CSE3055 – DATABASE PROJECT

In this project, we are going to make the database system of our airport, which is called Atatürk Airport. For this purpose, we made some research about airport management and database system and the results are in the following information:

* Airport has a name and a unique airport ID. The city where it is located.
* This airport has a parking lot, employees, flights, airport stores. An airport must have one or more parking lot.
  + There can be cars, planes, and airport vehicles in the parking lot. In parking lot, we need to keep the space number of the empty parking space, arrival and leaving time of the vehicles. There can be more than one vehicles in the parking lot.
    - As for, plane, car, and airport vehicles are subtype of vehicle, we need to keep the vehicle. Vehicles have a unique vehicle id. In addition, vehicles have model and color.
    - Cars has a unique plate number. Cars need to park into parking lot, therefor they need to pay daily price.
    - Planes has a unique plane id. In addition, they has types and capacities. In addition, planes can park into parking lot therefor we need to keep hourly prices and daily prices of the planes.
    - Airport vehicles have unique plate numbers and types. Airport vehicles do not need to pay for parking lot.
  + There are several type of persons, such as employees, pilots, and passengers. In order to differentiate persons we need to keep each person’s TCKN (ID), name, address (street, city), and phone number. There can be several phone numbers of persons. A person may be both an employee and passenger or both pilot and passenger at the same time.
    - Employees of the airport has a unique employee ID. Also, we need to keep their salaries, and skills. Each employee may have a several skills.
    - Employees are formed in four different ways according to their duties. These are technician, traffic controller, manager and emergency service.
      * Technicians kept with their field, traffic controllers, with their location. Emergency services has a type and an emergency number. In addition, each department has manager. To do that, managers kept with the department. So that we can see which department they are responsible for.
    - All of the employees must have a certificate about their job. There cannot be any other type of employee.
    - Pilot has a unique pilot id. Also, there must be a certificate for being a pilot.
    - Passengers keep tracked with their gender and luggage weights. A passenger needs a ticket to travel. Tickets have unique ticket id.
  + Flights of the airport has a unique flight ID. Also, we need to keep their date, and where they go to.
    - Flights are divided into two parts. One of them is cargo flight and the other one is passenger flights. We are keep the number of seats in passenger flights. Also we need to keep number of cargo for cargo flights.
    - Also every flights needs a pilot and every pilot must have a flight certificate. Every certificate has a certificate date and unique certificate ID.
    - Cargo flights has a cargo line and passenger flights has luggage line. Cargo line and passenger line kept with ordered quantity.
  + Airport stores of the airport has a unique block number. Each store has a name, contract date of lessee.
    - Airport stores have an relationship with suppliers. Supplier has a unique supplier ID. In addition, we keep track of name, and address of it with district and city.
    - Each supplier supplies to airport stores with a unit price. There can be a more than one supplier.

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