A Project Report on

CAR SHOWROOM MANAGEMENT SYSTEM

Diploma Computer Engineering 3rd Year

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GUIDED BY:

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Submitted to:

Computer department

B & B Institute of technology

V. V. Nagar

Car Showroom Management System

Project Submitted in

November – 2020

To the ***Computer Engineering Department*** *of*

Bhailalbhai and Bhikhabhai Institute of Technology

In partial fulfilment of the requirements

For diploma

In

COMPUTER ENGINEERING

By:

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B & B Institute of Technology,
Vallabh Vidyanagar – 388120,
Gujarat, India.

Date: 04-November-2020

CERTIFICATE

This is to Certify that

Sr. No.	Name	Enrollment No.
1	Soni Hetvi Manishkumar	186040307054
2	Shah Harsh Pankajkumar	186040307050
3	Patel Jay Kalpeshbhai	186040307032

Have satisfactorily completed final year diploma computer engineering Project – I (3350706) entitled **"Car Showroom management system"** for the partial fulfilment of the degree of Diploma in Computer Engineering (GIA) during the academic year 2020 at Computer Engineering Department, B. & B. Institute of Technology, Vallabh Vidyanagar.

Guide:
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I/C Head Department
Lecturer, Computer dept.
BBIT, V.V. Nagar

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I/C Head Department
Computer Engineering dept.
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External Examiner

ACKNOWLEDGEMENT

It's our great pleasure to present the project report on

"Car Showroom Management System"

We are Thankful to our project guide J.P. PARMAR [I/C Head, Computer dept.] and Mr. Bharat Chawda [Lecturer, Computer dept.] Sir who inspiring us by spending his valuable time for our project and also being supportive at every stage of the project work.

We give our deep sense of respect and gratitude to J. P. PARMAR Sir [I/C Head Computer dept.] for providing us an opportunity to carry out the project. We are grateful to him for sharing his valuable experience, management expertise and knowledge in the field of computer engineering.

We are thankful to our collage – B.B.I.T to allow us to carry out the Training Project Work at their esteemed organization and utilizing their provided facilities.

Finally, yet importantly, we would like to express our heartfelt thanks to our beloved parents for their blessings, my friends and classmates for their help and wishes for the successful completion of this project.

Index

1.1 Introduction:

Now day's 90% people are using mobile phones. Android users are increasing day by day. The mobile application is the best way to keep customers who engaged with the organization. Car showroom management system is a mobile application which is used for Booking a test drive, Booking a new car and Book appointment for Car services.

1.2 Abstract:

In many cities are using manual system to book a car, book a service management and test drive. Now days everyone is too busy in their own work. No one have that much time to go to the showroom and get all details of the car. Even people who worked in showroom are not able to explain everything about car to every customer.

Now days everything is easily available on the internet or smart phones. Car showroom management system is one of the most useful application which contains some features and functionalities who saves the costly time of customer. This application allows you to seat at your home and you can get information About the cars, many models, interior and exterior materials, price, colours and etc. It will save customers costly time and it also save you from walking in a showroom at different models to get information about cars. This application is easily show you everything about cars, services and test drives. Customers also book complains, also give feedbacks and services of us. This application saves your time so you can do your other work.

1.3 Features:

- Customers can easily look out the cars which they are interested to buy.
- The customers can Book a car which they want to buy, book a service appointment for a car.
- If the customer can not satisfy from the details and images of the car, they can also book a test drive for that car.
- Customer can pay through cheque or cash.
- They can easily cancel booked car, Test Drive and services.
- After purchase car, within 3 months customer will be provided by free service of car once.
- Customers can ride only 2 test drive free.
- Low requirements
- Better service provided
- Minimum time required
- Greater efficiency
- Small size (less space needed)

2. Tools/Platform/Language:

2.1 Software Requirement:

- **FRONT END:** ANDROID STUDIO
- **SERVER-SIDE SCRIPTING:** PHP
- **BACK END:** MYSQL

2.2 Hardware Requirement:

- **RAM:** Approximately 2 GB
- **Operating System:** 6.0 / 6.0 Up
- **Smart phone:** Android

2.3 Tools / Technologies used:

- **Language:** JAVA
- **Tools:** JDK (JAVA DEVELOPMENT KIT)

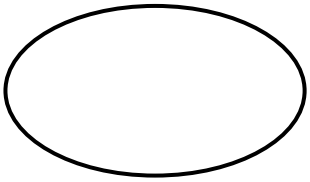
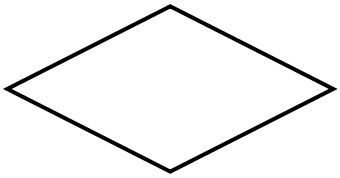
3) Complete Structure of Project:

3.1 E-R Diagram:

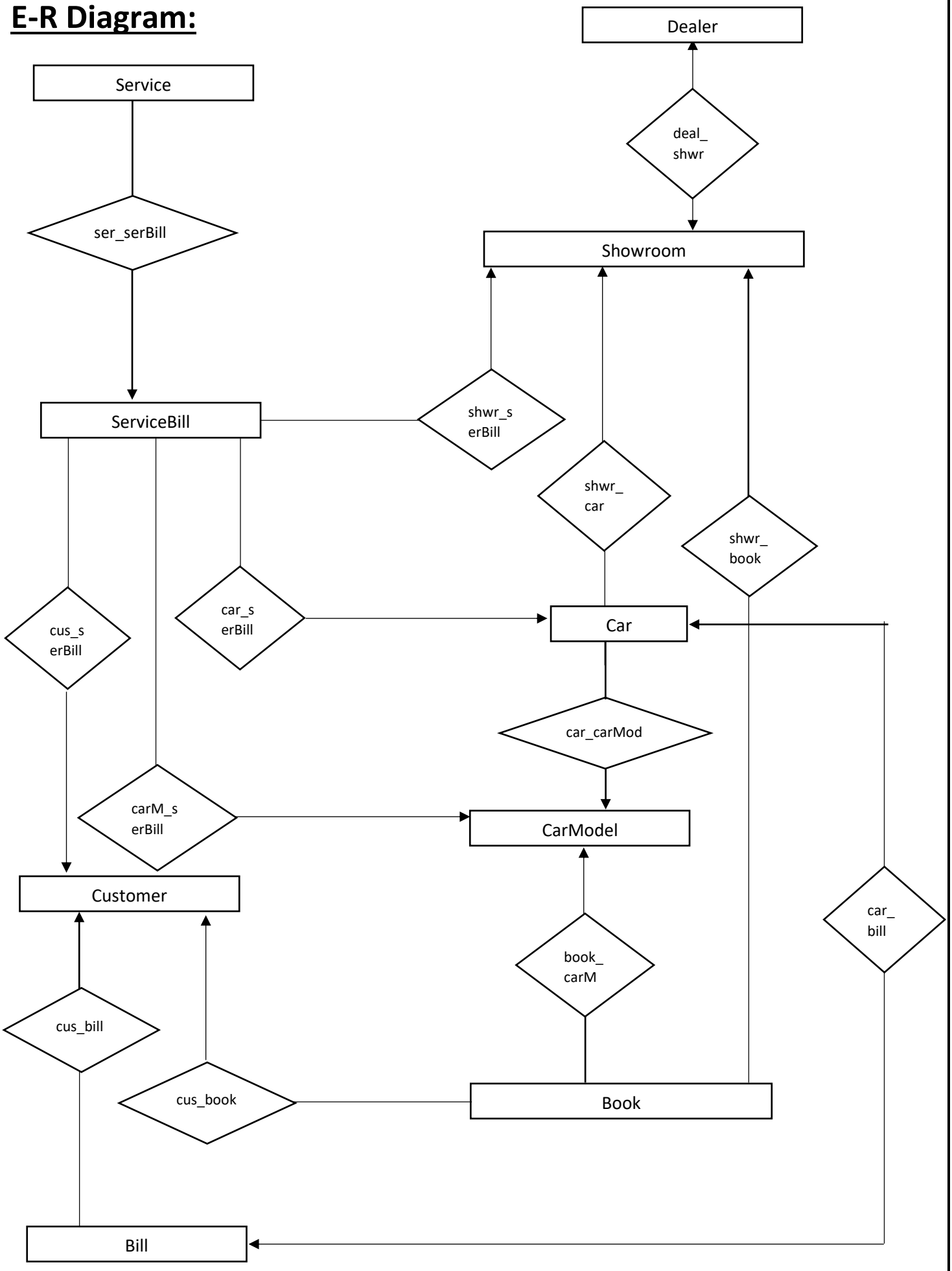
An Entity Relationship (ER) Diagram is a graphical representation of the overall logical structure of a database.

