



Computer Science Department

Database Management Systems 333

Vehicle Leasing Company Description

Group No: 2

Team Members:

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Summary:

Implementing a database system for a Jerusalem-based car rental company to streamline their data management, moving from manual to digital record-keeping.

Introduction:

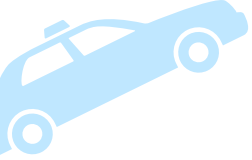
Our client is the Middle East company for car rental, it is a company for renting cars in Jerusalem, they use notebooks, papers, and Excel sheets for storing and managing data, in our project, we will help them to organize their data by using a database.

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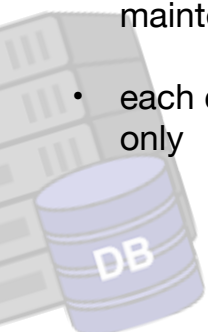
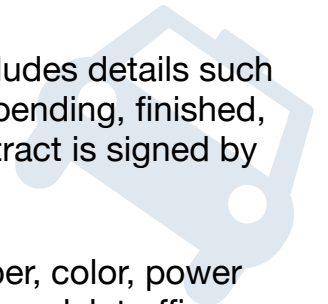
Technology:

We will use our laptops(HP, Dell, and MacBook), Windows OS, MAC OS mysql for the database and java as our programming language



Data Requirements

- Each **customer** is recorded with a unique identifier, first and last name, address, job, license number, and phone number.
- Every **employee** has a unique identifier, first and last name, a job designation (role), a salary, gender, phone number, address, hire date and Birth date
- Each **Contract** will be identified by a unique contract number and includes details such as start and end dates, insurance payment, cost, status (e.g., active, pending, finished, canceled), and a reference to the employee who initiated it. Each contract is signed by a customer.
- Each **Vehicle** identified by a vehicle ID. Details include the plate number, color, power of the vehicle, daily, weekly and monthly rent, number of passengers, model, traffic Department Fees, and year of manufacturing.
- Each **payment** is uniquely identified and related to a contract. It records the date, amount, and the method by which the payment was made.
- Each **maintenance** has a unique identifier, a reference to the vehicle it pertains to, a description of the maintenance work, the employee who supervised the maintenance, the company name that performed the service, the cost, and the date of the maintenance.
- each vehicle can be in only one lease agreement to be rented by **one** customer only at a time and a customer can sign **one or more** contracts at the same time, each one for renting a vehicle
- a vehicle can goes under **one** maintenance process at a time, and each maintaining process can be done to **many** vehicles
- an employee can make **multiple** contracts, and each contract can be made by **only one** employee
- an employee can supervise the maintenance of **one or more** vehicles, and each maintenance process **must** be supervised by **only one** employee
- each contract must be initiated by **one** payment, and each payment is for **one** contract only



Entity-Relationship Diagram (ERD):

ERD

