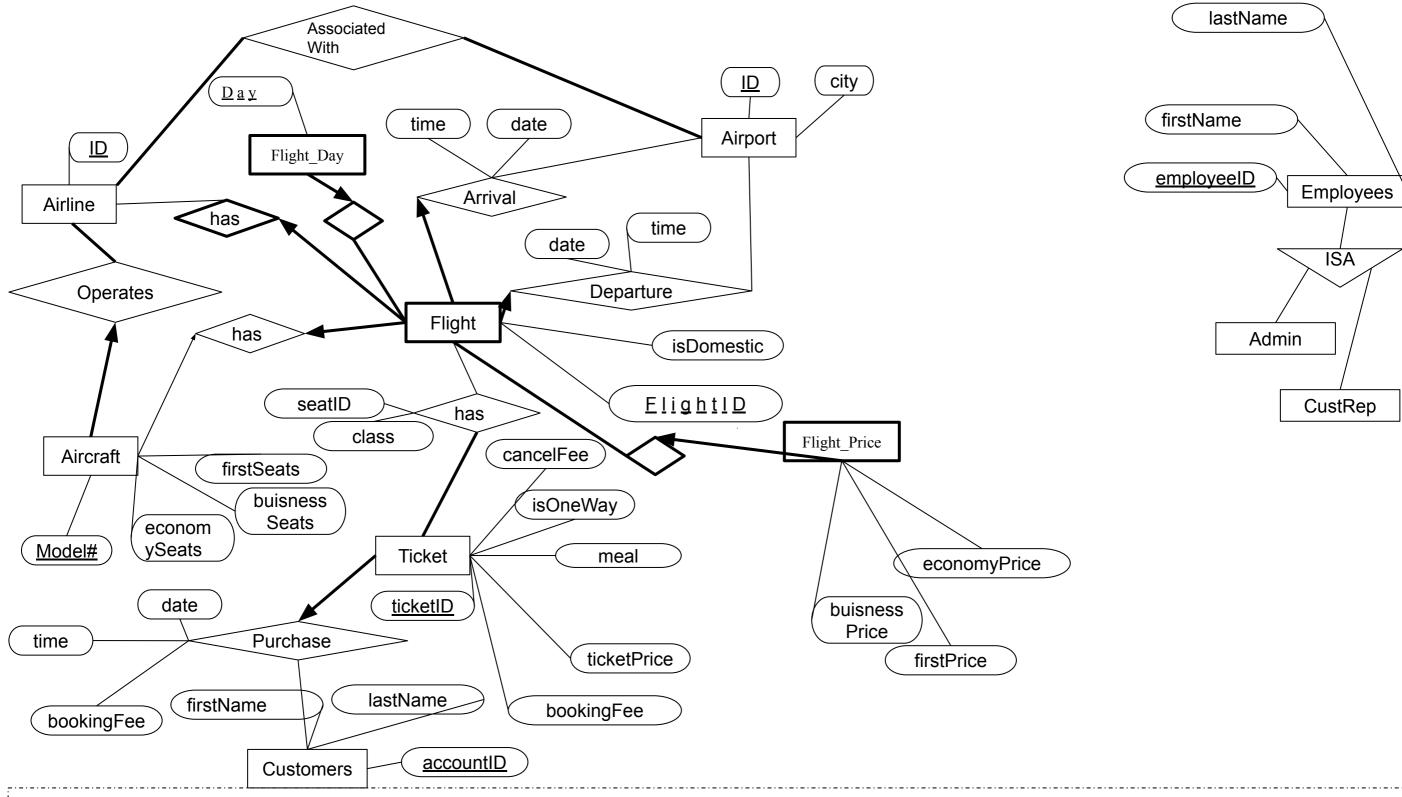
Group 20: Daniel Alvarado Maynor Moreno Rahul Patel Jonathan Pinto Naveenan Yogeswaran



## **ASSUMPTIONS:**

- Every Airline must be associated with at least one Airport and every Airport must be associated with at least one Airline.
- No aircraft can operate without an associated Airline (An airline being whatever company in charge of the aircraft)
  - Aircraft is its own table to avoid redundancy
  - Added model# and capacity to make calculations easier
  - The Flight number is a partial key
    - American Airlines #1000 is not Spirit #1000
- Flights is weak entity set, depends on Airline
- A flight has multiple flight days, weak entity set
  - The list of days it flies cannot be derived
- A Ticket can have one or many flights
  - This covers direct or transfer points
- A Ticket can be one way or round trip
  o isOneWay: Bool
  - Oneway and multiple flights = transfers
  - Oneway and single flight = direct
  - Not One way and 2 flights = round trip direct
  - Noe One way and more flights = round trip transfers
- Customer can have an account with no sales: 0 to many tickets purchased
- Threw in a ticketId for Tickets as pk
  - Can't be a weak entity set
- Give me flights within +- 3 days from a to b is a query
- Reservations are Purchases; Old and current flights can be queried for each customer
  - Overbooked flights get a queue system where system will allow people to book seats past the maximum capacity. Seat# capacity = queue for next available seat. When seat 10 opens up in a 100 capacity plane, for example, seat 101 would be changed to seat 10, and seat 102..... Would be decreased by 1 to seat 101
- Searching specific flights based on attributes is a query
- Tickets with multiple flights can be created through queries
- Fees can be set through queries
- Every ticket comes with at most one meal