PRE-OWNED VEHICLE CATALOGUE

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1.0 INTRODUCTION

1.1 System Purpose

The company wants to find a solution to reuse the old Car and Bike. The system being developed is a system to handle the business needs of old vehicles to customers, maintaining records and data on sold vehicle, operating the portal website, buy vehicles from seller customers, modify the old vehicle and make for resell. The system does not fulfill any other needs of the business.

1.2 System Scope

The functional scope of the system is represented in four different aspects of the system: Admin Module, Web Portal Module for user, modified vehicle details and adding vehicle details.

1.2.1. Admin Module: This module is purely for an administrator of the site. He can view the buyer's request, seller's details and also modify it. He can upload different modified vehicles details of pre-owned vehicles for which sell for customer.

1.2.2. Web Portal Module for user: The scope of the Customer Web Portal is to buy modified vehicles by customers and sell the pre-owned vehicles. The module will interface with the admin module but will not perform any of that module's duties.

1.2.3 Modified vehicle details: The scope of the modified vehicles details is to provide a clear and easy to view layout of vehicles and customers to follow along with this for work out a buy request. As mentioned above the module will interface with the admin module but only perform the request for buy.

1.2.4 Adding vehicle details: The scope of the adding vehicles details is to provide a platform by admin where vehicles owner can fill their details for sell vehicles including all vehicles details and images.

1.3 System Overview

1.3.1 System Context

The system has been designed with four modules in mind. These modules are the admin module, the web portal module for user, the modified vehicles details, and the adding vehicles details. These four modules will make up the structure of the system. The admin module will be the part of the system administration that is supposed to provide the managing everything that they need to perform their duties. The web portal module for user will be the part of the system that handles the website where the customers will be able to go through a view vehicles, sell old vehicles as well as buy modified vehicles. The modified vehicles details will do as its name suggests and also manage with the various type of filters. The adding vehicles details will be the part of the system that will be used to generate reports

from the pre-owned vehicles seller for the purpose of organizing the all types of vehicles details. The admin will be able to interact with the seller to process payment on behalf of the company.

1.3.2 System Functions

The system will be able to buy and also sold out vehicles. The system will be able to view layout of the modified vehicles. The system will keep track of the vehicles which company had sell to the buyer. The system will generate reports for the modified vehicles details.

1.3.3 User Characteristics

The users will be customers which can include buyer and seller people, registered viewers who have already interacted with the company, and also normal viewer who have not register. Other users of the system will be the admin of the store level and a headquarters. The admin will all be using windows desktops to conduct their business on the system but the system will need to accommodate the variety of devices that the customers will have. The customers will have also laptops or desktops running several different operating system for accommodate the full website.

1.4 Definitions

Pre-owned Vehicles modify & Reuse System:

1. Admin Module
2. Web Portal Module for User
3. Modified Vehicles Details
4. Adding Vehicles Details

Actors
1. Admin
2. Sellers
3. Buyers

1.5 Technologies to be used
- Core Java
- Advance Java
- Servlets
- HTML
- CSS & Java Script

2.0 REQUIREMENTS

2.1 External Interfaces

2.1.1 Hardware Interfaces

This System requires following minimum hardware configuration:

R.H.1: Processor: Intel Core i3

R.H.2: RAM: 4GB

R.H.3: Hard Disk: 500GB

R.H.4: CD Drive (optional)

R.H.5: Monitor: 15'' color monitor

2.1.2 Software Interfaces

R.S.1: The system will interact with the server for the purpose of interaction user with admin

R.S.2: The system data needs to be manage by the database management system.

This System requires following software configuration:

R.S.3: Eclipse Oxygen

R.S.4: Apache Tomcat

R.S.5: MySQL

2.1.3 User Interfaces

First of all the user has to search manually and find out those products from the stock, which are available then required (minimum stock) and request to buy for those product to the Company.

Second of all user has to give the details of old vehicles including images which they want to sell.

Third of all normal user can view the layout of modified vehicles without register in the portal.

2.2 Functions

2.2.1 Functional Requirements

Admin:

F1: The system will contain an admin login.

F2: Admin manage the pre-owned vehicle seller details whenever a vehicle has to buy by the administrator of the warehouse the request of the seller will be remove from the portal site and store in a different database which have to manage only by the warehouse administrator.

F3: The old vehicle will be modified by the warehouse if required.

Modification By:-

      M1: Interior Color and modification

      M2: Exterior Color

      M3: Repair External Damages

      M4: Repair Engine Damages

      M5: Tyres Type modification (optional)

      M6: Audio & Video System include

      M7: Tracking System (optional)

F4: Details of modified vehicles upload on the portal for sell with include respective price.

Details of Vehicles:-

      MVD 1: Company name

      MVD 2: Model

      MVD 3: Body style

      MVD 4: Year of first purchase by owner

      MVD 5: Engine capacity

      MVD 6: Number of gears

      MVD 7: Fuel type

      MVD 8: Top speed

      MVD 9: Horse power

MVD 10: Interior color

MVD 11: Exterior color

MVD 12: Images

F5: Prepare a page for getting buyer Information and request.

F6: Provide third party insurance for the modified vehicles.

F7: Manage also the buyer request.

Buyer:

F8: The system will contain a buyer login.

F9: View the portal for searching modified vehicle according to their requirements with the help of filter.

F10: Select the vehicle which they want to buy and select buy option.

F11: In buy option buyer have to fill their details for buying request.

F12: Once the request have generate the buyer receive a confirmation by the warehouse and the information send to the warehouse administration.

F13: Wait for the reply from warehouse administration.

