**Airlines company**

**1-Identify business process :**

The company different departments focus on three major of analysis

On reservation process, number of overnight the passenger stay and the customer feedback(customer care) we will use galaxy schema to handle the three fact tables

**2-Identify Grain:**

The level of grain vary according to the fact tables, so one fact table (reservation) the grain will be booking ID the others will analyze per passenger

**3-Identify dimensions:**

**-**Date dimension(conformed,Role playing): the DWH is historical data so the date dimension is required to handle the time the flight will take off and landing.

**-promotion dimension:** the promotion the company will apply to its customer

**-flight dimension(conformed):** the dimension that mentions all info related to the flight the airport of arrival and departure

**-fare base dimension:** at every airline company there is fare base code that handle different type of classes and fees**.**

**-status dimension:** most company have different status platinum, aluminum and titanium.

-**class dimension:** different classes in the plan Businees class ,first class and economy class

-**channel dimension**: the dimension describe the different way the client can booking a tickets may be online, offline or another method.

-**passenger dimension(conformed):** this dimension contain info about passenger like name,age and phone number

-**interaction dimension** :dimension describe the way the customer service connect with customer via mobile,face to face or other

**Accommodation dimension:** accommodation dimension describe the type of accommodation the passenger will spend the nights whether in hotel or rent a house for short time.

4-Identify Facts :

**-Booking fact table :**the booking fact table analyze and measure booking(reservation process) the measures will be**:**

1-ticket\_price(Non-additive fact)

2-frequent flyers mile(additive): number of miles the passenger earned

3-number of seat(additive): describe number of seats has reserved per single booking transaction.

4-Extended total profit per single booking transaction.

5-reservation\_id (degenerate dimension):the grain will be per reservation transaction.

**-overnight fact table:**

1-number of nights the passenger will accommodate in the specific type of accommodation (addititve**)**

**-feedback fact table:**

1-problem severity: the degree of the problem which the customer complaint

(semi additive)