Database Systems Quiz 4
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1. [50 pts] For the following relational schema diagram, specify the primary and foreign keys for this schema. Connect the schemas through their referential integrity constraints (foreign keys).

AIRPORT: Primary key is Airportcode.

FLIGHT: Primary key is Flight_number

FLIGHT_LEG: Primary key is Leg_number and Foreign key is Flight_number.

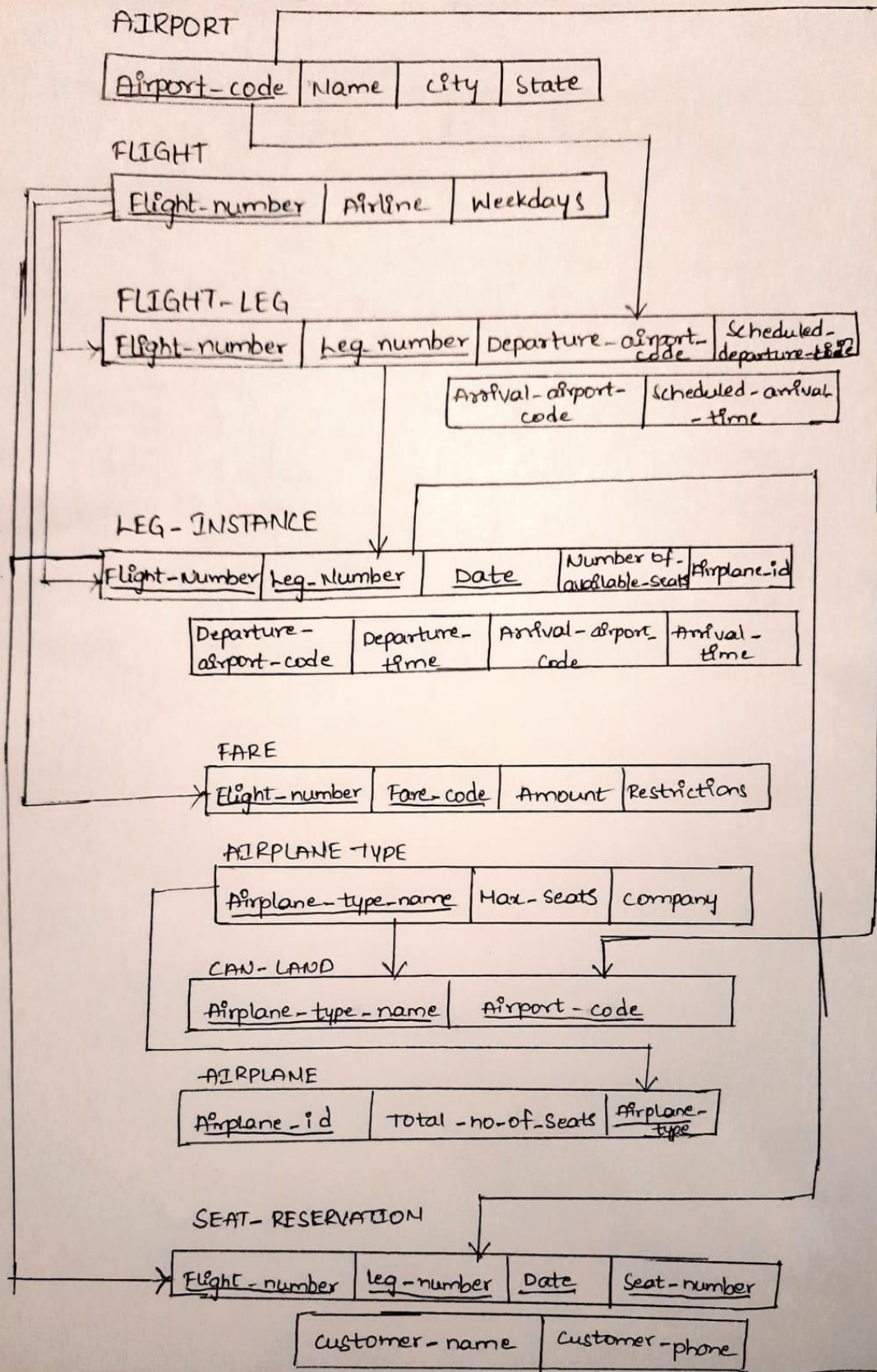**LEG_INSTANCE**: Primary key is Date and It has two Foreign keys Flight_number and Leg_number.

FARE: Primary key is Fare_code and Flight_number is Foreign key.

AIRPLANE_TYPE: Airplane_type_name is primary key.

CAN_LAND: It doesn't have any primary keys but it has two foreign keys Airplane_type_name and airport_code.

AIRPLANE: Primary key is Airplane_id and Airplane_type is Foreign code.

SEAT_RESERVATION: Primary key is seat_no and this table has two foreign keys Flight_number and Leg_number.

AIRPORT

Airport-code	Name	City	State

FLIGHT

Flight-number	Airline	Weekdays

FLIGHT-LEG

Flight-number	Leg-number	Departure-airport-code	Scheduled-departure-time
		Arrival-airport-code	Scheduled-arrival-time

LEG-INSTANCE

Flight-Number	Leg-Number	Date	Number of-available-seats	Airplane-id
	Departure-airport-code	Departure-time	Arrival-airport-Code	Arrival-time

FARE

Flight-number	Fare-code	Amount	Restrictions

AIRPLANE-TYPE

Airplane-type-name	Max-seats	Company

CAN-LAND

Airplane-type-name	Airport-code

AIRPLANE

Airplane-id	Total-no-of-Seats	Airplane-type

SEAT-RESERVATION

Flight-number	Leg-number	Date	Seat-number
	Customer-name	Customer-phone	

2. [50 pts] Fedex prides itself on having up-to-date information on the processing and current location of each shipped item. To do this, Fedex relies on a company-wide information system.

Shipped items are the heart of the Fedex product tracking information system. Shipped items can be characterized by item number (unique), weight, dimensions, insurance amount, destination, and final delivery date. Shipped items are received into the Fedex system at a single retail center. Retail centers are characterized by their type, uniqueID, and address. Shipped items make their way to their destination via one or more standard Fedex transportation events (i.e., flights, truck deliveries). These transportation events are characterized by a unique scheduleNumber, a type (e.g, flight,truck), and a deliveryRoute.

Please generate an Entity Relationship diagram that captures this information about the Fedex system. Be certain to indicate attributes, identifiers, and cardinality constraints.