Seller:

F14: The system will contain a seller login.

F15: Seller have to fill their contact details for verification and also to communicate with the warehouse administration.

F16: Seller have to fill the old car details form which they want to sell included images.

Old vehicle details:-

OVD 1: Company name

OVD 2: Model

OVD 3: Version

OVD 4: Color

OVD 5: Fuel type

OVD 6: Alternate fuel

OVD 7: Number of owners

OVD 8: Make year & month

OVD 9: Kilometer driven

OVD 10: Insurance type

OVD 11: Expected price

F17: Once the request have generate the seller receive a confirmation by the warehouse and the information send to the warehouse administration.

F18: Wait for the reply from warehouse administration.

F19: Seller have to grant a permission from the warehouse administration for modifying the details which they already generated.

Normal user:

F20: Normal user don't have to registration on the portal.

F21: They only view the layout of the portal without any activity.

F22: Once they want to perform any activity like buy or sell then they have to register first on the portal.
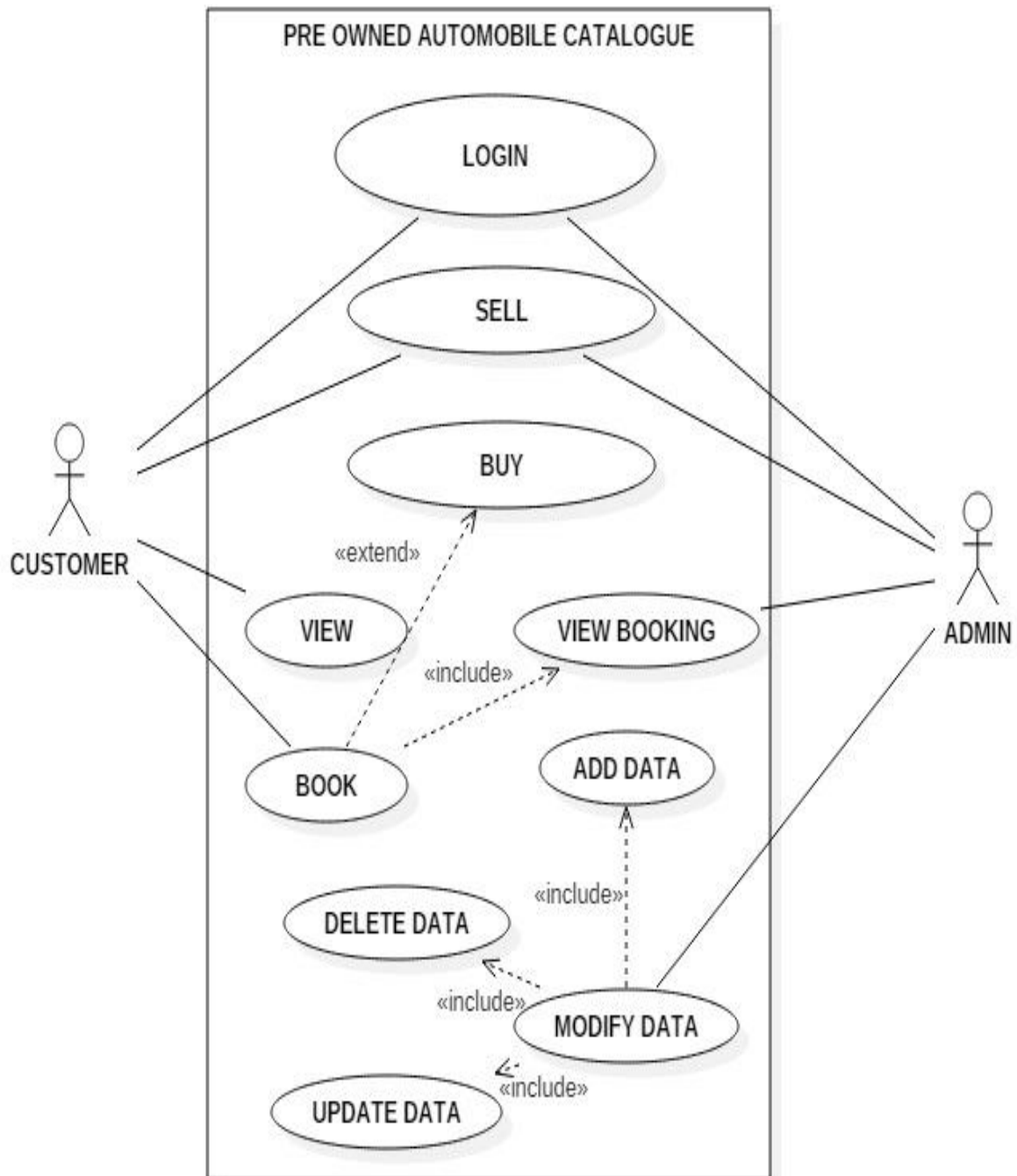
2.3 Design Constraints

The system will be constrained by operating software of the host system and will need to be able to function on the different internet servers
1. The system will need to function on major internet operating software including Internet explorer, Firefox, Chrome, Safari, Opera, and Android.
2. The system will be constrained operating software of the host computer which is windows.

