Database Management System (IT214)

Group:5

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DDL Scripts

```
CREATE TABLE Airports (
    Airport_name VARCHAR(100) PRIMARY KEY,
    State VARCHAR(100) NOT NULL,
    City VARCHAR(100) NOT NULL,
    Country VARCHAR(100) NOT NULL,
    Time_zone VARCHAR(50) NOT NULL,
    Latitude DECIMAL(9,6),
    Longitude DECIMAL(9,6)
);

CREATE TABLE Terminal (
    Terminal_id SERIAL PRIMARY KEY,
    No_of_gates INT NOT NULL,
    Airport_name VARCHAR(100) NOT NULL REFERENCES
Airports(Airport_name)
);

CREATE TABLE Aircraft (
    Aircraft_id SERIAL PRIMARY KEY,
    Manufacturer VARCHAR(100) NOT NULL,
    Model VARCHAR(100) NOT NULL,
    Capacity INT NOT NULL
);

CREATE TABLE Flights (
    flight_id SERIAL PRIMARY KEY,
    flight_no VARCHAR(20) NOT NULL,
    departure_airport VARCHAR(100) NOT NULL REFERENCES
Airports(Airport_name),
```

```sql
    arrival_airport VARCHAR(100) NOT NULL REFERENCES
Airports(Airport_name),
    departure_terminal VARCHAR(50) NOT NULL,
    arrival_terminal VARCHAR(50) NOT NULL,
    Aircraft_id INT NOT NULL REFERENCES Aircraft(Aircraft_id),
    departure_time TIMESTAMP NOT NULL,
    arrival_time TIMESTAMP NOT NULL,
    distance DECIMAL(10,2),
    Available_economy_seat INT NOT NULL,
    Available_Business_seat INT NOT NULL
);

CREATE TABLE Passenger (
    p_id SERIAL PRIMARY KEY,
    First_Name VARCHAR(100) NOT NULL,
    Middle_Name VARCHAR(100) NOT NULL,
    Last_Name VARCHAR(100) NOT NULL,
    Gender CHAR(1) NOT NULL,
    DOB DATE NOT NULL,
    Age INT NOT NULL,
    Nationality VARCHAR(50) NOT NULL,
    passport_no VARCHAR(20) NOT NULL
);

CREATE TABLE FrequentFlyer (
    loyalty_id SERIAL PRIMARY KEY,
    Membership_no VARCHAR(50) NOT NULL,
    Membership_tier VARCHAR(50) NOT NULL,
    p_id INT NOT NULL REFERENCES Passenger(p_id),
    Valid_from DATE NOT NULL,
    Valid_to DATE NOT NULL
);

CREATE TABLE Meals (
```

```sql
    meal_id SERIAL PRIMARY KEY,
    meal_type VARCHAR(50) NOT NULL,
    dietary VARCHAR(100),
    price_usd DECIMAL(10,2) NOT NULL,
    price_inr DECIMAL(10,2) NOT NULL
);

CREATE TABLE Booking (
    booking_id SERIAL PRIMARY KEY,
    source VARCHAR(100) NOT NULL,
    destination VARCHAR(100) NOT NULL,
    booking_date DATE NOT NULL,
    meal_id INT REFERENCES Meals(meal_id),
    flight_id INT NOT NULL REFERENCES Flights(flight_id),
    economy BOOLEAN NOT NULL,
    business BOOLEAN NOT NULL,
    p_id INT NOT NULL REFERENCES Passenger(p_id)
);

CREATE TABLE Payments (
    payment_id SERIAL PRIMARY KEY,
    p_id INT NOT NULL REFERENCES Passenger(p_id),
    booking_id INT NOT NULL REFERENCES Booking(booking_id),
    payment_method VARCHAR(50) NOT NULL,
    amount DECIMAL(10,2) NOT NULL,
    loyalty_id INT REFERENCES FrequentFlyer(loyalty_id),
