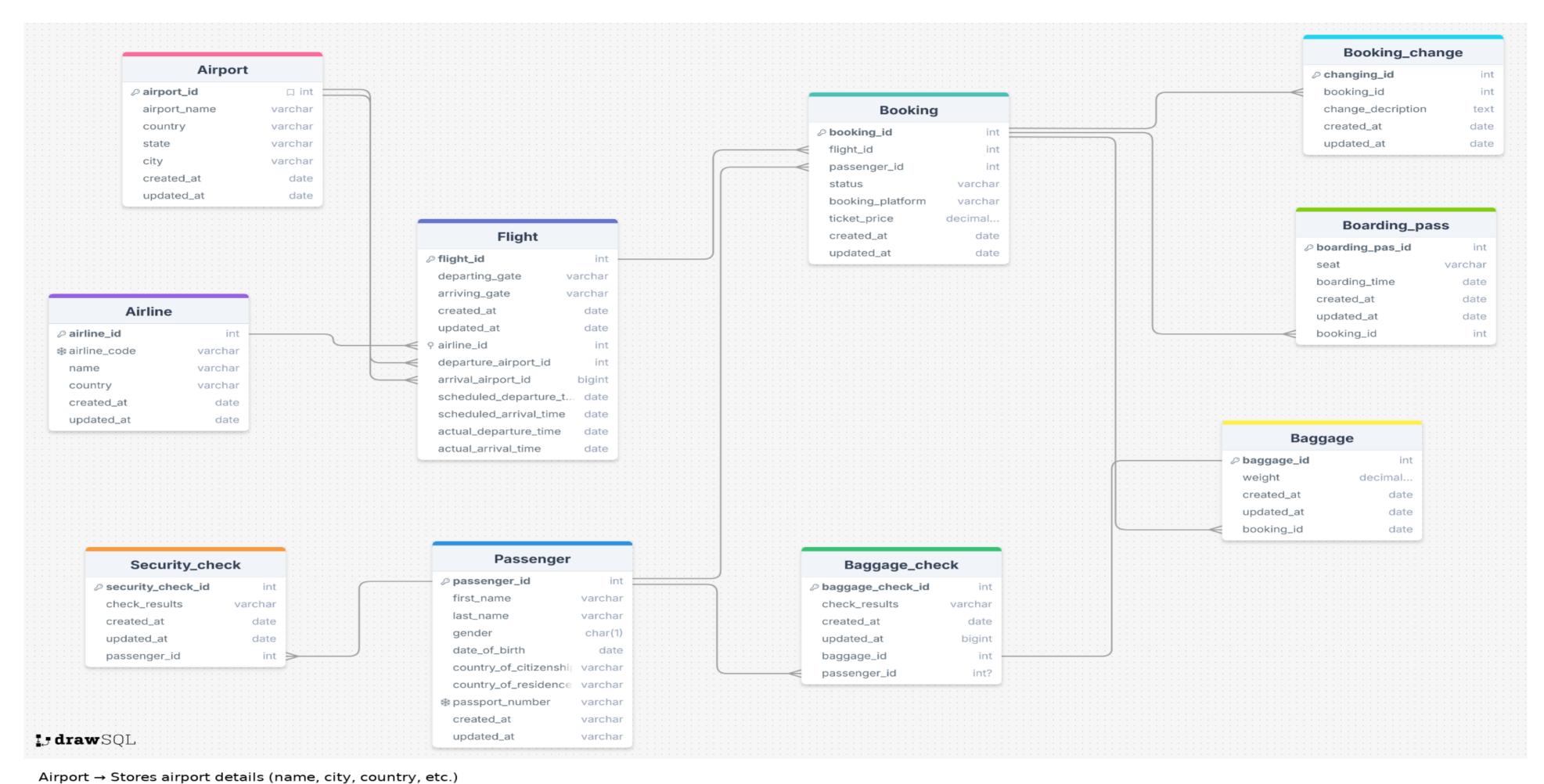
Laboratory Work 1: ERD Diagram



Airline → Contains airline information (code, name, country)

Flight → Flight details (airline, departure/arrival airports, time, gates)

Passenger → Passenger data (name, date of birth, citizenship, passport)

Booking → Reservations made by passengers (status, price, platform)

Booking_change → History of booking modifications (type, description, time)

Boarding_pass → Boarding passes issued for bookings (seat, boarding time)

Baggage → Registered baggage items (weight, details)

Baggage_check → Results of baggage inspections (security clearance)

Security_check → Passenger security checks (results of screening)

Legend of Relationships:

1:1 → One-to-One relationship

1:N → One-to-Many relationship

PK → Primary Key (unique record identifier)

 $FK \rightarrow Foreign Key (reference to another table)$

Overall Explanation:

The ERD represents the International Airport database system. It includes entities such as Airport, Airline, Flight, Passenger, Booking, Booking_change, Boarding_pass, Baggage, Baggage_check, and Security_check.

- The relationships are mainly One-to-Many (1:N), for example:
 One Airline can have many Flights.
 One Flight can have many Bookings.
 One Passenger can have many Bookings.
 One Booking can have many Boarding_pass and Baggage records.

There is also One-to-One (1:1) relationship:
- One Baggage is connected to exactly one Baggage_check.

This ERD was normalized to 3NF, ensuring no redundant data and clear integrity of relationships.