

# Airport Management Project (MMAA)

## Members Names:

عبدالرحمن خالد سعد الدين

عبدالرحمن عبد الناصر احمد علي

محمد علاء عبدالرازق محمد

محمد خالد احمد ماهر

## Supervisors Names:

عبدالرحمن خالد سعد الدين

## The Problem:

We focus on the airlines that have contracted with us and the flights operated by those airlines. We also pay attention to the different weather conditions that will affect the condition of the plane, and we also pay attention to the employees who will be present on each flight, as well as the maintenance work for the planes and buses.

## Requirements:

Consider an airport database that keeps track of employee, passenger, flight, hanger and plane:

- For each employee, the database maintains information on the employee's name, salary, job title, ssn, gender, birth date, address, education and phone number.
- Each employee may have many phones number.
- Four subclasses of the employee entity type are identified: mechanic, AME, Flight Attendant and Pilot.

- For each passenger, the database maintains information on the passenger's name, place of birth, nationality, passport-type, edate, birth date, idate, country-code, passport-no, and gender.
- For each flight, the database maintains information on the flight's no, status, arrival, departure, date, time, destination, and inception.
- Specific attributes of pilot are ppl and flight hours.
- A specific attribute of AME is IV in Aeroskills Certificate.
- Specific attributes of flight attendant are language and flight hours.
- Each flight attendant may speak many languages.
- Specific attributes of mechanic are certificate no and date of issue.
- For each gate, we keep gate number and location.
- For each hanger, we keep hanger no and hanger location.
- There a subclass of the hanger is bus hanger.
- A specific attribute of bus hanger is capacity.
- For ticket, we keep price, class and no.
- We keep coordinates, wind, humidity, air pressure, Precipitation, CD, Country\_Code, log\_date, Cloud\_Coverage, Relative\_Visibility and Weather\_Condition in Weather\_Data.
- For each airline, the database maintains information on the airline's name, iata, icao and base-airport.
- For each bus, we keep status, bus type, capacity and bus no.
- Air-employee is a subset of the union of pilot and air-attendant.
- There is a trinary relationship between ticket, passenger and flight book.
- There is a relationship between flight and weather\_data send many-many.
- There is a relationship between plane and flight on-board one-many.
- There is a relationship between airline and plane own one-many.
- There is a relationship between air-employee and airline work many-one.
- There is a relationship between plane and hanger in one-one.
- The mechanic maintains planes Supervised by AME.
- There is a relationship between mechanic and bus Maintain many-many.
- Each gate is secure by two employees.

