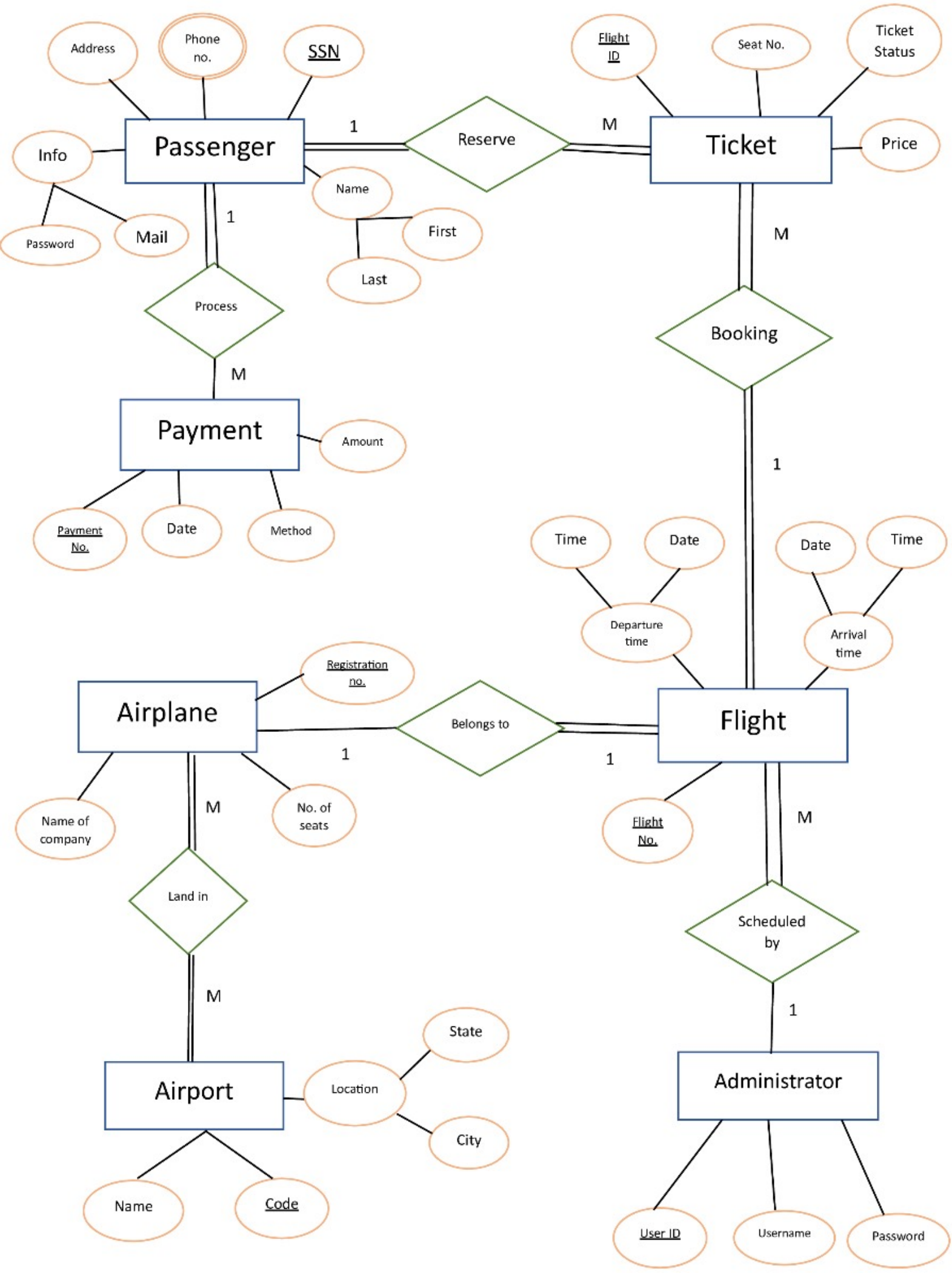
Address
Phone no.
SSN
Passenger
Info
Password
Mail
Name
First
Last
1
1
Reserve
M
Flight ID
Seat No.
Ticket Status
Ticket
Price
M
Booking
1
Process
M
Payment
Amount
Payment No.
Date
Method
Time
Date
Departure time
Date
Time
Arrival time
Registration no.
Airplane
Belongs to
1
1
Flight
Name of company
M
No. of seats
Flight No.
M
Land in
Scheduled by
M
1
State
Location
City
Airport
Administrator
Name
Code
User ID
Username
Password

PASSENGER

SSN	ADDRESS	FIRST_NAME	SECOND_NAME	EMAIL	PASSWORD

TICKET

TICKET_ID	SEAT_NO	TICKET_STATUS	PRICE	PASSENGER_ID	FLIGHT_ID

FLIGHT

FLIGHT_NO	DEPARTURE_DATE	DEPARTURE_TIME	ARRIVAL_DATE	ARRIVAL_TIME	ADMIN_ID	AIRPLANE_ID

PAYMENT

PAYMENT_NO	PAYMENT_DATE	METHOD	AMOUNT	PASSENGER_SSN

AIRPORT

AIRPORT_CODE	AIRPORT_NAME	AIRPORT_STATE	AIRPORT_CITY

AIRPLANE

REGISTRATION_NO	SEATS_NO	MANUFACTURER_COMPANY

ADMINSTRATOR

ADMIN_ID	USERNAME	PASSWORD

LANDING

AIRPLANE_ID	AIRPORT_ID	DATE	TIME

PHONE NUMBER

PHONE_NUMBER	PASSENGER_SSN

Assumption

❖ Entities and attributes:

- Airport

Each airport has:

- Name.
- Code.
- Location (has State and City).

- Airplane

Each airplane has:

- Registration number.
- Name of company.
- Number of seats.

- Flight

Each flight has:

- Flight number.
- Departure time and Arrival time (Both have Date and Time).

- Ticket

Each ticket has:

- Flight Id.
- Ticket status.
- Price.
- Seat number.

- Administrator

Each administrator has:

- User id.
- Username.
- Password.

- Passenger

Each passenger has:

- Name (has First name and Last name).
- SSN.
- Phone number.
- Address.
- Info (has Mail and Password).

- Payment

Each payment has:

- Payment number.
- Amount.
- Method.
- Date.

❖ Relationships:

- Airplane – Airport (Land in): (M : M)

An airplane may land in multiple airports based on its destination.

Multiple airplanes may land in the same airport.

All airplanes must land in an airport.

All airports must have an airplane.

- Airplane – Flight (Belongs to): (1: 1)

An airplane belongs to one flight.

A flight belongs to one airplane.

All flights must belong to an airplane.

Not all airplanes must belong to a flight.

- Flight – Administrator (Scheduled by): (M : 1)

An administrator may schedule multiple flights.

A flight is scheduled by one administrator

All flights must be scheduled by an administrator.

Not all administrators must schedule a flight.

- Flight – Ticket (Booking): (1 : M)

Multiple tickets may be booked for a flight.

A flight has one ticket.

All flights must have a ticket.

All tickets must belong to a flight.

- Ticket – Passenger (Reserve): (M : 1)

A passenger may reserve multiple tickets.

A ticket is reserved by one passenger.

All tickets must be reserved by a passenger.

All passengers must reserve a ticket.

- Passenger – Payment (Process): (1 : M)

A passenger may process multiple payments.

A payment is processed by one passenger.

All passengers must process a payment.

Not all payments must be processed by a passenger.