ER Diagrams are in the base of popularity and widespread use of the ER Model. ER Diagrams are simple and clear. They do not include any implementation details. Any non-technical user can also understand data requirements of an organization represented by ER Diagram.

Basic notations used in ER Diagram are as follows:

Symbol	Notation	Represents
	Rectangle	An Entity Set
	Ellipse	An attribute
	Diamond	A Relationship Set
	Arrow	Link between an Entity Set &a Relationship set represents mapping cardinality one
	Line	Link between an Entity Set &a Relationship set represents mapping cardinality many

E-R Diagram:


Dealer
deal_
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Service
ser_serBill
Showroom
ServiceBill
shwr_s
erBill
shwr_
car
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book
cus_s
erBill
car_s
erBill
Car
car_carMod
carM_s
erBill
CarModel
Customer
car_
bill
book_
carM
cus_bill
cus_book
Book
Bill

3.2 Data Dictionary:

Customer: -

Column Name	Type	Size	Constraint	Describes
cus_id	Varchar	4	Primary Key	Customer ID
cus_name	Char	10	Not Null	Customer Name
cus_email	Varchar2	15	Not Null	Customer Email
cus_pswd	Varchar2	10	Not Null	Customer Password
cus_contact	Number	10	Not Null	Customer Contact
cus_address	Varchar2	50	Not Null	Customer Address
cus_bdate	Date			Customer Birthdate
cus_gender	Char	6		Customer Gender

Showroom: -

Column Name	Type	Size	Constraint	Describes
shwr_id	Varchar	4	Primary Key	Showroom Id
shwr_contact	Number	10	Not Null	Showroom Contact
shwr_name	Char	10	Not Null	Showroom Name
shwr_address	Varchar	20	Not Null	Showroom Address
shwr_pincode	Number	6	Not Null	Showroom Pin code
shwr_areaname	Varchar	10		Showroom Area Name
de_id	**Varchar**	**4**	**Foreign key**	**Dealer Id**

Dealer: -

Column Name	Type	Size	Constraint	Describes
dea_id	Varchar	4	Primary Key	Dealer Id
dea_name	Char	10	Not Null	Dealer Name
dea_pswd	Varchar2	10	Not Null	Dealer Password
dea_contact	Number	10	Not Null	Dealer Contact
dea_address	Varchar	50		Dealer Address
dea_email	Varchar2	15	Not Null	Dealer Email

Admin: -

Column Name	Type	Size	Constraint	Describes
ad_id	Varchar	4	Primary Key	Admin Id
ad_name	Char	20	Not Null	Admin Name
ad_email	Varchar2	20	Not Null	Admin Email
ad_pswd	Varchar2	10	Not Null	Admin Password
ad_contact	Number	10	Not Null	Admin number
ad_address	Varchar	30		

Book: -

Column Name	Type	Size	Constraint	Describes
book_id	Varchar	4	Primary Key	Book Id
book_type	Char	10	Not Null	Buy / Test Drive
book_date	Date		Not Null	Date of Booking
book_time	DateTime		Not Null	Time of Booking
book_status	Varchar	10	Not Null	Status of Booking (Pending, Cancel, Complete)
cus_id	**varchar**	**4**	**Foreign key**	**Customer id**
shwr_id	**varchar**	**4**	**Foreign key**	**Showroom id**
cm_id	**varchar**	**4**	**Foreign key**	**Car model id**

Car: -

Column Name	Type	Size	Constraint	Describes
car_id	Varchar	4	Primary Key	Car Id
car_name	Varchar	10	Not Null	Car Name
car_chassisno	Varchar2	17	Not Null	Car Chassis No of 16 Digits
car_RTO	Varchar2	10		RTO Number of Car
car_insurance	Varchar2	10		Insurance No of Car
car_instimeduration	Date			Ending Date of Insurance
shwr_id	**varchar**	**4**	**Foreign key**	**Showroom id**
cm_id	**varchar**	**4**	**Foreign key**	**Car model id**

Car Model: -

Column Name	Type	Size	Constraint	Describes
cm_id	Varchar	4	Primary Key	Car Model Id
cm_fueltype	Char	6		Fuel Type of Car Model
cm_color	Char	8		Colour of Car Model
cm_price	Number	7	Not Null	Price of Car Model
cm_warrenty	Number	2		Warranty of Car
cm_enginetype	Varchar2	15		Engine Type of Car
cm_average	Number	2		Average of car
cm_seatingcap	Number	2		Setting Capacity Of car
cm_maxpower	Varchar2	6		Maximum Power of Car
cm_torque	Varchar2	10		Torque of Car

Bill: -

Column Name	Type	Size	Constraint	Describes
bill_id	Varchar	4	Primary Key	Bill Id
bi_date	Date		Not Null	Bill Date
bi_finalprice	Number	7		Bill Final Price
bi_paytype	Varchar2	5		Bill payment Type
cus_id	**varchar**	**4**	**Foreign key**	**Customer id**
car_id	**Varchar**	**4**	**Foreign Key**	**Car Id**

Service: -

Column Name	Type	Size	Constraint	Describes
ser_id	Varchar	4	Primary Key	Service Id
ser_list	Varchar2	20		List of Services
ser_description	Varchar2	50		Description of Service
ser_amount	Number	5		Amount of Service

Service Bill: -

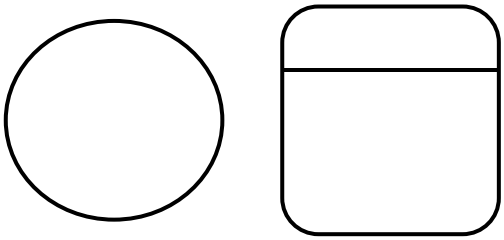
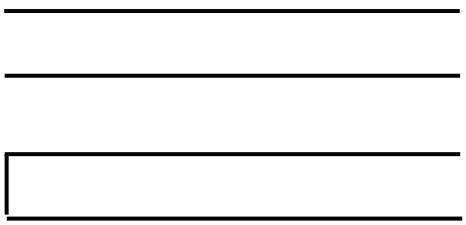
Column Name	Type	Size	Constraint	Describes
sb_id	Varchar	4	Primary Key	Service bill id
sb_dateofcar	Date			Date When Car Come for Service
sb_totalamount	Number	5		Total Amount of Service
sb_dateofdel	Date			Date of Delivery After Service
cus_id	**varchar**	**4**	**Foreign key**	**Customer id**
shwr_id	**varchar**	**4**	**Foreign key**	**Showroom id**
cm_id	**varchar**	**4**	**Foreign key**	**Car model id**
ser_id	**Varchar**	**4**	**Foreign Key**	**Service Id**
car_id	**Varchar**	**4**	**Foreign Key**	**Car Id**

