Database Project – Asher Remer and Yishai Dredzen

In this project, we will be creating a database for a fictional airline. Any similarities to real airlines' databases are purely incidental.
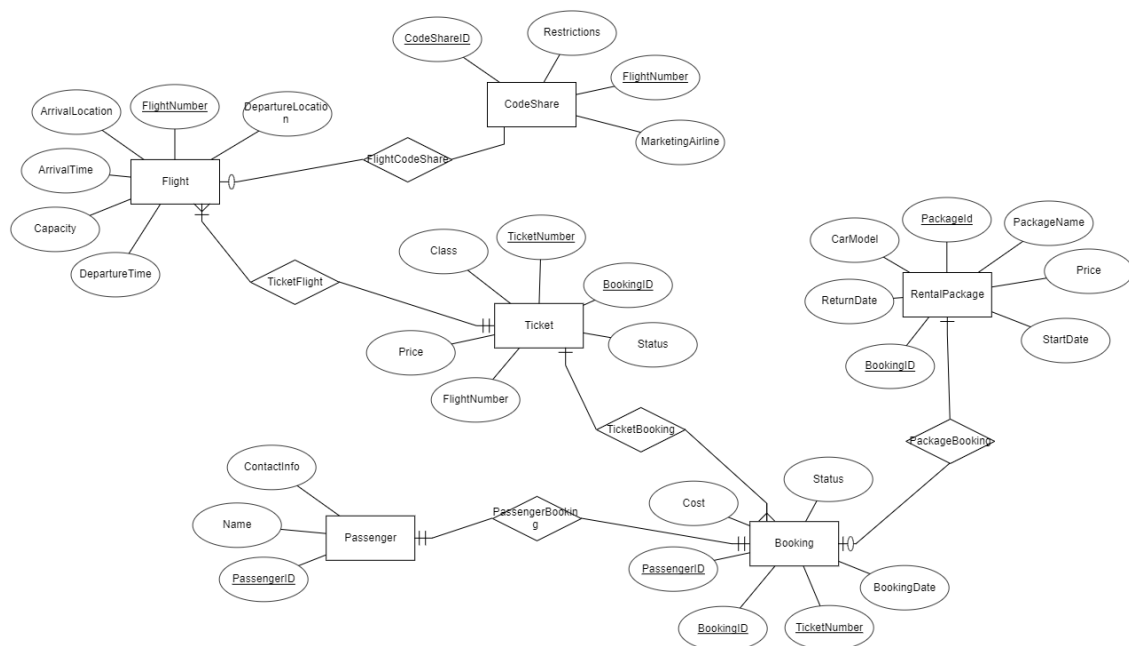
We will be managing the ticketing part of the airline database. We have six entities as follows:

1. Ticket: Contains details about the ticket, the passenger, the flight and other details.
2. Passenger: Details about the passenger.
3. Flight: Details about the flight, departure and arrival times and locations.
4. Booking: Details about a customer's booking, date of the booking.
5. Rental Package: Details of car rental if a customer wants to add on to their booking.
6. CodeShare: Information about code-share agreements between us and other airlines, flight numbers and other details.

Properties of the entities are as follows:

1. Ticket: TicketNumber, PassengerID, FlightNumber, Class, Status, Price
2. Passenger: PassengerID, Name, ContactInfo
3. Flight: FlightNumber, DepartureLocation, DepartureTime, ArrivalLocation, ArrivalTime, Capacity
4. Booking: BookingID, TicketNumber, PassengerID, BookingDate, Status
5. Rental Package: PackageID, Package Name, BookingID, StartDate, ReturnDate, CarModel, Price
6. CodeShare: CodeShareID, FlightNumber, MarketingAirline, Restrictions

Below is a screenshot of the ERD, created using erdplus.com:

The relationships between the entities are as follows:

1. PassengerBooking: A booking is linked to a specific customer/passenger by their unique Passenger ID.
2. TicketBooking: A booking is linked to a ticket by its unique ticket number.
3. PackageBooking: A booking is linked to a rental package order through the Booking ID in the Package entity.
4. TicketFlight: A ticket is linked to a flight through the assigned flight number.
5. FlightCodeShare: Code sharing is linked to a flight through the assigned flight number.

Below is a screenshot of the DSD: