Background

The system design being reviewed is a portion of an overall SuperRent system. The user this section of the product is concentration on is the customer. No functionality for managers or employees will be discussed in this design document or in this review. The document concentrates of four major areas of functionality vehicle rental, vehicle return, reward point system, and insurance purchasing. This review is of the requirement and design of the document.

Areas focused in the system requirements review.

Data

-Vehicle Class no specification’s placed only references other tables. No requirement made to track vehicle beyond type. No date of purchase, no color, no requirements beyond a referencing another table.

- in the class structure seems strange to have a one to one between carRentalReservation and vehicle though this will allow to lock of the vehicle for other CarRentalReservation this will mean deleting the CarRetanlReservation entries to free up vehicles in the database as a requirement this also removes a requirement to track everything but StartDate and confirmation number that is in CarRentalReservation.

-DFD diagrams are up to level 2 data flow is consistent and concise using correct states and with properly labeled transitions.

-No were in the original user stories is it mentioned that a customer can use points to purchase days of rent the only requirement placed on the system in the user stories is to allow the customer to pay for their insurance with points. Even though this is referenced in the Introduction

-CareSalesagreement the requirement to track the start and end time of a sales agreement is not shown anywhere in the customer requirements and having separate fields for it seems odd also tracking the odometer reading in that class where is it coming from?

Area focused for system design review.

Data

-Database why are we tracking gas level in the vehicle table not in the rental records table as all cars should be full on leaving so there is no need to track a starting amount only a return amount at it will be fluctuating based on who used it last also should be tied not just to the car but to the rente.

-A customer can only have one rental agreement

-each vehicle type can only be attached to one vehicle

-no data types are mentioned

-CarRentalreservaction references a vehicle type vehicle type is not refernaced as an attribute any where else in the class diagram.

-vehicle appears to store a large number of functions with a small number a attributes also no id number referenced.

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