3.2 Data flow diagrams:

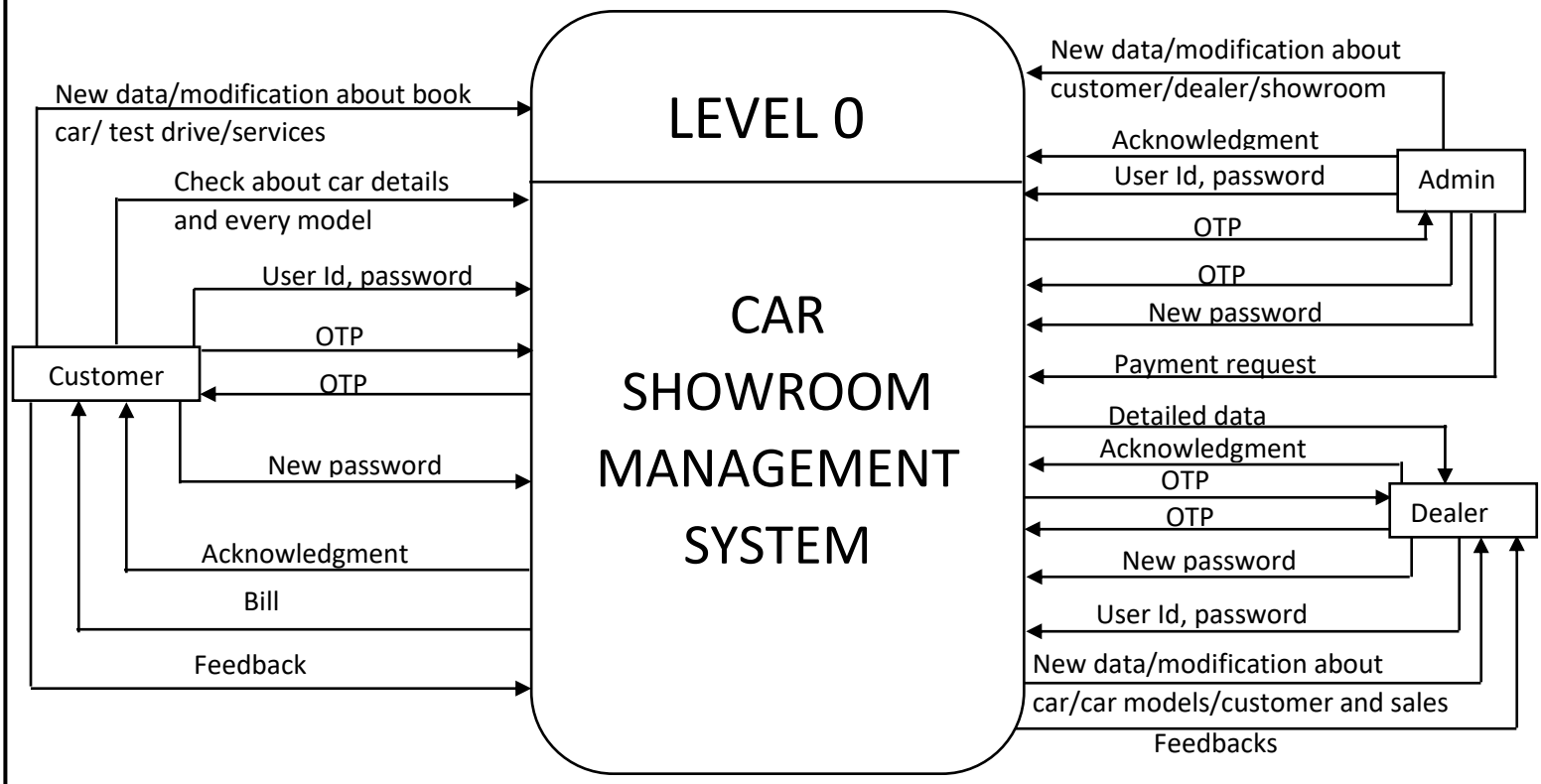
Data Flow Diagram (DFD) is a graphical representation of the flow of the data through an information system, modelling its process aspects.

It is popular because it easy to understand b technical & non-technical person. It can provide high level system overview with boundaries and connections to other systems. It can provide a detailed representation of system components.

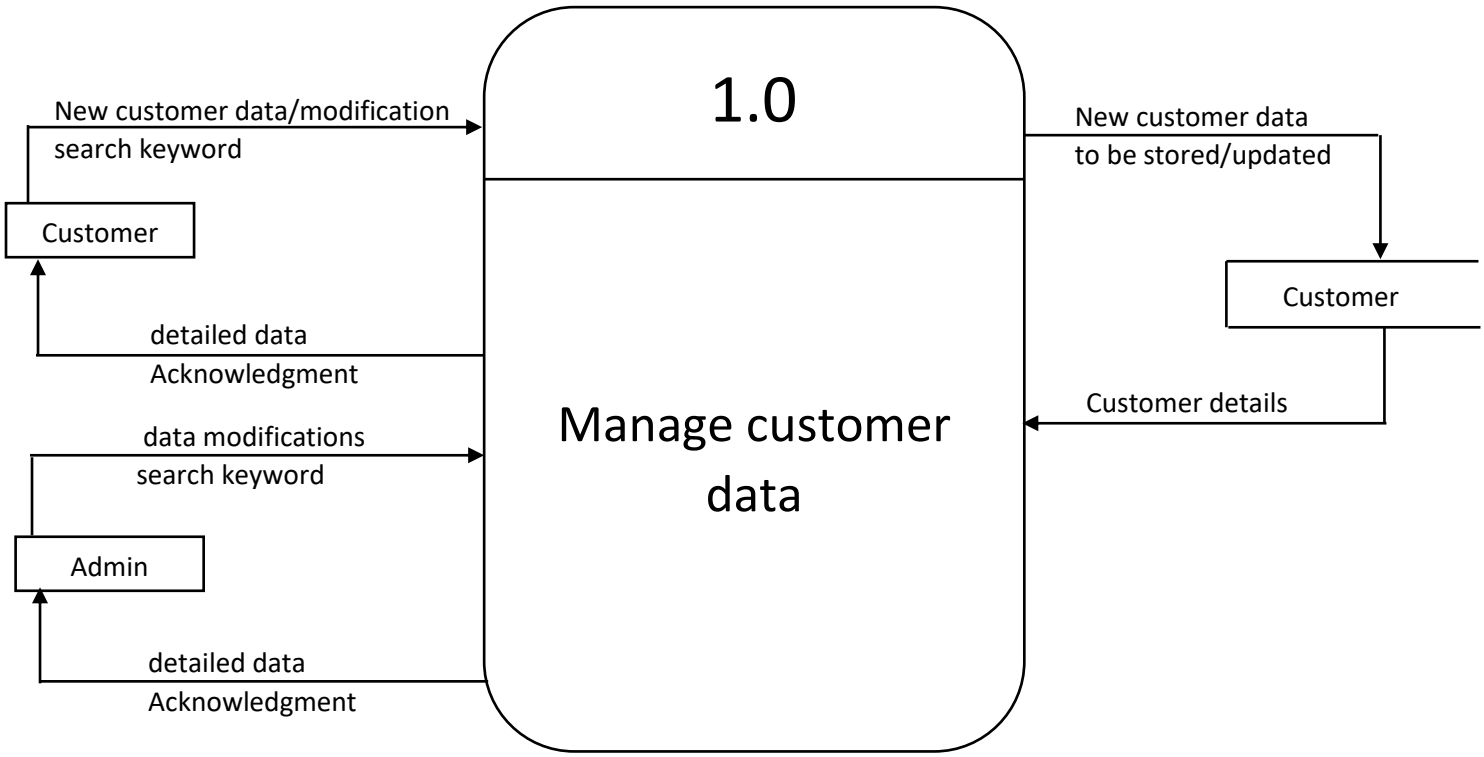
Primitive Symbols for DFD:

Symbol	Notation	Represents
	Circle, Rounded Rectangle	Process/Function
	Arrow	Data Flow
	Rectangle	External Entity
	Parallel Lines, Open Rectangle	Data Store

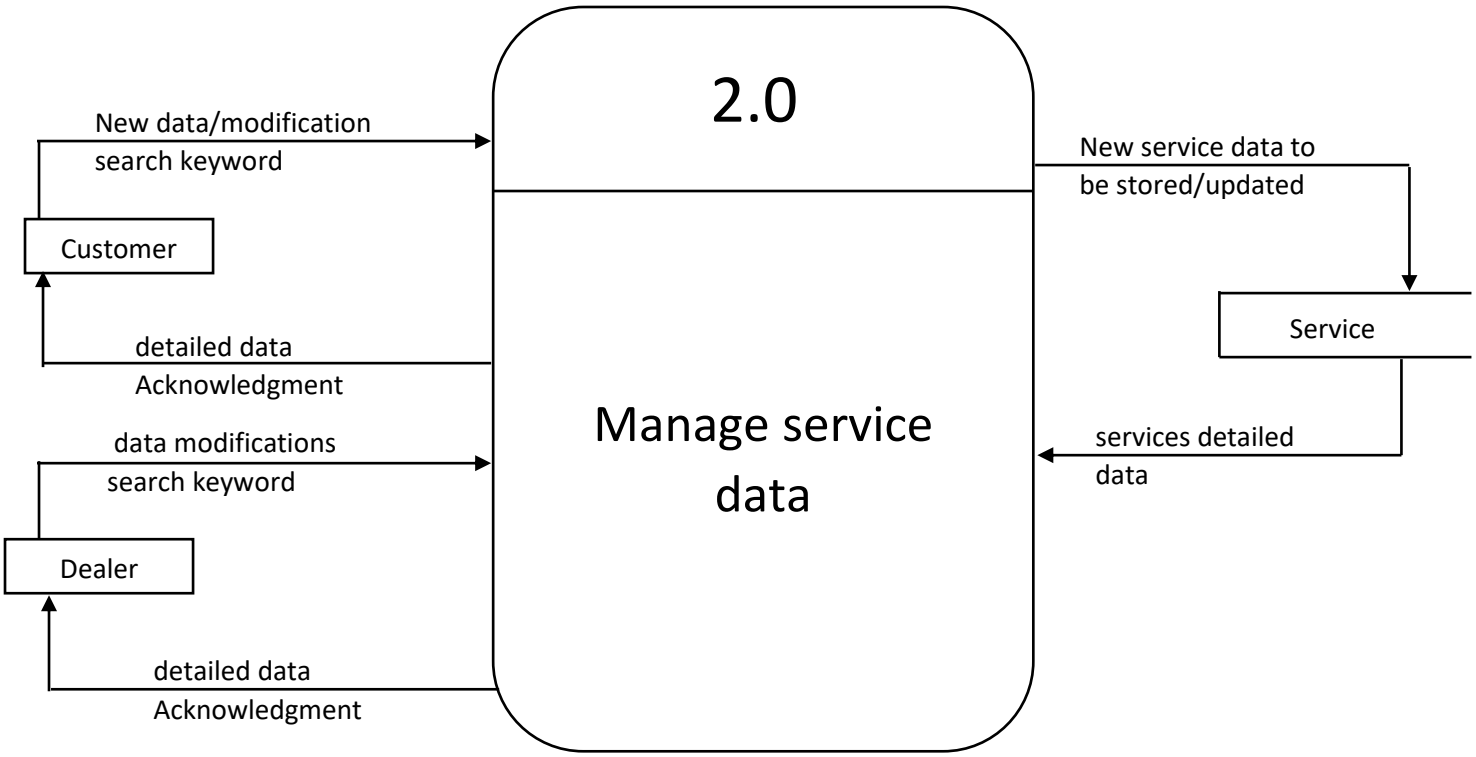
Context Level Diagram: (Level 0)