2.4   Entity Relationship Diagram

PHONE

EMAIL

ADDRESS

NAME

COMPANY NAME

SELLS

CAR SELLER

PHONE

VERSION

KMS DRIVEN

NAME

EMAIL

MODEL

OLD CAR

CAR BUYER

COLOR

HAS

HAS

ADDRESS

FUEL TYPE

INSURANCE TYPE

BUY

COMPANY NAME

MAKE YEAR

BUYS

KMS DRIVEN

LOGIN

INSURANCE TYPE

MODIFIED CAR

MODEL

COLOR

ADDITIONAL FEATURES

FUEL TYPE

HAS

MAKE YEAR

ADMIN

MODIFIES TO

COMPANY NAME

BUYS

MAKE YEAR

FUEL TYPE

COMPANY NAME

MODEL

INSURANCE TYPE

ADDITIONAL FEATURES

MODIFIED BIKE

COLOR

OLD BIKE

HAS

MODEL

FUEL TYPE

KMS DRIVEN

MAKE YEAR

COLOR

SELLS

HAS

BUYS

BIKE BUYER

ADDRESS

NAME

BIKE SELLER

EMAIL

PHONE

ADDRESS

NAME

PHONE

MODIFIES TO

EMAIL

2.5 Use Case Diagram
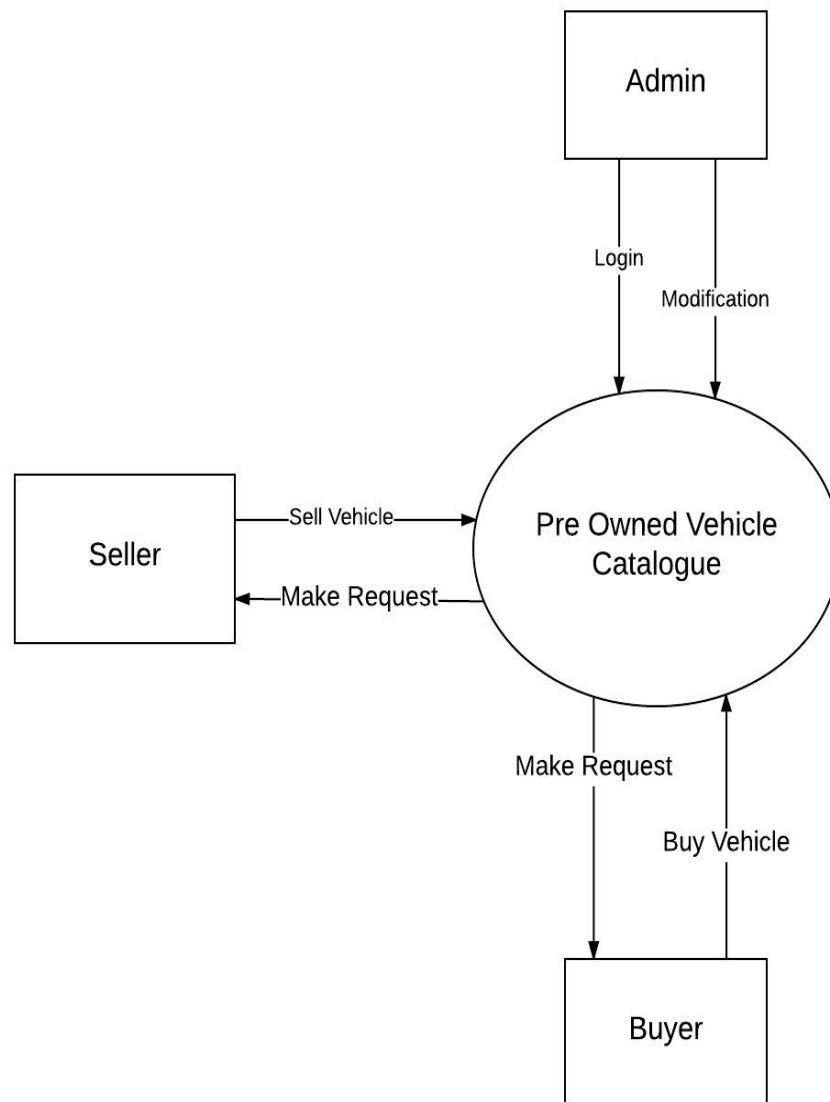
2.5.1   Use Case Description

Admin:

