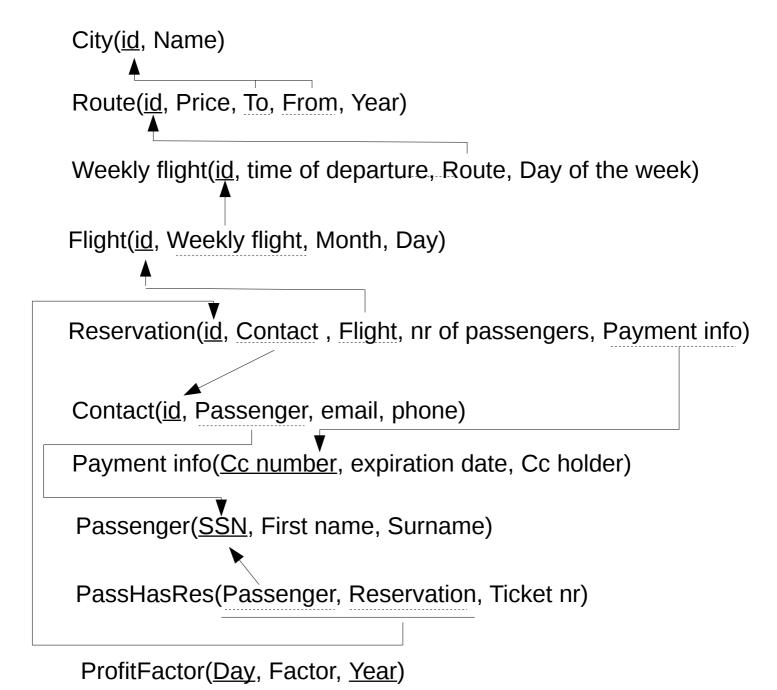


Before normalisation



The purpose of every table:

City:

The city table holds a name for a city and a unique id because there's a small risk that there will be two different cities sharing the same name. We use this table so we can avoid duplicating the city name in the route table.

Candidate keys: id Primary key: id

Route:

This table contains the different routes that flights uses, used to avoid duplicating data when different flights use the same route. Stores info about arrival and destination city aswell as the cost for the specific route. The table also has a column that tells which year the route is used.

Candidate keys: id, (to, from, year)

Primary key: id

WeeklyFlight:

Stores a connection to a route, a weekday and a time of departure. Its purpose is to contain info for all the flights that might occur every week. The table also refers to the profitfactor table.

Candidate keys: id, (route, day of week, time of departure)

Primary key: id

ProfitFactor:

This table only has 3 columns. Day, factor and year are the values stored for each row. The purpose for this table is to avoid duplicate data and it also makes it possible to have different factors for different years.

Candidate keys: (Day, Year) Primary key: (Day, Year)

Flights:

This table references a weekly flight and will be referenced to from other tables. The table also contains a month and a day.

Candidate keys: id, (weekly flight, month, day)

Primary key: id

Reservation:

Stores information about reservations that has been made. We also store information to a contact. Also contains number of passengers and a pointer to the payment info.

Candidate keys: id Primary key: id

PaymentInfo:

Stores information about the credit card that paid for a booking.

Candidate keys: CC_number Primary key: CC_number

Passenger:

Stores information about all passengers, each passenger will only be present once.

Candidate keys: SSN Primary key: SSN

PassHasRes:

Stores the relation between reservations and passengers, it's needed since each passenger can have many reservations and a reservation can have many passengers. If a reservation has been paid for it will also contain the ticket number.

Candidate keys: (Passenger, Reservation) Primary key: (Passenger, Reservation)

Contact:

Stores contact information and points to a passenger.

Candidate keys: id Primary key: id

We went through the normalization process and couldn't find any changes that was needed.