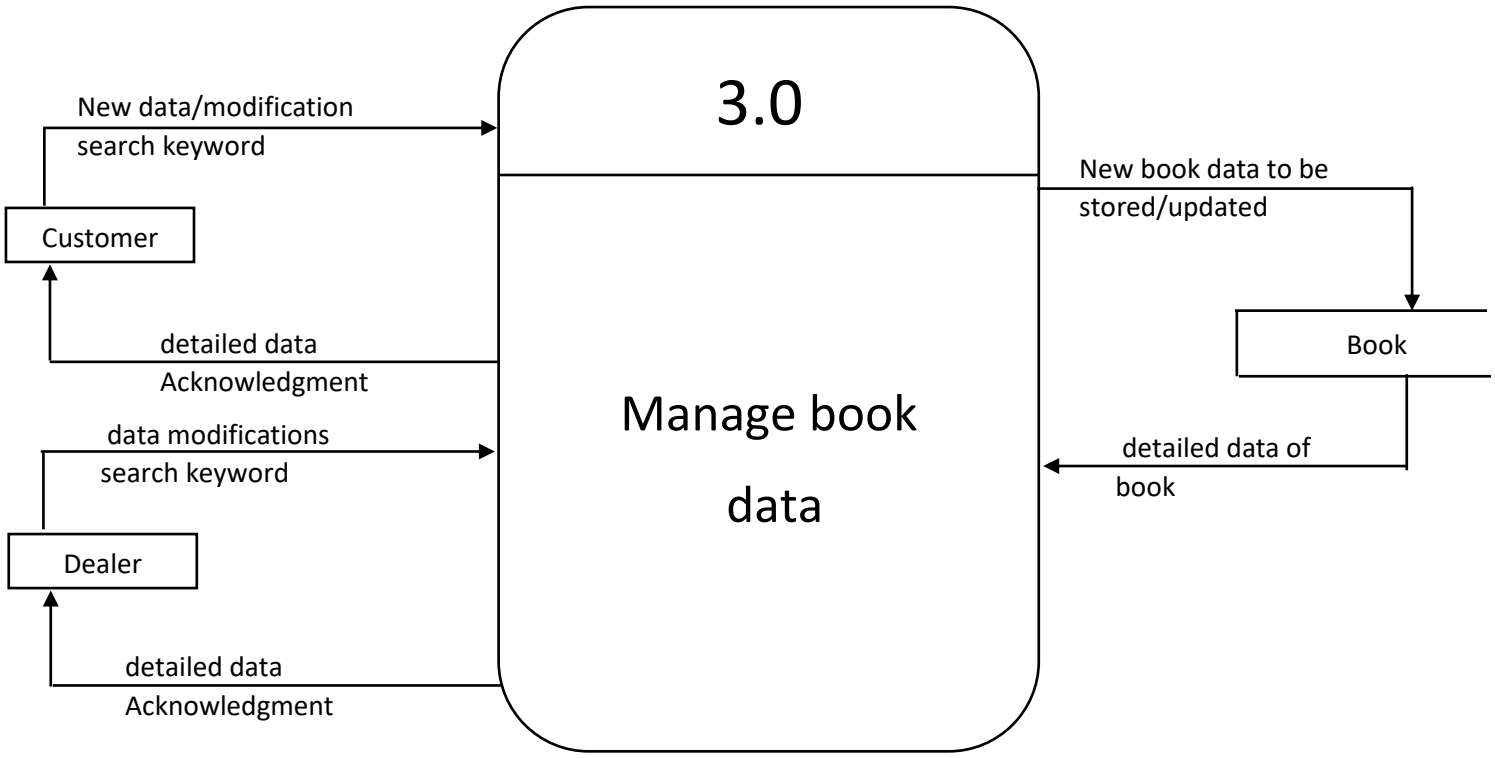
Level 1 Diagram: Manage customer data



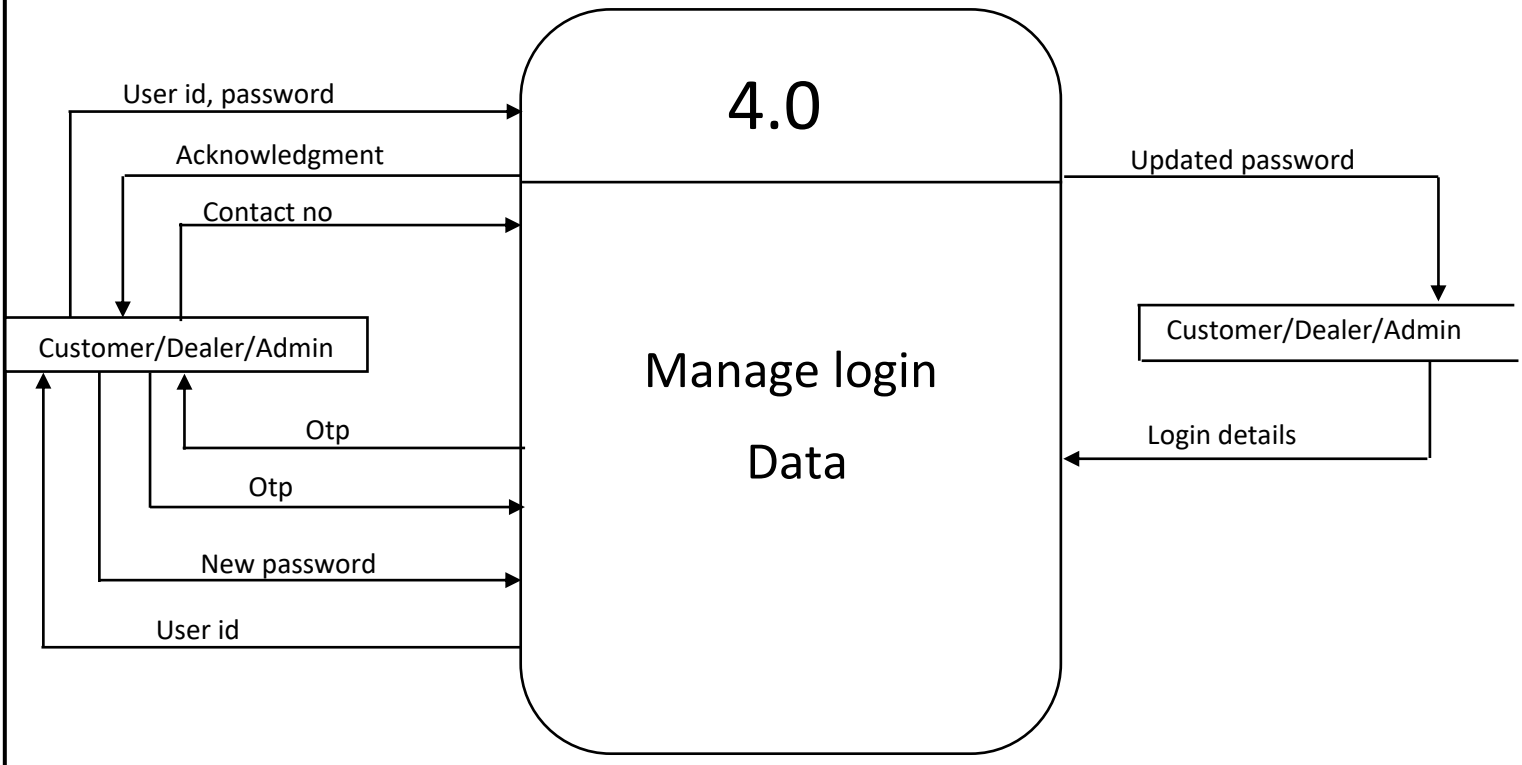
Level 1 Diagram: Manage service data



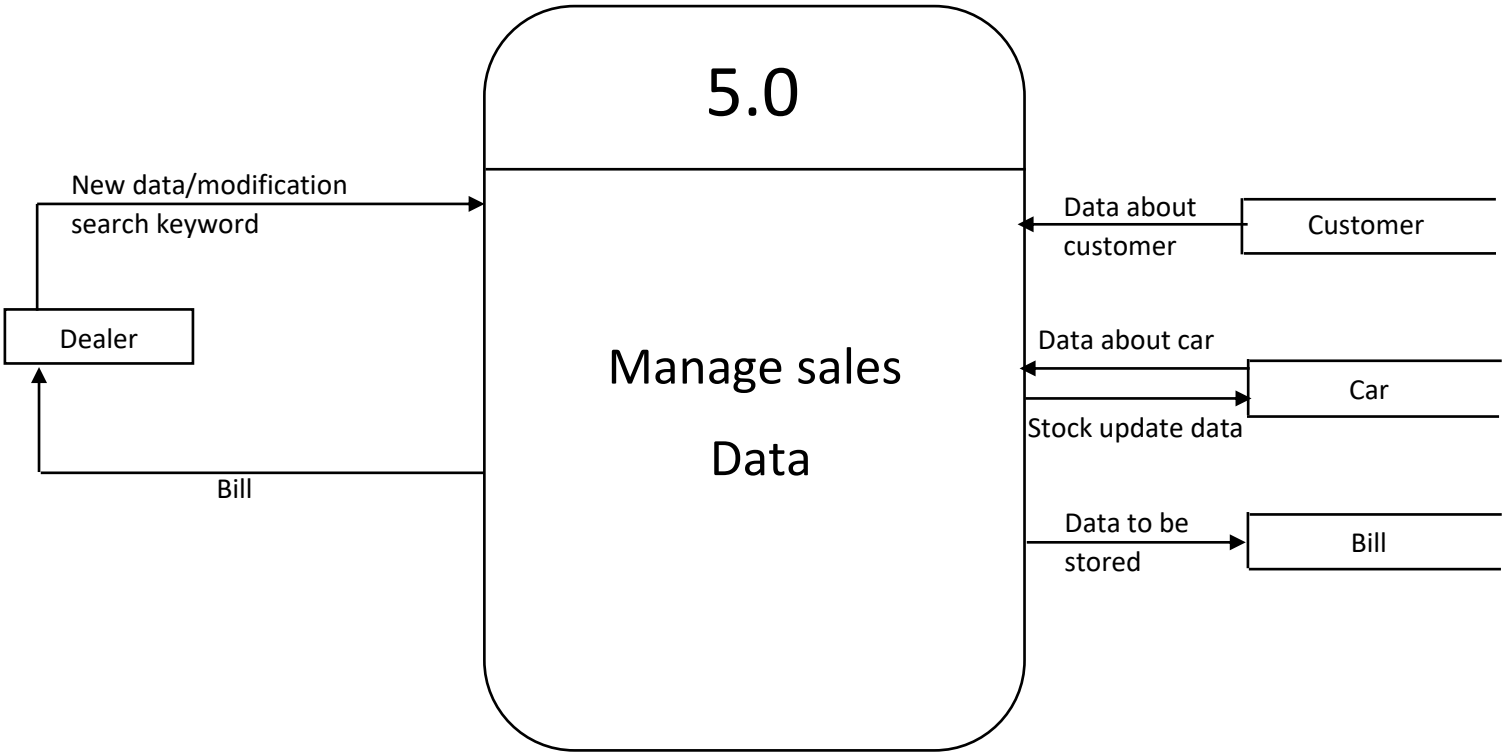