- Admin will login the System.
- He will check the database, requests and orders.
- He will modify the database after checking the requests.
- He will buy vehicle from the customer who wants to sell old vehicle.
- He will sell the modified vehicles to the customer as per requirement.
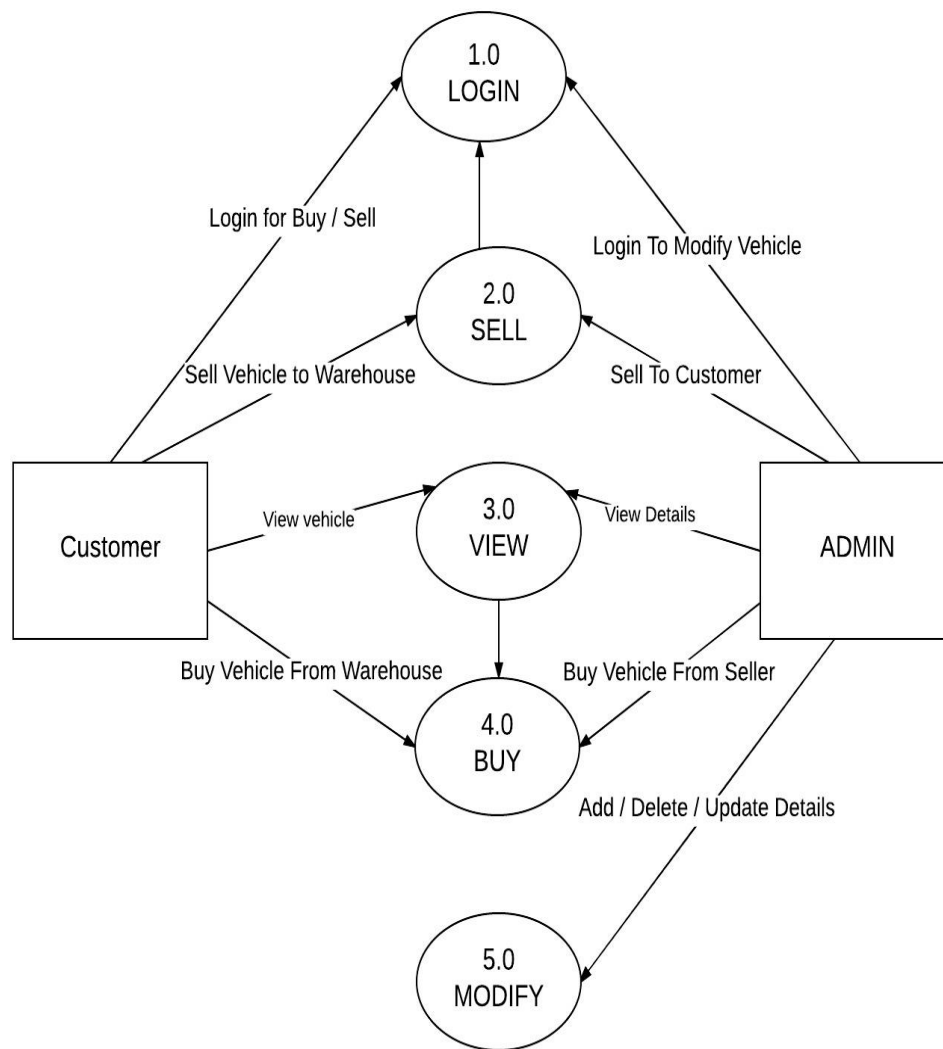
Customer:

