

Clients				
PK/FK	Name	Description	type	Constraint
PK	client_id	unique id	INTEGER	
	client_name		TEXT	NOT NULL
	passport_number		TEXT	NOT NULL, CHECK(regex)
	citizenship		TEXT	NOT NULL
Tickets				
PK/FK	Name	Description	type	Constraint
PK	seat_number	number of seat on plane	TEXT	CHECK(regex)
FK	flight_id	unique id	INTEGER	NOT NULL, FK Flights(flight_id)
FK	client_id		INTEGER	NOT NULL, FK Clients(client_id)
	class	class of ticket	TEXT	NOT NULL, CHECK(in (Econom, Business))
Flights				
PK/FK	Name	Description	type	Constraint
PK	flight_id	unique id	INTEGER	
FK	airplane_id	unique id	INTEGER	NOT NULL, FK Airplanes(airplane_id)
FK	route_id	unique id	INTEGER	NOT NULL, FK Routes(route_id)
	departure_time		DATE TIME	NOT NULL, CHECK(departure_time < arrival_time)
	arrival_time		DATE TIME	NOT NULL, CHECK(departure_time < arrival_time)

Crew members				
PK/FK	Name	Description	type	Constraint
PK	member_id	unique id	INTEGER	
	member_name		TEXT	NOT NULL
	date_of_birth		DATE	NOT NULL
	role	role in crew	TEXT	NOT NULL
Flights X Crew members				
PK/FK	Name	Description	type	Constraint
PK, FK	flight_id	unique id	INTEGER	NOT NULL, FK Flights(flight_id)
PK, FK	member_id	unique id	INTEGER	NOT NULL, FK Crew members(member_id)
Airplanes				
PK/FK	Name	Description	type	Constraint
PK	airplane_id	unique id	INTEGER	
FK	model		TEXT	NOT NULL, FK Airplane models(model)
	start_of_operation		DATE	NOT NULL
Airplane models				
PK/FK	Name	Description	type	Constraint

PK	model		TEXT	
	capacity	max number of passengers	INTEGER	NOT NULL, CHECK(> 0)
	flight_range	flight range in km	INTEGER	NOT NULL, CHECK(> 0)
Airports				
PK/FK	Name	Description	type	Constraint
PK	code_IATA	unique code	TEXT	
	city		TEXT	NOT NULL
	country		TEXT	NOT NULL
Routes				
PK/FK	Name	Description	type	Constraint
PK	route_id	unique id	INTEGER	
	duration	time in air in minutes	INTEGER	NOT NULL, CHECK(> 0)
FK	departure_IATA	unique code	TEXT	NOT NULL, FK Airports(code_IATA)
FK	arrival_IATA	unique code	TEXT	NOT NULL, FK Airports(code_IATA)
Route time				
PK/FK	Name	Description	type	Constraint
PK, FK	route_id	unique id	INTEGER	FK Routes(route_id)
PK	date_of_week	unique id	TEXT	CHECK(regex)
PK	departure_time		TEXT	CHECK(regex)

PK	periodicity		TEXT	CHECK(regex)
	valid_from		DATE	NOT NULL, CHECK(valid_from > valid_to)
	valid_to		DATE	NOT NULL, CHECK(valid_from > valid_to)