Level 1 Diagram: Manage book data



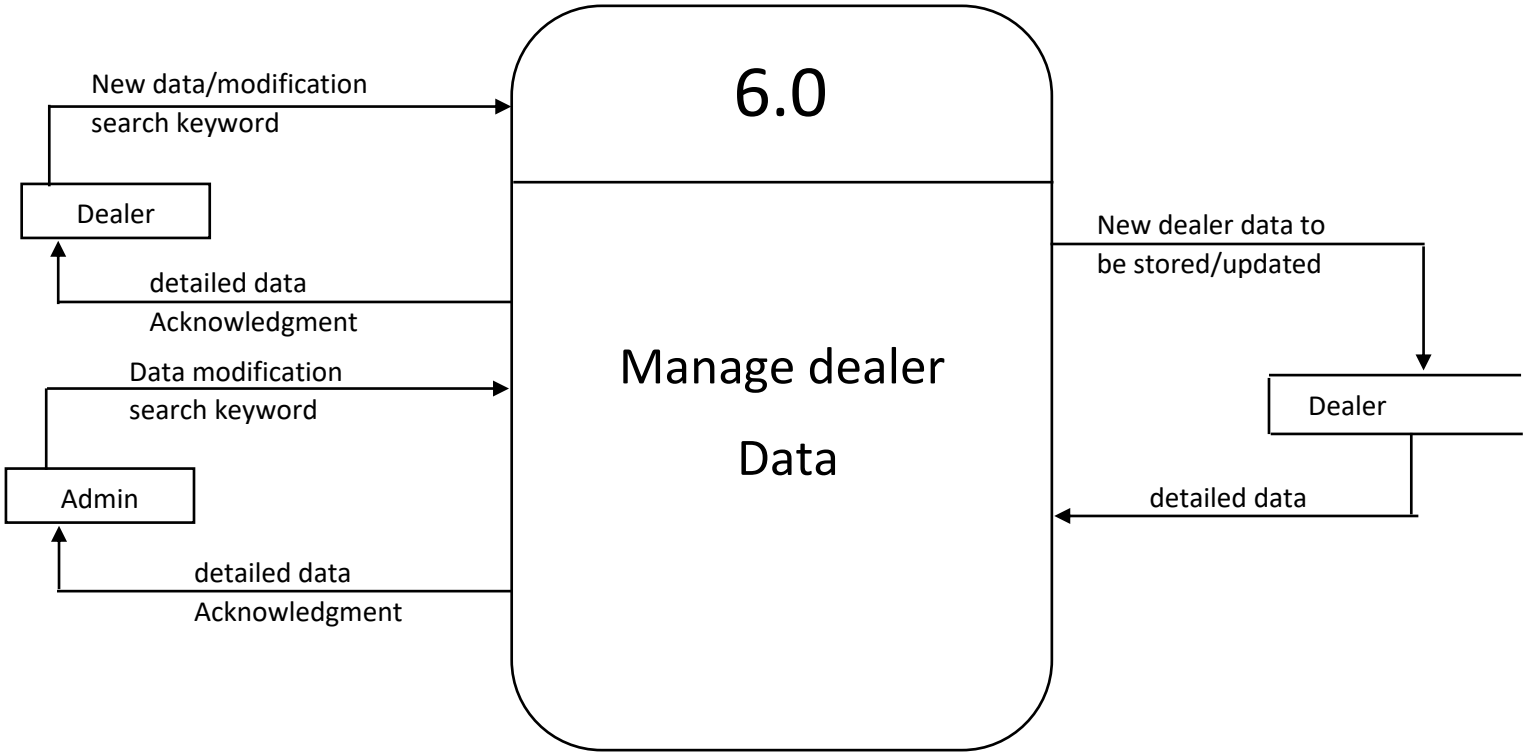
Level 1 Diagram: Manage login data



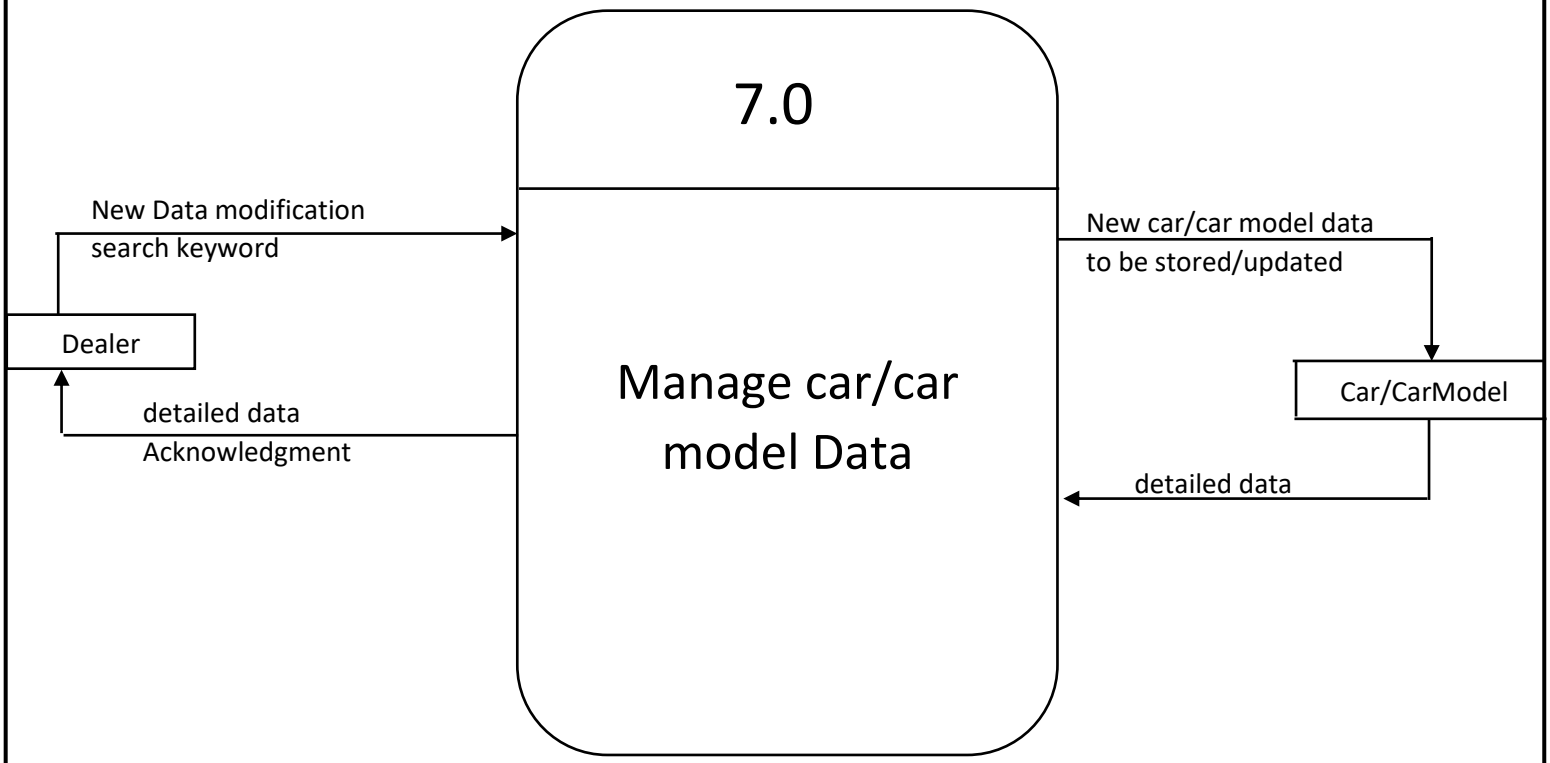
