

Group 19

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### **Schemas**

**Airline**(airline\_id:varchar(2), primary key(airline\_id))

**Aircraft**(aircraft\_id:int, primary key(aircraft\_id))

**Airport**(airport\_id:varchar(3), primary key(airport\_id))

**Owns**(aircraft\_id:int, airline\_id:varchar(2),  
primary key(aircraft\_id),  
foreign key(airline\_id) references Airline)

**Has\_seats**(aircraft\_id:int, seat\_number:int, seat\_class:varchar(1),  
primary key(aircraft\_id, seat\_number),  
foreign key(aircraft\_id) references Aircraft)

**Flight\_Operates**(airline\_id:varchar(2), airport\_id:varchar(3), aircraft\_id:int, flight\_number:int,  
flight\_type:varchar(1), depart\_time:datetime, arrive\_time:datetime, fare\_first:float,  
fare\_economy:float, departure\_airport:varchar(3), destination\_airport:varchar(3)  
primary key(airline\_id, airport\_id, aircraft\_id, flight\_number),  
foreign key(airline\_id) references Airline,  
foreign key(airport\_id) references Airport,  
foreign key(aircraft\_id) references Aircraft)

**Day**(day\_number:int, day:varchar(10), primary key(day\_number))

**Flights\_on**(airline\_id:varchar(2), airport\_id:varchar(3), aircraft\_id:int, flight\_number:int,  
day\_number:int,  
primary key(airline\_id, airport\_id, aircraft\_id, flight\_number, day\_number),  
foreign key(airline\_id) references Airline,  
foreign key(airport\_id) references Airport,  
foreign key(aircraft\_id) references Aircraft)

**Ticket**(ticket\_number:int, round\_trip:boolean, booking\_fee:float, issue\_date:datetime,  
total\_fare:float,  
primary key(ticket\_number))

**Person**(username:varchar(15), password:varchar(15), name:varchar(50),

is\_admin:boolean NOT NULL, is\_customer\_rep:boolean NOT NULL, is\_customer:boolean NOT NULL, account#:int,  
primary key(username))

**Reserves**(ticket\_number:int, user\_name:varchar(15),  
primary key(ticket\_number:int),  
foreign key (user\_name))

**Trip**(ticket\_number:int, airport\_id:varchar(3), airline\_id:varchar(2), aircraft\_id:int,  
seat\_number:int, flight\_number:int, date:datetime, meal:varchar(30),  
primary key(ticket\_number, airport\_id, airline\_id, aircraft\_id, seat\_number,  
flight\_number)),  
foreign key(ticket\_number) references Ticket,  
foreign key(seat\_number) references Has\_seats  
foreign key(airport\_id) references Flight\_Operates  
foreign key(airline\_id) references Flight\_Operates  
foreign key(aircraft\_id) references Flight\_Operates  
foreign key(flight\_number) references Flight\_Operates

**\*\*Note\*\***

Merged “has” with “seats” → “has\_seats”

Using an attribute for “departure” and “destination airports”

Merged “Flights” with “operates”, “uses”, “departure” and “destination” to create  
“flight\_opperates”

Merged Trip with “operates”, “for”, and “assigned” into “Trip”

Added boolean values for “admin”, “customer\_rep” and “customer” to create one table for  
“Person”, encompassing “admin”, “customer representatives” and “customers” all in one