Computed Columns

1. Average delay of each airline (Isan)
2. Customer total mileages they have flew (Isan)
3. Sum of baggage weight for individual flight (Qikun)
4. # of flights staff were assigned to (Qikun)
5. Percentage of on-time rate of each airline (# of on-time flights / total) (Chenyang)
6. # of special needs type per flight (Chenyang)
7. Average age of current employee per airline (Chenyang)
8. Count of current premium club customers per flight (Chenyang)

Business Rule

1. Airplanes which begin use dates greater than 15 years are not allowed to host flights.(Isan)
2. The weight of individual baggage of international flight is not allowed to weigh more than 50 pounds.(Isan)
3. The weight of individual baggage of domestic flight is not allowed to weigh more than 40 pounds. (Qikun)
4. Staff who work less than 2 years are not allowed to be assigned to an international flight.(Qikun)
5. Capacity > 100, Staff limit to 5 (Chenyang)
6. For international flights, the travel document should not expire within 6 months.(Chenyang)
7. One ticket is limited to two check-in bags (Qikun)
8. People with special needs named 'wheelchair' should not be assigned to a window seat.(Qikun)

Complex Queries

1. List all customers: Single flight mileage > 3000, Travel document type: passport, PermState: WA (Isan)
2. List all flights: Departure airport = SEA, Within past 3 years, Carrier: Alaska, Contains staff citizenship: Mexico (Isan)
3. List all male customers: Customer Age < 18, Flight type: international, A ticket with two baggages (Qikun)
4. List all models: BeginDate within 3 years, Host a flight departed from LAX, Carrier county from China, Capacity >= 240 (Qikun)
5. List all flights: Captain staff first name is “Maxwell”, last name is “Musk”, status = “Delay”, delay over 30 minutes (ActualDepartureTime - EstimatedDepartureTime > 30 minutes), Having count staff >= 8, Departure airport = JFK (Chenyang)
6. (Chenyang)
7. List customers: special need: vegan, club: gold, having count business class flights >= 5, Customer Age >= 40 (Isan)
8. List carrier and the count of how many times they host an international flight in 2018, Carrier country name is United States // Model: A380 >= 5 // Distinct staff citizenship >= 8 (Isan) (//的意思是要用subquery)