

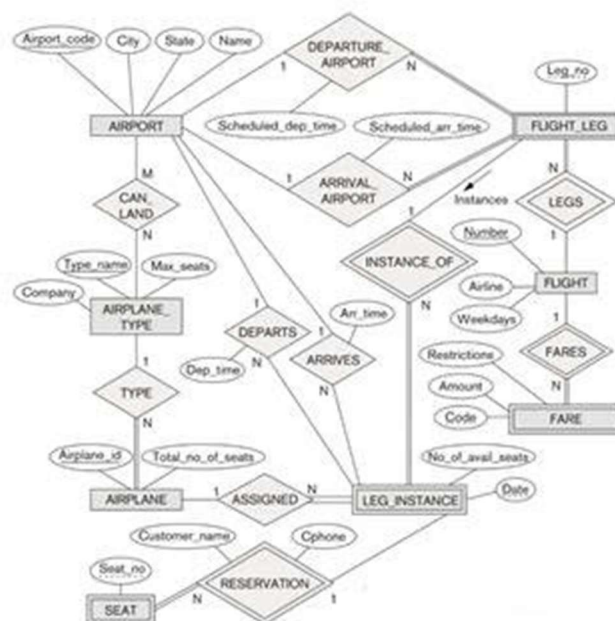
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Group Name: Project_Group 2

Prof: Miranda Garcia Antonio

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Entity Relationship Diagram



Relational Schema

Airlines(
airline_id CHAR(20) PRIMARY KEY,
airline_name VARCHAR(100)
)

Aircraft(
aircraft_id CHAR(20) PRIMARY KEY,
airline_id CHAR(20),
model VARCHAR(50),
total_seats INT,
FOREIGN KEY (airline_id) REFERENCES Airlines(airline_id)
)

Airports(
airport_id CHAR(20) PRIMARY KEY,
airport_name VARCHAR(100),
city VARCHAR(50),
state VARCHAR(50)
)

Days(
day_number INT PRIMARY KEY,
day_name CHAR(10)
)

Flights(
flight_number CHAR(20) PRIMARY KEY,
airline_id CHAR(20),
departure_airport CHAR(20),

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destination_airport CHAR(20),
flight_type CHAR(20),
depart_time TIME,
arrive_time TIME,
fare_first FLOAT,
fare_economy FLOAT,
FOREIGN KEY (airline_id) REFERENCES Airlines(airline_id),
FOREIGN KEY (departure_airport) REFERENCES Airports(airport_id),
FOREIGN KEY (destination_airport) REFERENCES Airports(airport_id)
)

Flight_Days(
flight_number CHAR(20),
day_number INT,
PRIMARY KEY (flight_number, day_number),
FOREIGN KEY (flight_number) REFERENCES Flights(flight_number),
FOREIGN KEY (day_number) REFERENCES Days(day_number)
)

Trip(
flight_number CHAR(20),
trip_date DATE,
meal CHAR(30),
PRIMARY KEY (flight_number, trip_date),
FOREIGN KEY (flight_number) REFERENCES Flights(flight_number)
)

Seats(
aircraft_id CHAR(20),

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seat_number CHAR(10),
class CHAR(10),
PRIMARY KEY (aircraft_id, seat_number),
FOREIGN KEY (aircraft_id) REFERENCES Aircraft(aircraft_id)
)

Seat_Assignment(
flight_number CHAR(20),
trip_date DATE,
aircraft_id CHAR(20),
seat_number CHAR(10),
PRIMARY KEY (flight_number, trip_date, aircraft_id, seat_number),
FOREIGN KEY (flight_number, trip_date) REFERENCES Trip(flight_number,
trip_date),
FOREIGN KEY (aircraft_id, seat_number) REFERENCES Seats(aircraft_id,
seat_number)
)

Person(
user_name CHAR(20) PRIMARY KEY,
passw CHAR(20),
full_name CHAR(50)
)

Admin(
user_name CHAR(20) PRIMARY KEY,
FOREIGN KEY (user_name) REFERENCES Person(user_name)
)

Customer_Reg(
user_name CHAR(20) PRIMARY KEY,

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FOREIGN KEY (user_name) REFERENCES Person(user_name)
)
Customer(
  user_name CHAR(20),
  account CHAR(20),
  PRIMARY KEY (user_name),
  FOREIGN KEY (user_name) REFERENCES Person(user_name)
)
Ticket(
  ticket_number CHAR(20) PRIMARY KEY,
  flight_number CHAR(20),
  trip_date DATE,
  user_name CHAR(20),
  round_trip CHAR(1),
  booking_fee DECIMAL(8,2),
  issue_date DATE,
  total_fare DECIMAL(8,2),
  FOREIGN KEY (flight_number, trip_date) REFERENCES Trip(flight_number,
trip_date),
  FOREIGN KEY (user_name) REFERENCES Person(user_name)
)
Users(
  user_id INT PRIMARY KEY,
  username VARCHAR(50),
  password VARCHAR(50),
  role ENUM('admin', 'user', 'customer_rep')

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)  
  
Question(  
    question_id INT PRIMARY KEY AUTO_INCREMENT,  
    user_name VARCHAR(50),  
    question_text TEXT,  
    question_date DATETIME,  
    FOREIGN KEY (user_name) REFERENCES Person(user_name)  
)  
  
Answer(  
    answer_id INT PRIMARY KEY AUTO_INCREMENT,  
    question_id INT,  
    rep_username VARCHAR(50),  
    answer_text TEXT,  
    answer_date DATETIME,  
    FOREIGN KEY (question_id) REFERENCES Question(question_id),  
    FOREIGN KEY (rep_username) REFERENCES Person(user_name)  
)
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