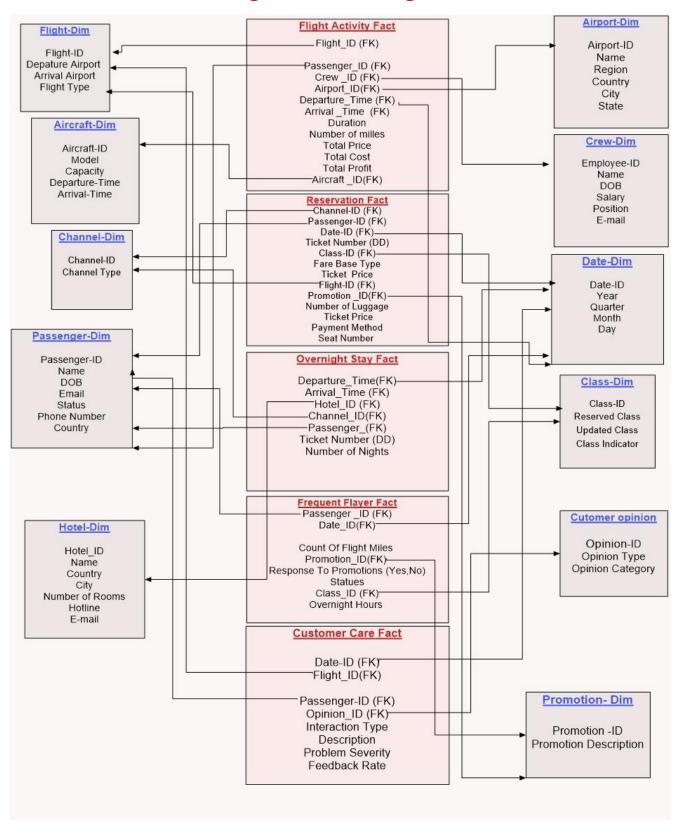
Logical Modelling



> Details about the model:

Using Galaxy schema to represent the model because the case study has many business processes.

- Flight activity fact: represents the data that occurs during the flight like the total cost, total price and total profit for each flight. ID, crew ID, airport ID and aircraft ID.
- Reservation fact: represent information about Reservation (Booking) such as date of booking, passenger ID, flight ID, reservation channel, booking class type, seat and payment method.
- Overnight stay 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.
- Frequent flyers fact: analyzes the data for frequent flyers (flyers who flies a lot) and it calculates the data about the repeated flight miles, promotion they take and the class_ID.
- **Customer care fact**: analyze the opinion of the passenger, take a feedback and show the problem severity from passenger.
- **Reservation channel dimension:** represent the method that passenger use to make the reservation.
- Class type dimension: represent whether the passenger sat in economy, business, or first class.
- Hotel dimension: represent information about the hotel that the passenger spend number of nights in it.
- **Cust**. **Opinion dimension**: represent a type of opinion of passenger if it's a feedback, inquiries or complain.
- Flight dimension: represent the flight and departure details.
- Passenger dimension: mentions the information about each passenger.
- Crew dimension: Show the details for each crew member.
- Aircraft dimension: shows the specifications for the aircraft.

- **Airport dimension:** shows the detailed information for the airport the customer landed in.
- **Date dimension:** shows the specific dates that are reserved by customers.
- **Promotion dimension:** shows the details of the promotion that repeated flyers takes.

> Bus matrix for business processes against common dimensions:

	Date	Flight	Passenger	Reservation Channel	Class	Crew	Hotel	Airport	Aircraft	Promotion	Cut. Opinion
Flight Activity	√	√	√			√		√	√		
Reservation	√		√	√	√		√			√	
Overnight Stay	√		√	√			√				
Frequent Flayer	√		√		√					✓	
Customer Care	✓	>	√								√