**Business Processes:**

1- Flight activity process

2- Frequent Flyers process

3- Reservation process

4- Customer care process

**Grains:**

1- Ticket (atomic)

2- Passenger (atomic)

3- Reservation (atomic)

4- Interaction [example: inquiry, complaint, feedback] (atomic)

**Dimensions:**

* Date [ID, year, quarter, month, day]
* Flight [ID, airline]
* Airport [ID, name, city, country]
* Passenger [ID, name, address, gender, age, phone]
* Interaction [ID, interaction type]
* Reservation channel [ID, name]
* Service class [ID, Service class: Business- full economy…, Fare codes: J,Y, W…]

**Facts:**

**1- Flight activity fact**

Flight ID (fk)

Departure Airport ID (fk)

Arrival Airport ID (fk)

Passenger ID (fk)

Departure time (fk)

Arrival time (fk)

Ticket no. (DD)

Flight miles

**2- Frequent flyer fact**

Passenger ID (fk)

Service class (fk)

Departure time (fk)

Arrival time (fk)

Ticket no (DD)

Flight ID (fk)

Flight miles

Promotion

Response to promotion

Status

Upgrade date (fk)

New service class (fk)

Status proportion

Base Miles pct

Bonus Class Miles pct

Total earned miles

Upgrade Frequency

Overnight hours

**3- Reservation fact**

Reservation date (fk)

Flight ID (fk)

Passenger ID (fk)

Reservation channel ID (fk)

Service class ID (fk)

Price

Cost

profit

seat

**4- Customer care fact**

Interaction ID (fk)

Flight ID (fk)

Passenger ID (fk)

Contact date (fk)

Resolution date (fk)

Problem severity

**⇒ Query on the ticket no to get the overnight stays given that a transit flight has only one ticket for the whole trip with times/dates and airports.**