

Assumptions regarding exercise BrianAir 4a

EER

Booking - Seat price is derived from TotalPrice/Travelers.

Reservation and Booking - A booking can not exist without there being a reservation. Thus the Booking entity is in a weak relationship with the Reservation entity.

Traveller Superclass - All Bookings need at least one Contact. There may be multiple Passengers for each booking, but only one Contact so in case there is only one Passenger that passenger is also a Contact.

Weekday flight - The weekday flights' entity attributes are added to the Flight entities' attributes.

UnpaidSeats and VacantSeats difference - UnpaidSeats are reserved but not booked seats. VacantSeats are neither reserved nor booked seats. You cannot book more seats than unpaid seats, but you can reserve more seats than both vacant seats and unpaid seats.

Mapping of EER to Relational Diagram

Route - Added RouteNbr as a partial key to primary key FlightNbr in Flight.

Booking - Added ReservationID as partial key to primary key ReservationID in Reservation. The single attributes of the relation type "payment" are added as attributes to Booking.

Reservation - Added FlightNbr as partial key to primary key FlightNbr in Flight.

Booking - Added CPassNbr as partial key to primary key CPassNbr in Contact.

On_reservation - Combined primary keys from Passenger and Reservation.

In the relational diagram **bold with underscore** means it is a primary key. Being only underscored means it is a candidate key.