- He will login according to Id.
- He will view the vehicles according to his requirements.
- He will book the vehicle to buy.
- He can also sell his old vehicle to warehouse.

2.6 Data Flow Diagram
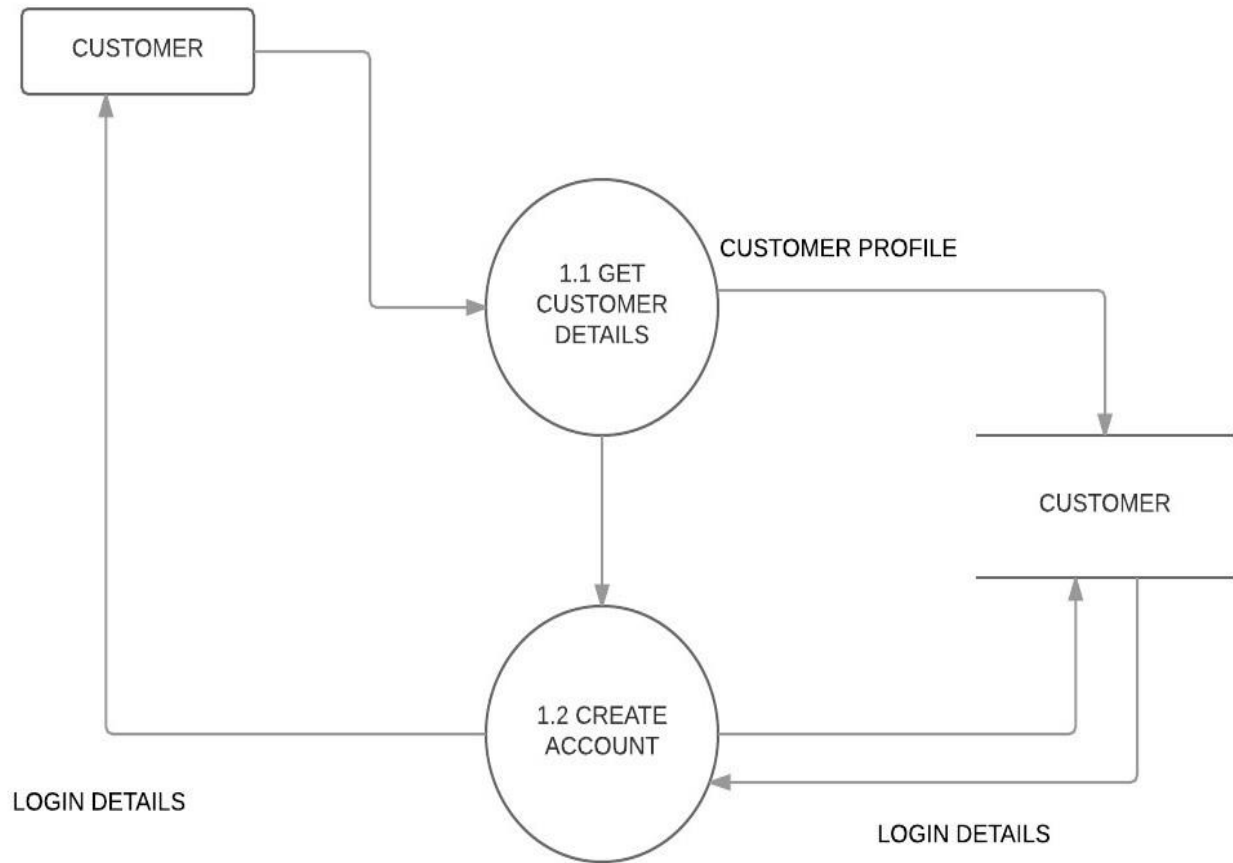
2.6.1 Context Level Diagram
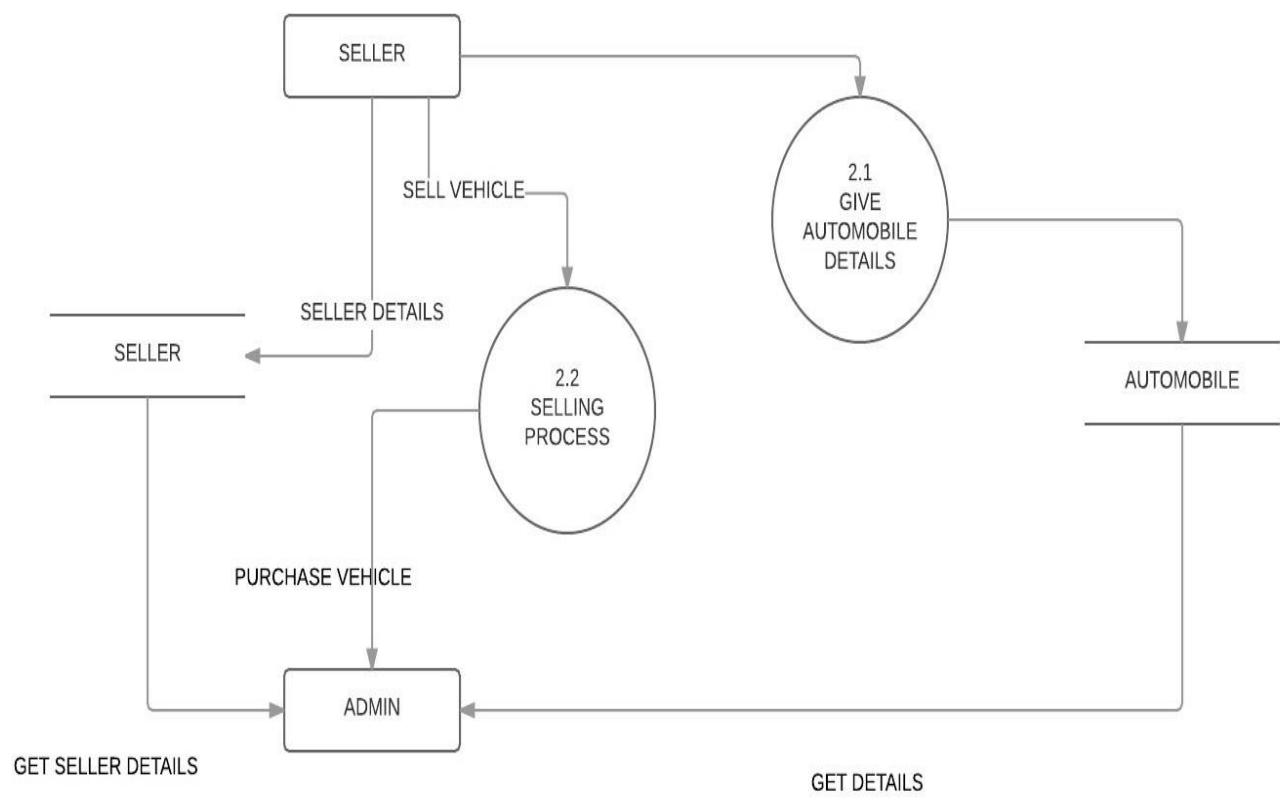
2.6.2   Level 0 Diagram

