**logical data model**

Diagram

Description automatically generated

**Why did we choose this data model design? And what does the data represent?**

We choose Galaxy schema to represent our model because the case study has many business processes.

Grain: per flight.

**Flight activity fact:** represent information about flight such as passengers number, flight number, date, reservation channel, class type and distance of the flight in miles.

**Reservation fact:** represent information about Reservation such as date, passenger number, flight number, reservation channel, class type, seat, rate and payment amount.

**Overnight stat fact**: represent the details of the date of arrival, departure and reservation, ticket number and reservation channel about passengers who spend a number of nights in hotel.

**Customer care fact:** as a program to take a feedback or problem severity from passenger.

**Fights dimension:** represent information about each flight, such as flight number, the departure and arrival airport and the departure and arrival time.

**Passenger dimension:** represent information about each Passenger, such as Passenger number, first and last name, address, phone number.

**Data dimension:** represent date, date of week, date of month, date of year, month number, quarter, year.

**Fare bases dimension:** represent the terms surrounding the fare ex full fare economy, full fare first class, full fare business or discount economy, discount first class, discount business.

Clarify fare basis table, shortcuts stands for:

F1 : full fare first class

FB : full fare business class

FC : full fare economy class

D1 : discount fare first class

DB : discount fare business class

DC : discount fare economy class

**Reservation channel dimension:** represent the passenger book the ticket by airline company or website online.

**Class type dimension:** represent whether the passenger sat in coach, business, or first class.

**Hotel dimension:** represent information about that the passenger spend number of nights in it.

**Cust. Opinion dimension**: represent a type of opinion of passenger.

**Interaction type dimension**: represent the time of feedback or complain before/after/within the flight.

**Bus matrix of the business processes against common dimensions**