    transaction_date TIMESTAMP NOT NULL,
    currency VARCHAR(10) NOT NULL
);

CREATE TABLE Check_in (
    checkin_id SERIAL PRIMARY KEY,
    p_id INT NOT NULL REFERENCES Passenger(p_id),
    flight_id INT NOT NULL REFERENCES Flights(flight_id),
```

```sql
    checkin_time TIMESTAMP NOT NULL,
    boarding_pass_id INT NOT NULL,
    boarding_time TIMESTAMP NOT NULL,
    baggage_count INT NOT NULL,
    payment_id INT NOT NULL REFERENCES Payments(payment_id)
);

CREATE TABLE Luggage (
    Luggage_id SERIAL PRIMARY KEY,
    Luggage_type VARCHAR(50) NOT NULL,
    is_fragile BOOLEAN NOT NULL,
    checkin_id INT NOT NULL REFERENCES Check_in(checkin_id),
    weight DECIMAL(10,2) NOT NULL,
    payment_id INT NOT NULL
);

CREATE TABLE Reviews (
    Review_id SERIAL PRIMARY KEY,
    flight_id INT NOT NULL REFERENCES Flights(flight_id),
    Comments TEXT,
    Rating INT CHECK (Rating BETWEEN 1 AND 5)
);

CREATE TABLE Employee (
    E_id SERIAL PRIMARY KEY,
    First_name VARCHAR(100) NOT NULL,
    Middle_name VARCHAR(100),
    Last_name VARCHAR(100) NOT NULL,
    Age INT NOT NULL,
    Nationality VARCHAR(50) NOT NULL,
    DOB DATE NOT NULL,
    Position VARCHAR(100) NOT NULL,
    Department VARCHAR(100) NOT NULL
);
```

```sql
CREATE TABLE Crew (
    Crew_id SERIAL PRIMARY KEY,
    E_id INT NOT NULL REFERENCES Employee(E_id),
    Role VARCHAR(100) NOT NULL,
    Experience INT
);

CREATE TABLE Assigned (
    Crew_id INT NOT NULL REFERENCES Crew(Crew_id),
    flight_id INT NOT NULL REFERENCES Flights(flight_id),
    PRIMARY KEY (Crew_id, flight_id)
);

CREATE TABLE Passenger_Phone (
    P_id INT NOT NULL REFERENCES Passenger(p_id),
    Phone VARCHAR(20) NOT NULL,
    PRIMARY KEY(P_id, Phone)
);

CREATE TABLE Passenger_email (
    P_id INT NOT NULL REFERENCES Passenger(p_id),
    E_mail VARCHAR(100) NOT NULL,
    PRIMARY KEY(P_id, E_mail)
);

CREATE TABLE Passenger_Address_Pincode (
    P_id INT NOT NULL REFERENCES Passenger(p_id),
    Pincode INT NOT NULL,
    PRIMARY KEY(P_id, Pincode)
);

CREATE TABLE Passenger_Address_State (
    P_id INT NOT NULL REFERENCES Passenger(p_id),
```

```sql
    State VARCHAR(50) NOT NULL,
    PRIMARY KEY(P_id, State)
);

CREATE TABLE Passenger_Address_City (
    P_id INT NOT NULL REFERENCES Passenger(p_id),
    City VARCHAR(50) NOT NULL,
    PRIMARY KEY(P_id, City)
);

CREATE TABLE Employee_Phone (
    E_id INT NOT NULL REFERENCES Employee(E_id),
    Phone VARCHAR(20) NOT NULL,
    PRIMARY KEY(E_id, Phone)
);

CREATE TABLE Employee_email (
    E_id INT NOT NULL REFERENCES Employee(E_id),
    E_mail VARCHAR(50) NOT NULL,
    PRIMARY KEY(E_id, E_mail)
);

CREATE TABLE Crew_Phone (
    Crew_id INT NOT NULL REFERENCES Crew(Crew_id),
    Phone VARCHAR(20) NOT NULL,
    PRIMARY KEY(Crew_id, Phone)
);
```

THANK YOU