

# Information Technology Institute

## Data Warehouse Project

- Dimensional modeling for each business process:
  - Reservation: it represents flight activity and represented as a fact table which includes keys points to data for the passenger, the fare basis, departure, destination, if the passenger got a promotion, date of the flight, time of the reservation, feedback, level, and it is the core of the analysis.
  - Passenger: it is data about the person who applied to the reservation like SSN, name, age, gender, address, proportion of these persons gold, platinum, aluminum, or titanium.
  - Level: the level of the flyer and its previous level (if he/she upgraded).
  - Promotion: it is the details of the promotion offered to the flyer and if he accepted or not.
  - Date: it's the date of departure and arrival by day-month-year details.
  - Payment: it is the fare basis of the flight and the method of payment.
  - Destination: it is the country and city which the flight goes to.
  - Departure: it is the country and city which the flight comes from.
  - Feedback: it is the customer care interaction before, within and after the trip.

We can answer how long the flyers overnight stays are by calculating the date of the flight from the date dimension.

We can analyze the company profit by calculating the payment for each reservation from the payment dimension.

We can get proportion of frequent flyers by accessing the attribute proportion in the passenger dimension and if they upgraded from the level dimension.