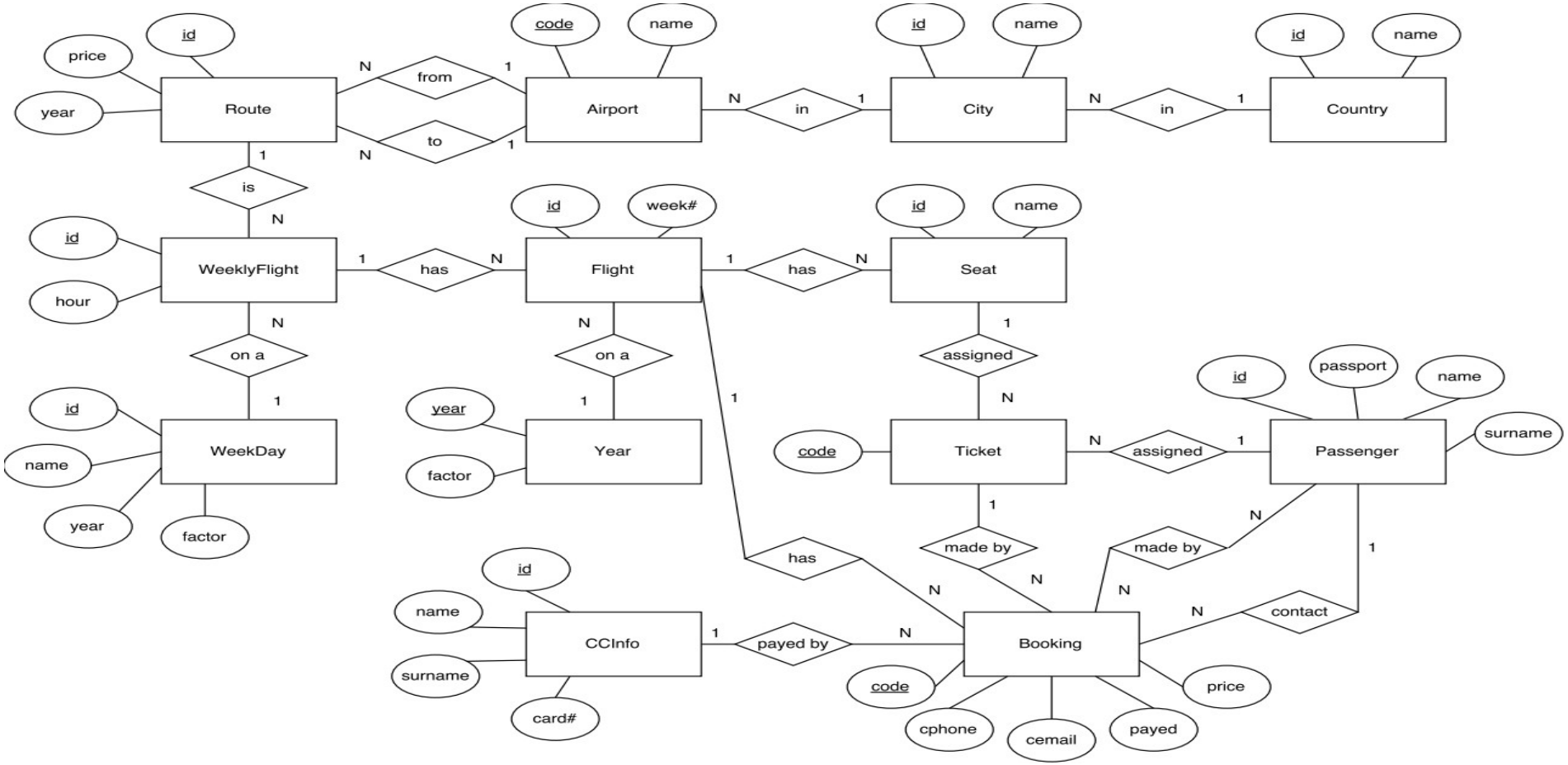
LAB 4

Part 1



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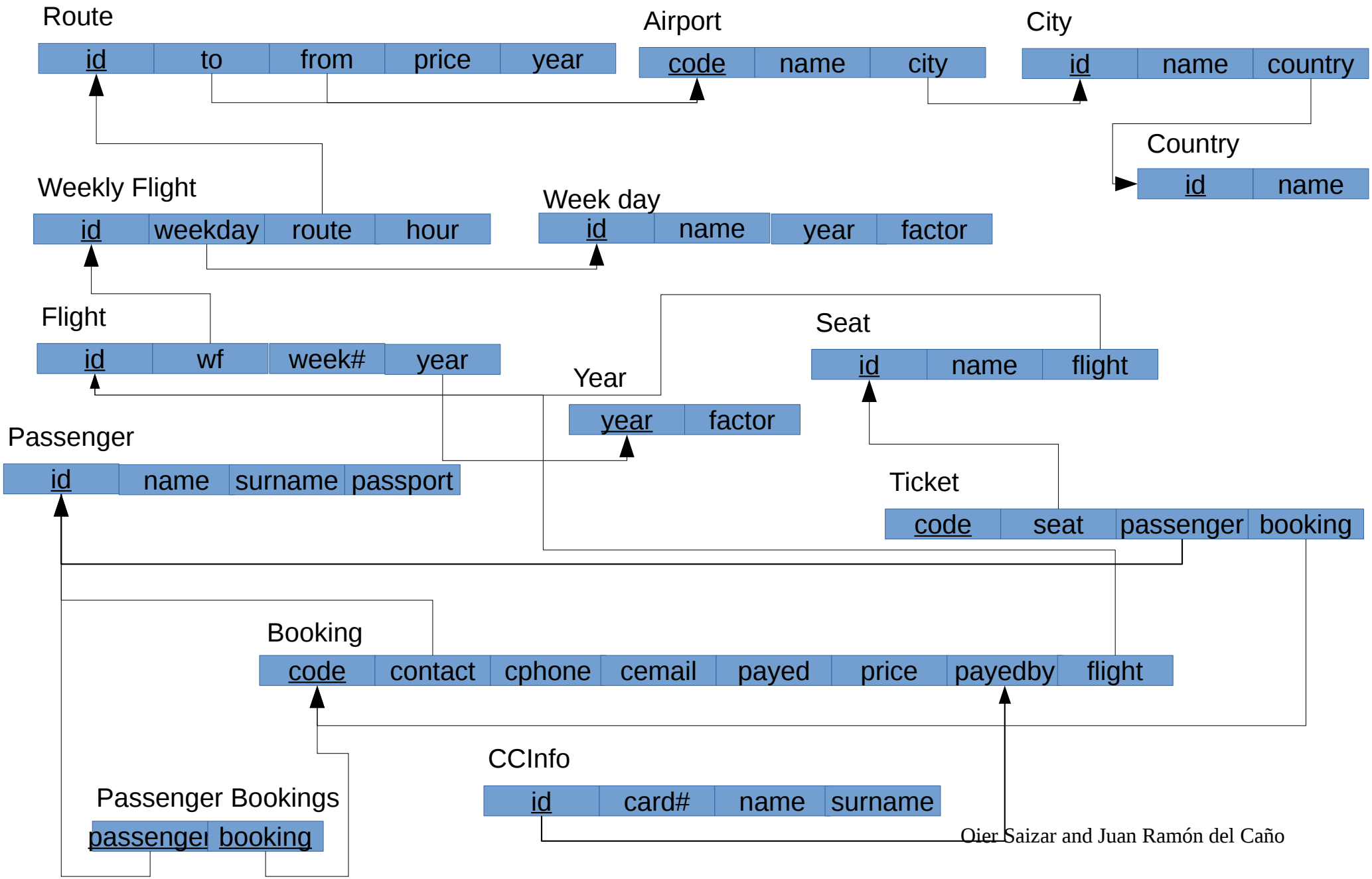

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Normalization

Route:

id -> to, from, year (not 3rd nf)

to, from, year -> price

Airport:

code -> name, city

City:

id -> name, country

Country:

id -> name

Weekly Flight:

id -> weekday, route, hour

Week Day:

id -> name, year

name, year -> weekpfactor

Flight:

id -> weeklyFlight, week#, year

Year:

year -> yearpfactor

Seat:

id -> name, flight

Ticket:

code -> seat, passenger, booking

Passenger:

id -> passport

passport -> name, surname

Booking:

code -> contact, payed, price, payedby, flight

contact -> cphone, cemail

Passenger Bookings:

passenger, bookings

CCinfo:

id -> card#, name, surname

card# -> name, surname

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Design Justification

As seen in the previous page, some tables (Route and Week Day) are not on the 3rd Normal form, this happens because we have created a artificial PK to make the database easier to use and create. If we don't use a artificial PK, we would need to store more than one PK on the tables that make reference to Route and Week Day.

In the same way, Passenger and Ccinfo use a artifical PK because we think that using the passport and the ccnumber as PK is not safe.

To finish with, we could create a table for the contact information on Booking but we decided to keep it this way to keep it simple and easi to use.

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