2.6.3 Level 1 Diagram

2.6.3.1 Login
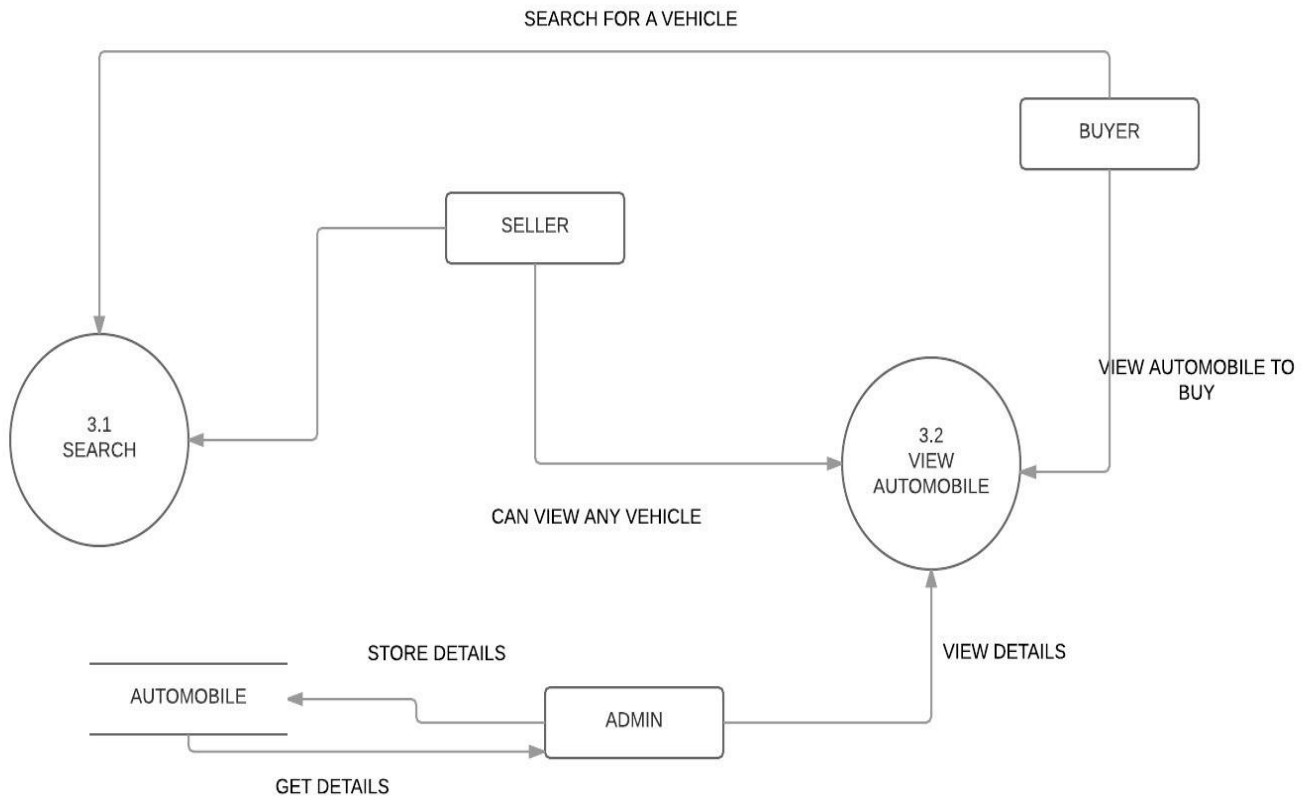
2.6.3.2　　　Sell

2.6.3.3   View

2.6.3.4   Buy

SELL BOOKED CAR TO BUYER

BUYER

BOOK CAR TO BUY

4.2
SELL CAR

REGISTER DETAILS

4.1
BOOK CAR

BUYER

AUTOMOBILE

ADMIN

GET BUYER DETAILS

STORE MODIFIED DETAILS
OF AUTOMOBILE

2.6.3.5　　　Modify

AUTOMOBILE

5.1
UPDATE

5.2
ADD

5.3
DELETE

ADMIN

SELL

5.4
MODIFY
VEHICLE

BUYER

BUY MODIFIED VEHICLE

2.7 Class Diagram

ADD_VEHICLE

Company name
Model
Version
Color
Fuel type
Alternate fuel
Number of owners
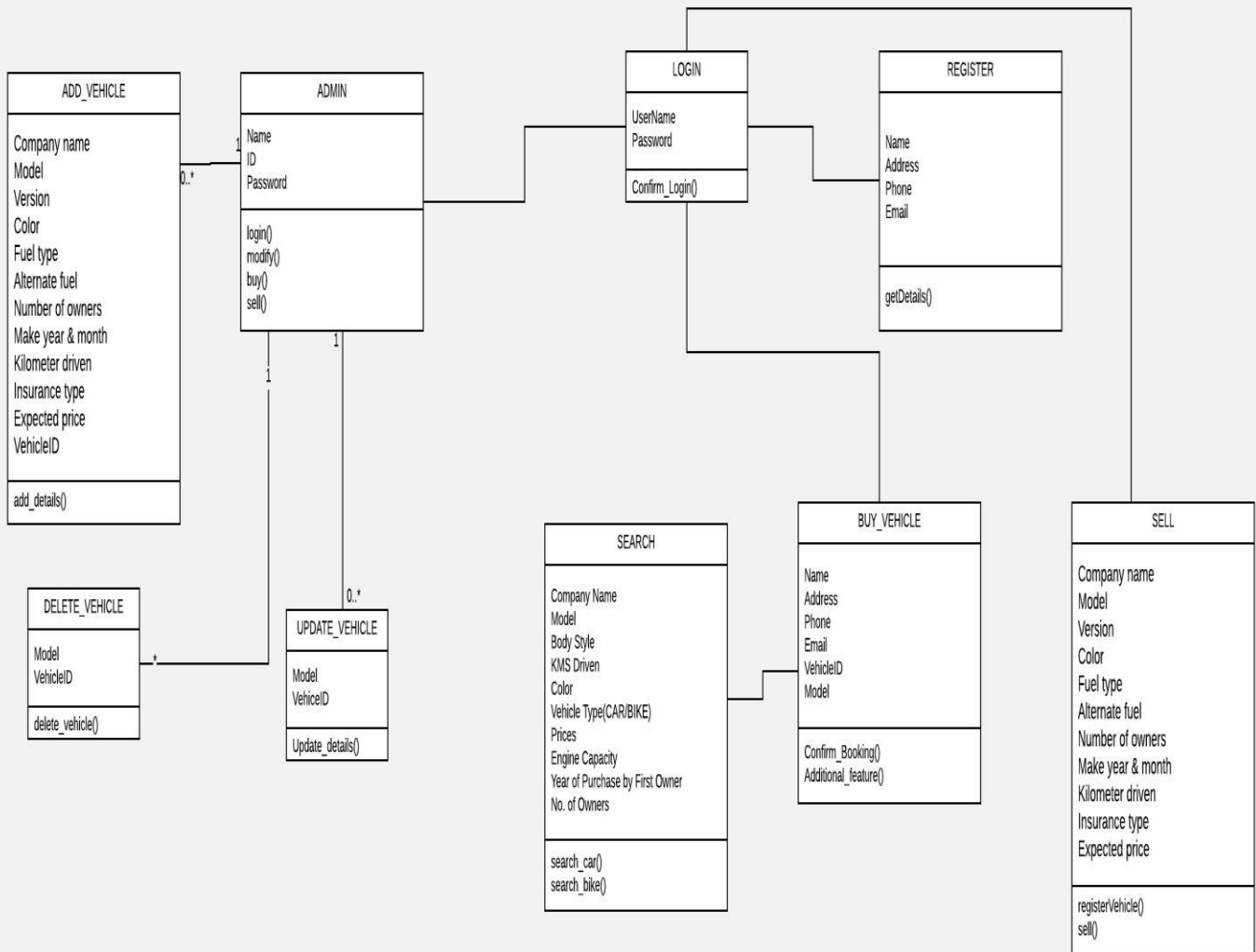Make year & month
Kilometer driven
Insurance type
Expected price
VehicleID

add_details()