Level 1 Diagram: Manage sales data



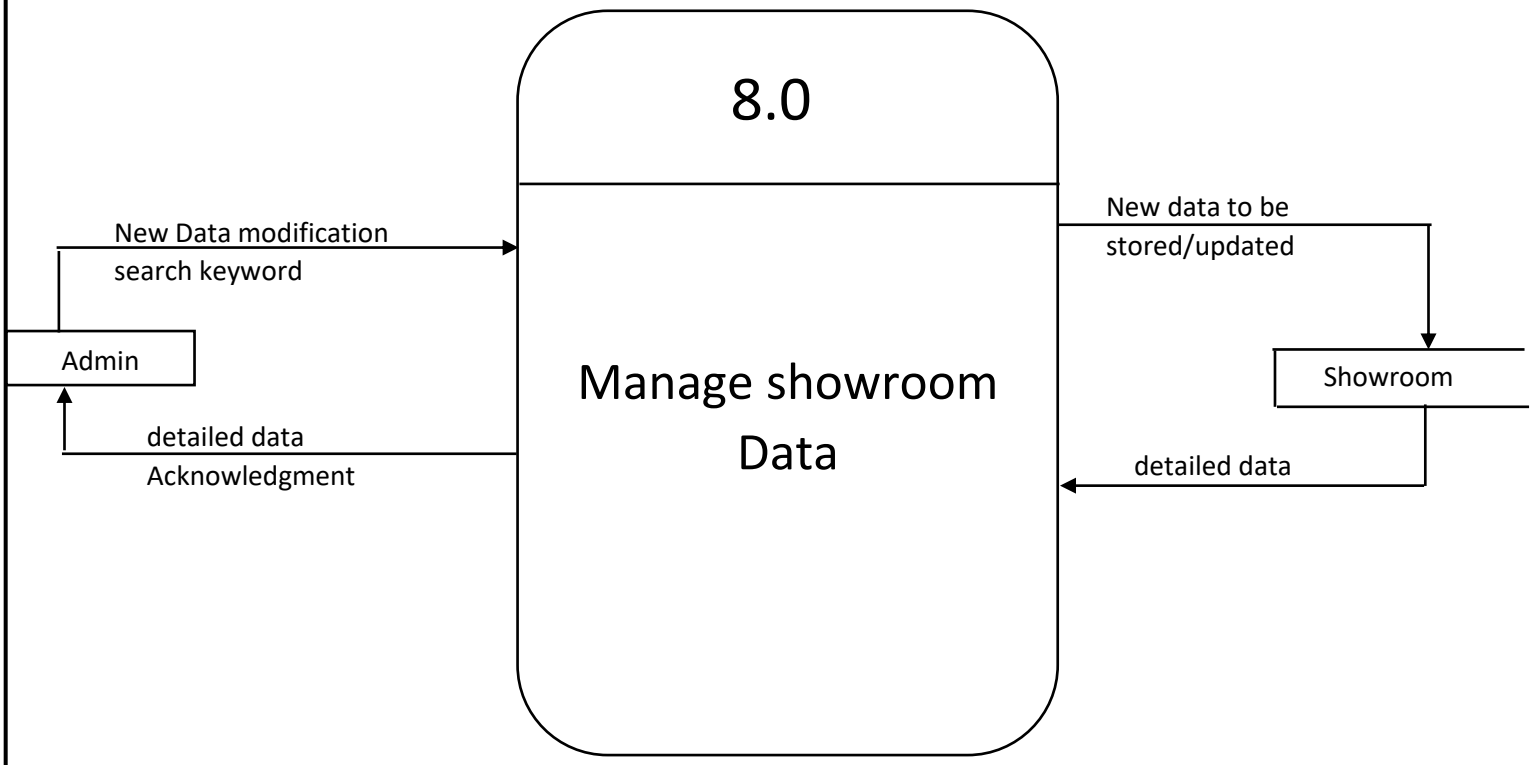
Level 1 Diagram: Manage Dealer data



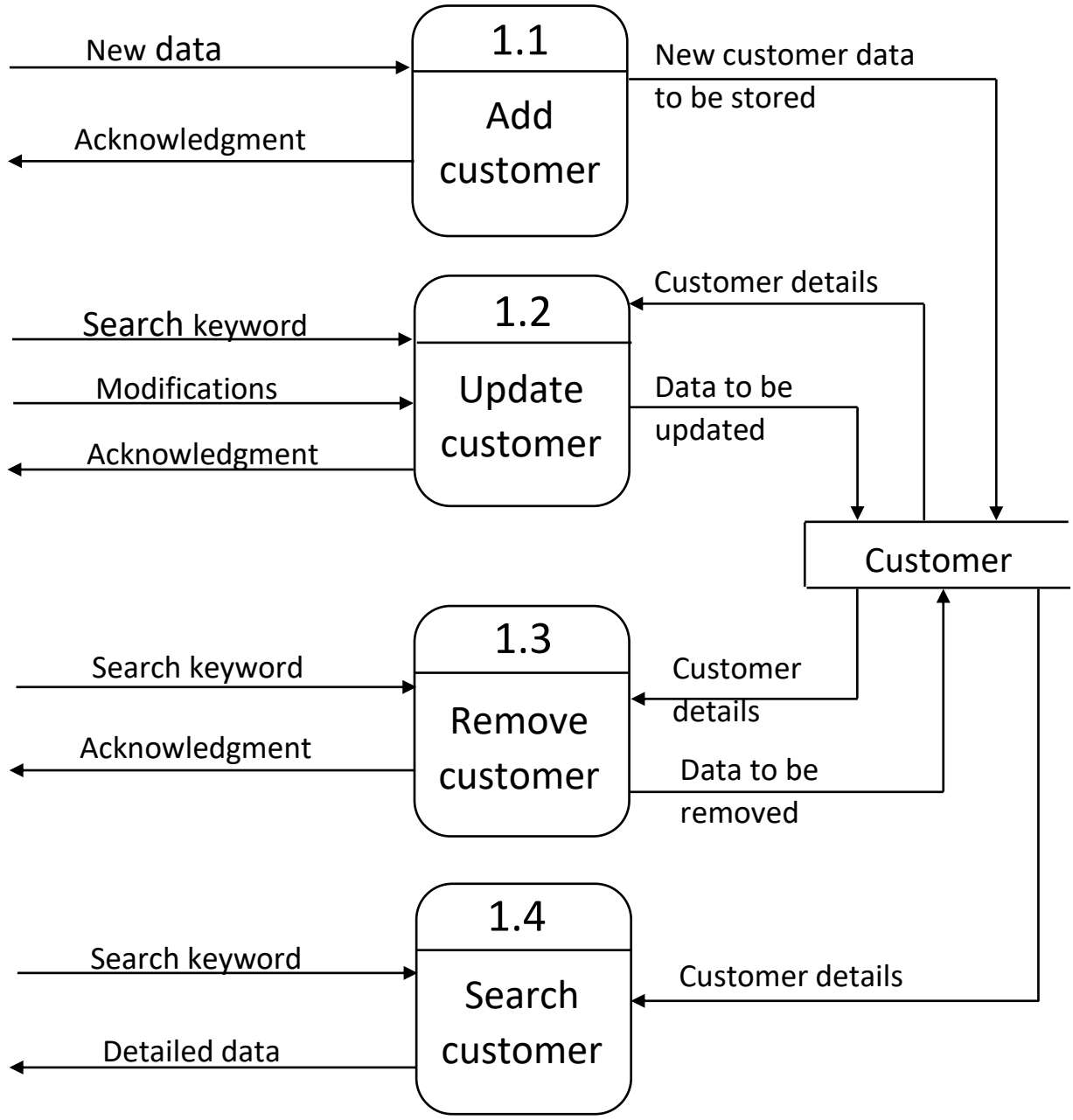
Level 1 Diagram: Manage car/car model data



