Car Rental Database EER Diagram

Homework 2.1 EER Diagram

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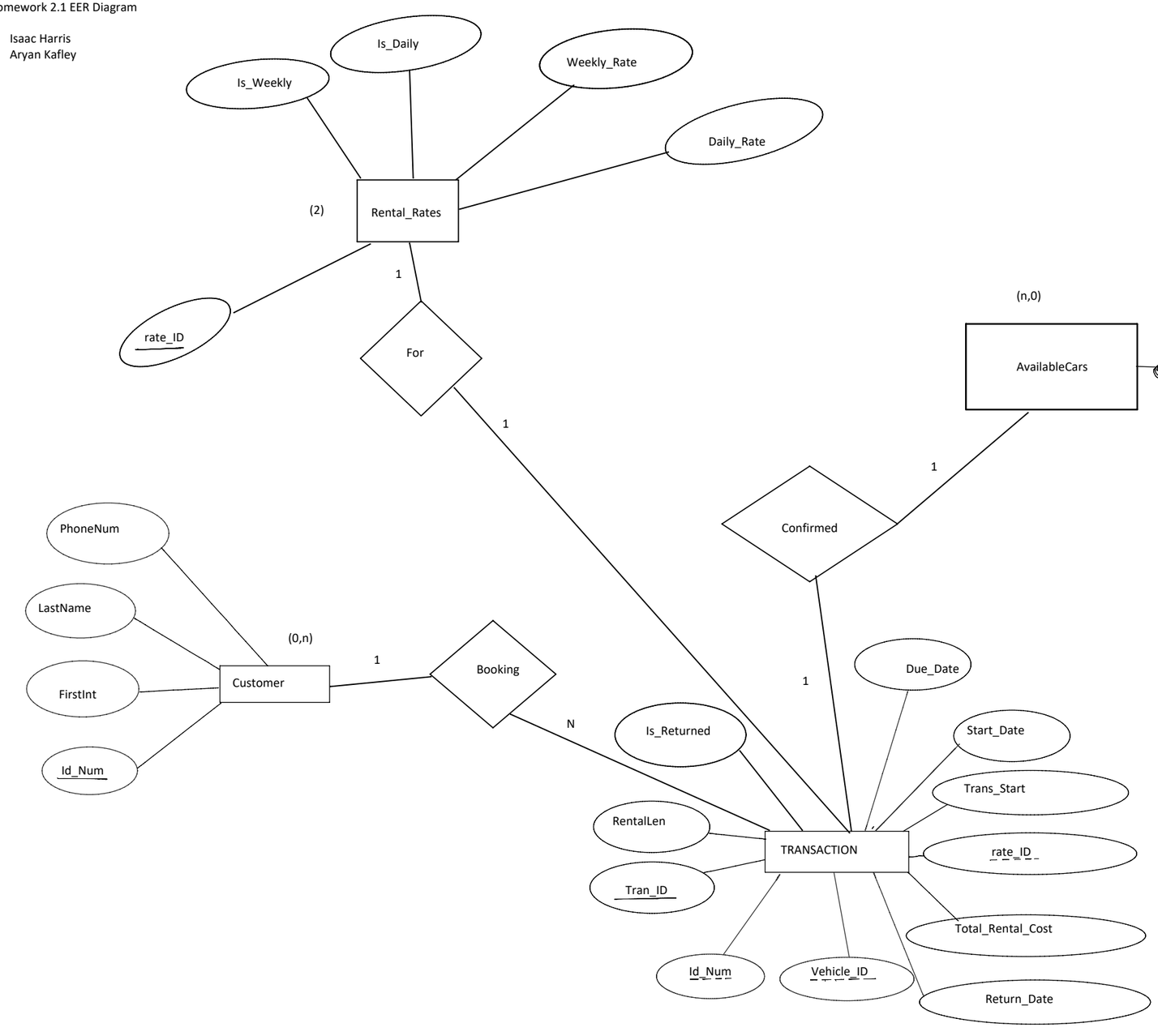

f(RentalLen) = (Due_Date - Startdate)
On return it is changed to f(RentalLen) = (Return_Date - Start Date)

f(Total_Rental_Cost) = (RentalLen * Rental_rates.Weekly_Rate)/7
Or for daily
f(Total_Rental_Cost) = (RentalLen * Rental_rates.Dailyy_Rate)

Cars.Is_Avalible is updated when the car is booked or when the care is returned.

transactions.Is_Returned is updated when the tranaction is started to 'N' then updated to 'Y' on the return.

Return_Date is not imputed by the users cars can only be returned on the current day.

Trans_Start is not imputed by the users it us updated automatically at the start of a transaction.

The subset AVALIBLE_CARS is formed using a Boolean condition based on the variable cars.Is_Avalible where cars.Is_Avalible = 'Y'

A CUSTOMER can rent as many AVALIBLE_CARS as they would like at any given time.

A TRANSACTIONS can only have one of each attribute.

A CARS can be on any number of TRANSACTIONS.

A CUSTOMER can have any number of TRANSACTIONS.

Num_Seats, Has_AWD, Has_Truck_Bed are used to determine the type of car that is being rented.

dom(TRANSACTIONS.Vehicle_ID) = dom(CARS.Vehicle_ID)

dom(TRANSACTIONS.ID_Num) = dom(CUSTOMER.ID_Num)

dom(TRANSACTIONS.Rate_ID) = dom(RENTAL_RATES.Rate_ID)

A TRANSACTIN can only be started with a valid customer.ID, AVLALIBLE_CARS.Vehicle_ID, Rate_ID,

Start_Date, and Due_Date.