ADMIN

Name
ID
Password

login()
modify()
buy()
sell()

LOGIN

UserName
Password

Confirm_Login()

REGISTER

Name
Address
Phone
Email

getDetails()

DELETE_VEHICLE

Model
VehicleID

delete_vehicle()

UPDATE_VEHICLE

Model
VehicleID

Update_details()

SEARCH

Company Name
Model
Body Style
KMS Driven
Color
Vehicle Type(CAR/BIKE)
Prices
Engine Capacity
Year of Purchase by First Owner
No. of Owners

search_car()
search_bike()

BUY_VEHICLE

Name
Address
Phone
Email
VehicleID
Model

Confirm_Booking()
Additional_feature()

SELL

Company name
Model
Version
Color
Fuel type
Alternate fuel
Number of owners
Make year & month
Kilometer driven
Insurance type
Expected price

registerVehicle()
sell()

2.8 Sequence Diagram

2.8.1 Admin Sequence Diagram

| ADMIN | LOGIN | BUY CAR | MODIFY CAR | SELL CAR |

1 : LOGIN TO VIEW DETAILS

2 : BUY OLD CAR

3 : MODIFY OLD CAR

4 : SELL NEW CAR

5 : PAYMENT
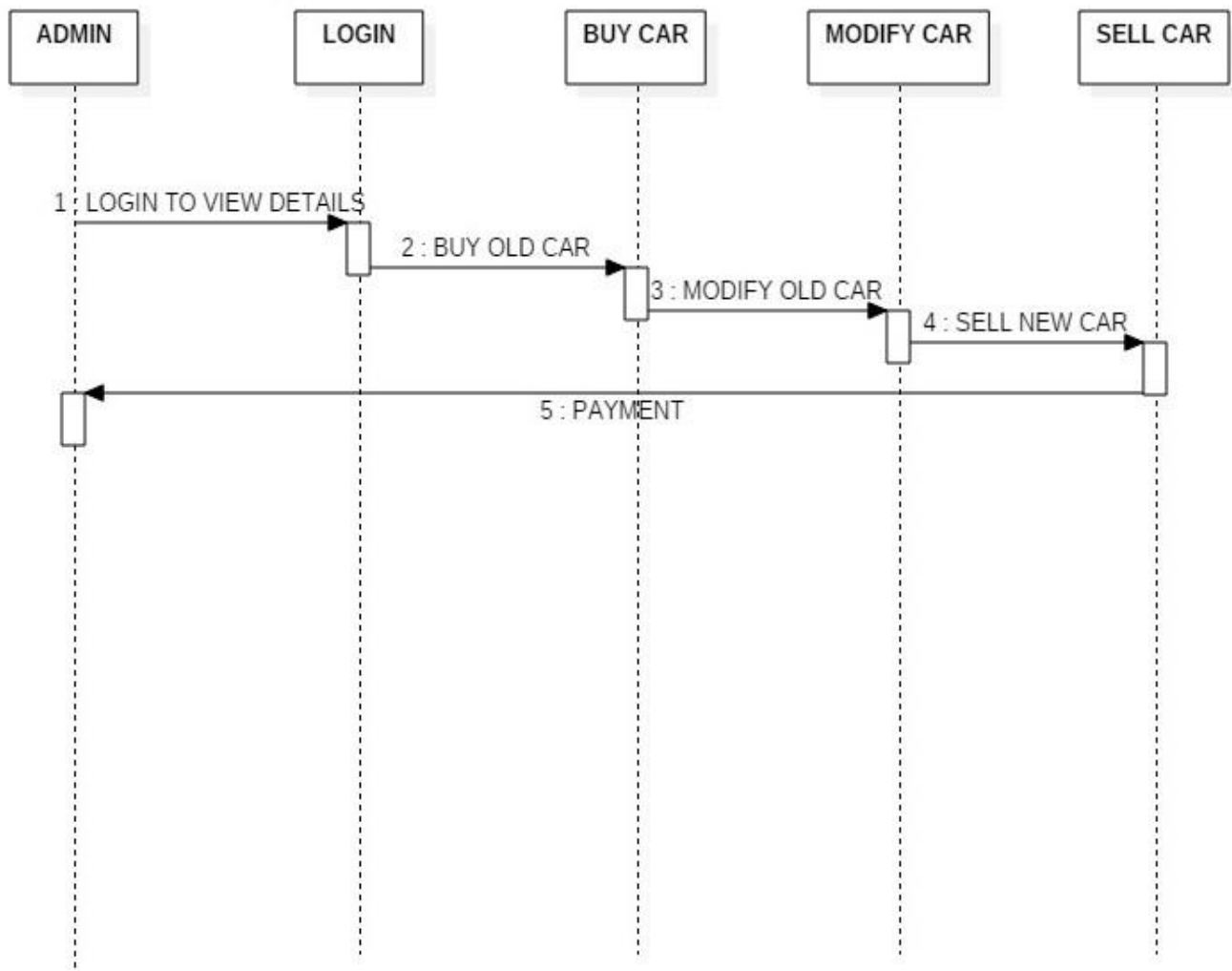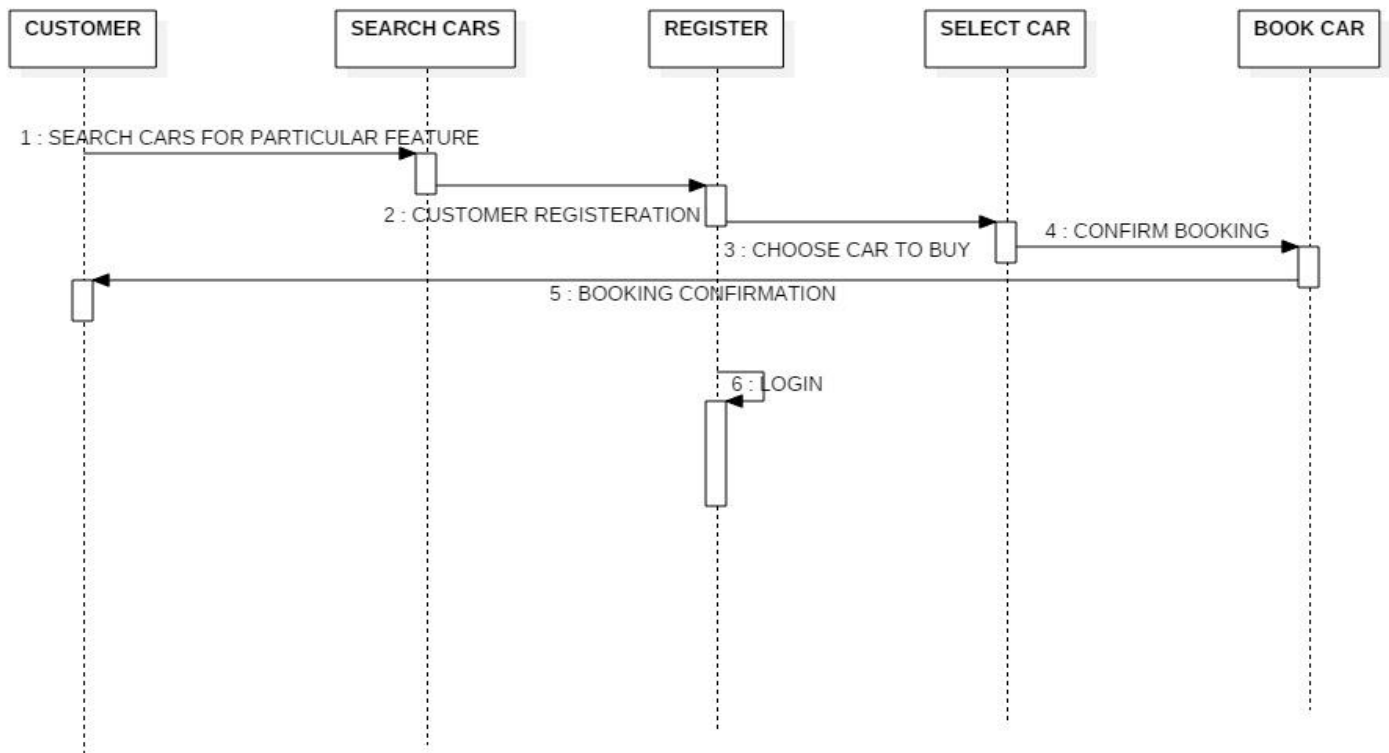
