airport

pairport_id bigint
airport_name varchar
country varchar
state varchar
city varchar
created_at timesta...
updated_at timesta...?

flight

bigint flight_id airport_arrival_id bigint airport_departure_id bigint airline_id bigint arriving_gate varchar departing_gate varchar created_at timesta... updated_at timesta ...? actual_departure_til timesta... actual_arrival_time timesta...

airline

booking

Dooking_id bigint 5 flight_id bigint bigint > passenger_id status varchar booking_platform varchar created_at timesta.. updated_at timesta ...? ticket_price bigint

booking_changes

change_id bigint
booking_id bigint
changed_at timesta...?
old_value bigint
new_value bigint
changed_by varchar

boarding_pass

pass_id bigint

booking_id bigint

seat varchar

boarding_time timesta...

created_at timesta...?

updated_at timesta...?

baggage_registra...

baggage_id bigint
booking_id bigint
weight bigint
created_at timesta...
updated_at timesta...?

baggage_reg_che...

bag_check_id bigint
baggage_id bigint
cheking_result boolean
checking_report text?
created_at timesta...
updated_at timesta...?

passenger

passenger_id bigint first_name varchar last_name varchar gender varchar date_of_birth date country_of_citizenship varchar country_of_residence varchar ★ passport_number bigint created_at timesta... updated_at timesta ...?

passenger_reg_c...

passenger_id bigint
checking_result boolean
checking_report text
created_at timesta...
updated_at timesta...?

Lee Nikita

Lab-1

ENTITIES

- 1. airport
- 2. flight
- 3. airline
- 4. booking
- 5. booking changes
- 6. boarding pass
- 7. baggage reg
- 8. passenger
- 9. baggage reg check
- 10. passenger reg check

ATTRIBUTES OF EACH ENTITY

- Each entity has its **id** unique identifier. Its required, to avoid duplicates and used to create relations.
- Also entites have **created_at and updated_at** fields to track these values. Timestamp type is used to collect both date and time with its time zone.
- **Updated_at** is nullable, because it may or may not be updated, while **created_at** is required for each.
- For relations in some entities created a **foreign key attributes**, called same as id of main table for convenience.
- In checking tables, **checking_result** is boolean type, because it could be either pass or not. Then I've added **checking report**, if something was denied. Also report is nullable, because it could be or not (not required).

ATTRIBUTES OF EACH ENTITY

In some entities, there are some just **unique values** like passport_number or airport_code.

RELATIONS

- Firstly, airport --- fllight relations. Many flights could arrive or depart in same airport: airport \rightarrow flight (1:N) for both departure id and arrival id.
- Flight \rightarrow airlines (N:1) because many flights could be on one airline.
- Flight \rightarrow booking (1:N) because many bookings could be reserved on one flight.
- Booking \rightarrow booking_changes (1:1) when booking changes it could affect only on single booking.

RELATIONS

Booking \rightarrow boarding_pass (1:N) on one booking could be many passes on board.

Booking \rightarrow baggage_reg (1:N) one booking can have zero or many bags.

Booking \rightarrow passenger (1:N) one booking can have zero or many passengers.

Booking \rightarrow passenger (1:N) one booking can have zero or many passengers.

Baggage_reg → baggage_reg_check (1:1) each baggage checked undividually

Passenger → passenger_reg_check (1:1) each passenger checked undividually