Airflights system

<https://www.altexsoft.com/blog/airline-reservation-systems-passenger-service-systems/>

suggested datasets

<https://www.kaggle.com/datasets/usdot/flight-delays?select=flights.csv>

<https://jblevins.org/notes/airline-data> *T100 Domestic Segment*

business process 1:

create a DW for the marketing department

Questions:

**1-What flights do the company’s frequent flyers take?**

Dimension: flights, airline, airport

Fact: sum(flights)

**2-what fare bases do they take?**

Dimension: Fair bases types

(30d 🡪 100% of ticket price )

(21d🡪120% of ticket price)

(10d🡪140% of ticket price)

(5d🡪160% of ticket price)

Fair bases are represented by a code ex “LKG7”

**3-how often they upgrade?**

Flight record ex: Text

Description automatically generated with low confidence

Ahmed has upgraded from economy class to business

How to add it to our module ? not finished

**4- how they earn and redeem their frequent flyer miles?**

What is flyer miles : points that customer earns, and can use it later.

How to flyer miles:? Based on the flight cost, we will create rangers, for

each range a costumer earns a number of points .

ex:

if a customer pays from 0 to 1000 $🡪 10 points

**5- whether they respond to special fare promotions?**

special fare promotions are fares within a limited time

Not finished

A suggestion🡪 creating a special fare promotions column(0, 1),

0 = didn’t respond

1=responded

**6- how long their overnight stays are?**

Customers can book between 1-24 hours in the airport’s hotel

values: number of overnight hours booked 1 - 24

Fact: sum(hours booked per customer)

**7- what proportion of these frequent flyers have gold, platinum, aluminum, or titanium status?**

values: gold, platinum, aluminum, or titanium

Fact: count(value) / number of vales

Not finished

Business process 2:

Finance team

Company profit (take time into considerations)

Reservation process: a full reservation record(who reserved, when did they reserve, the flight schedule time

Channels: web, in the airport, application

Business process 3:

Customer satisfaction

Table

Description automatically generated