Assignment 1(In Class)

Car Rental Database

You are recently hired by a car rental company to create a database and a database application for their ongoing daily tasks. This place has 10 small cars, 20 medium size vehicles and 23 vans and 20 trucks. They never send out the vehicles out of the province and they charge differently based on the season.

This car rental company has only three locations in Lower mainland located at the Airport, at Burnaby Metro town and Langley Airport. People can rent a car from one location and they have the option to drop the car off on another location, in which case a $5.00 service charge is added to their bill.

In order to rent a car you either have to have a credit card with a valid credit limit and expiry date or you should be authorized through your company’s corporate account.

Before they rent a car they check for damage before giving the car to a customer and all current damages are reported to the customer before they rent the car. Once the car is returned, possible damages are checked again and if any damage is added to what was in the initial report the customer is responsible and he/she has to pay.

Insurance is mandatory and each client has to buy at least minimum insurance when they rent a car

All traffic tickets are the client’s responsibility and the database should keep track of the client’s address in order to send them the tickets that received by mail.

Before any rental, there should be a contract made between the company and the clients.

The contract is a legal agreement that is signed by both parties.

The company has two types of employees, hourly (part time) and salary-based (full time). Part time employees can work in more than one location but full time employees can only work in one branch

Each branch has a manager who is a full time employee.

Consider all the above mentioned situations and all common sense facts that exists in a car rental company.

You have to:

1. Create a questionnaire at least 10 questions that should be answered by each employee and client that results proper requirement indication(You don’t need to send these to me)
2. Create and identify all tables and keys.
3. Normalize all tables all the way through with 1NF,2NF and 3NF
4. Fix any Fan or Chasm trap if they come up in your design
5. Create the actual physical tables using Microsoft Access