2.8.2　Seller Sequence Diagram
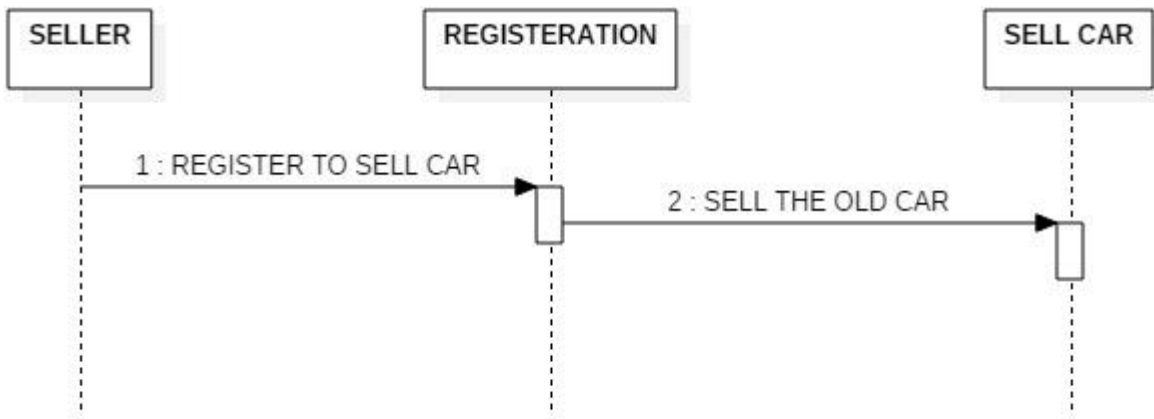
2.8.3　Customer Sequence Diagram

3.0 CONCLUSION

The pre-owned Automobile Catalogue is one step towards the digital world and refurbished the old car and bike where customer can buy or sell any type vehicle according to their requirements. It helps to release the vehicles with a new modification. The design and implementation of this system environment is such that customer could search the refurbished vehicles and also genarated request for their activity. After analyzing the cost benefit analysis of the current system, we conclude that the automated system is best. It also reduces the burden of work and wasting time to searching old vehicles.

The system is highly user friendly and is well efficient to ease interactions with admin and customer. The system is done with aninsight into the necessary modification that may require in the future. Finally the total system can be maintained successfully with any man power.