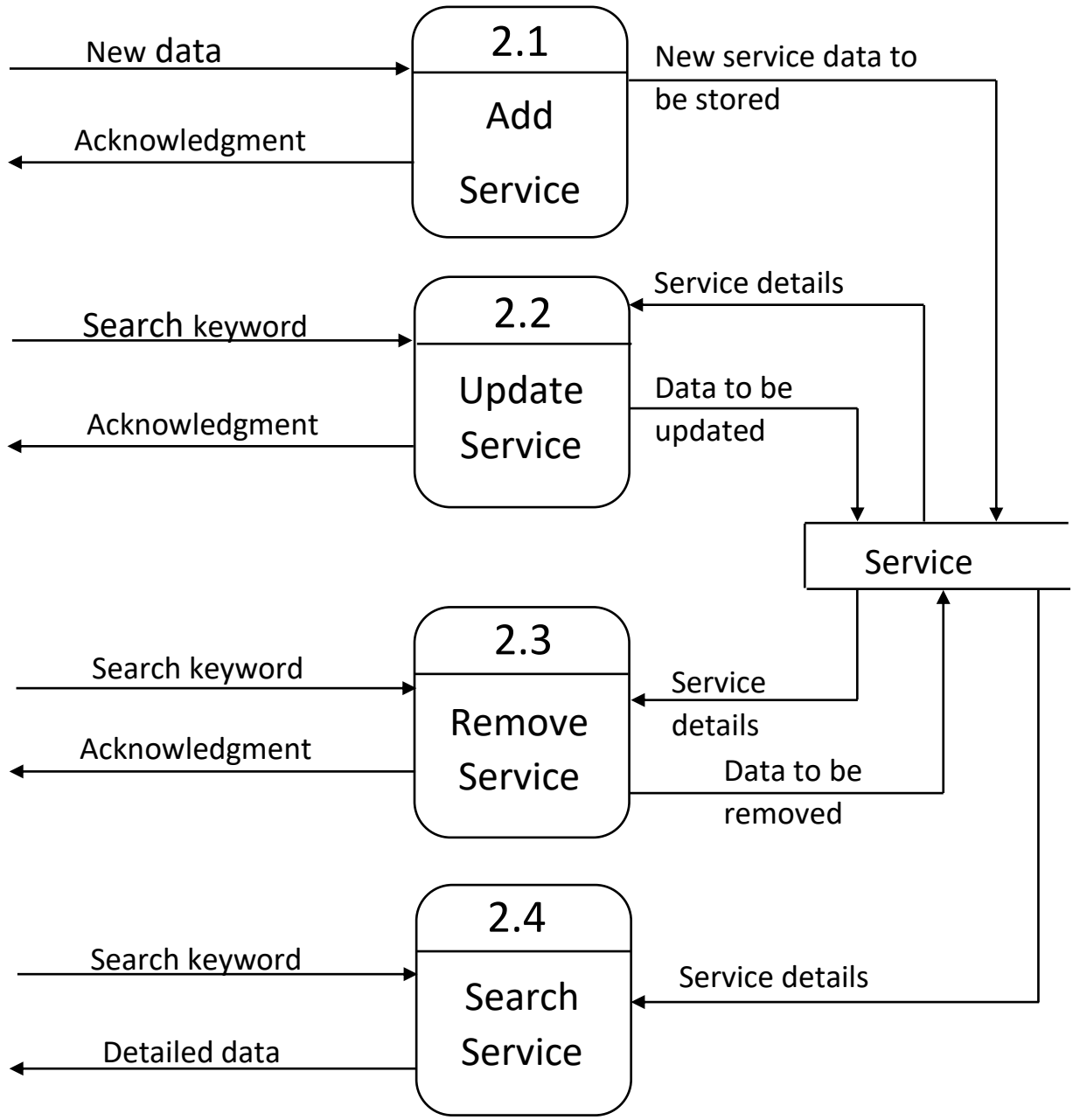
Level 1 Diagram: Manage showroom data



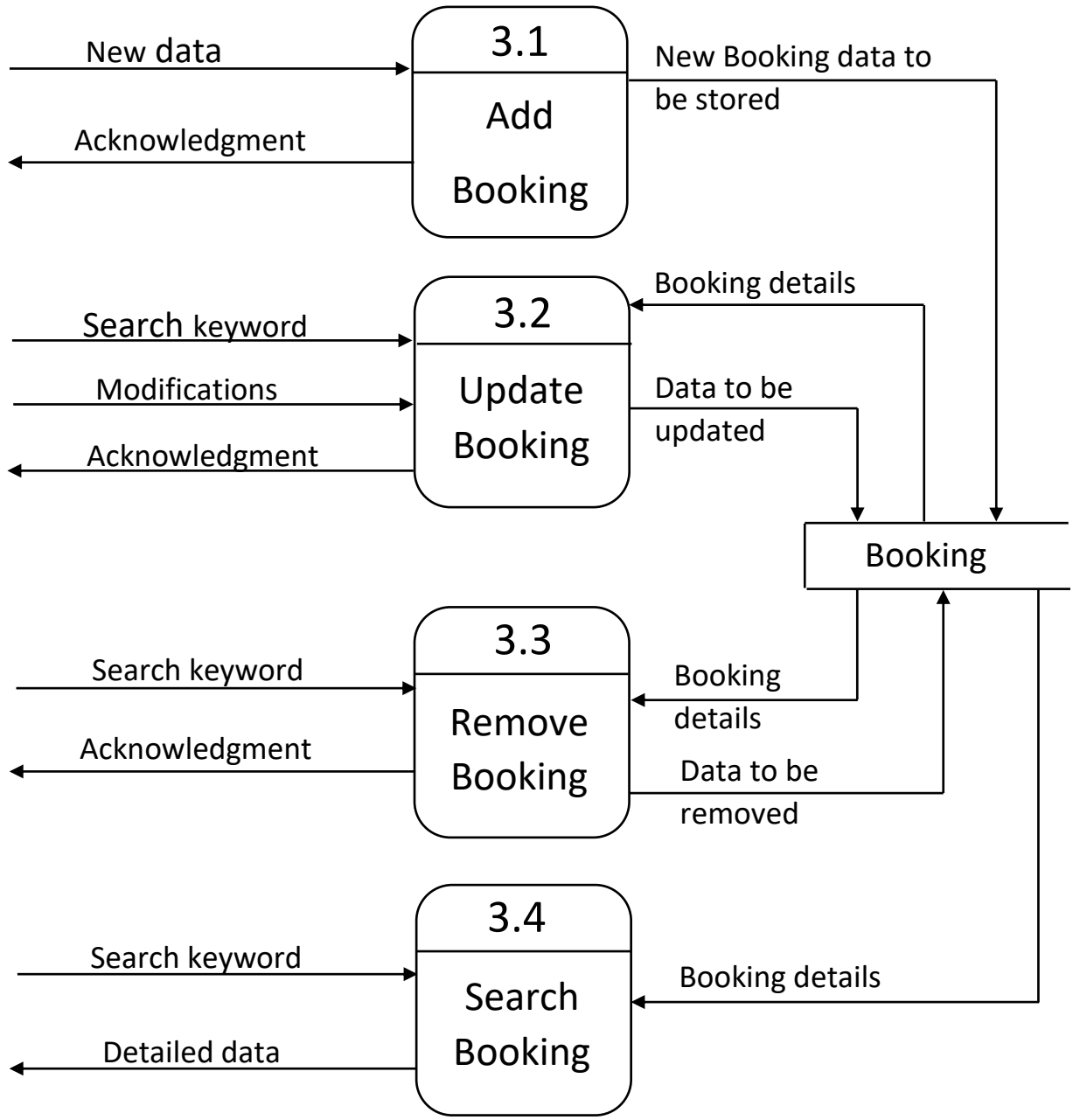
Level 2 Diagram: Manage customer data



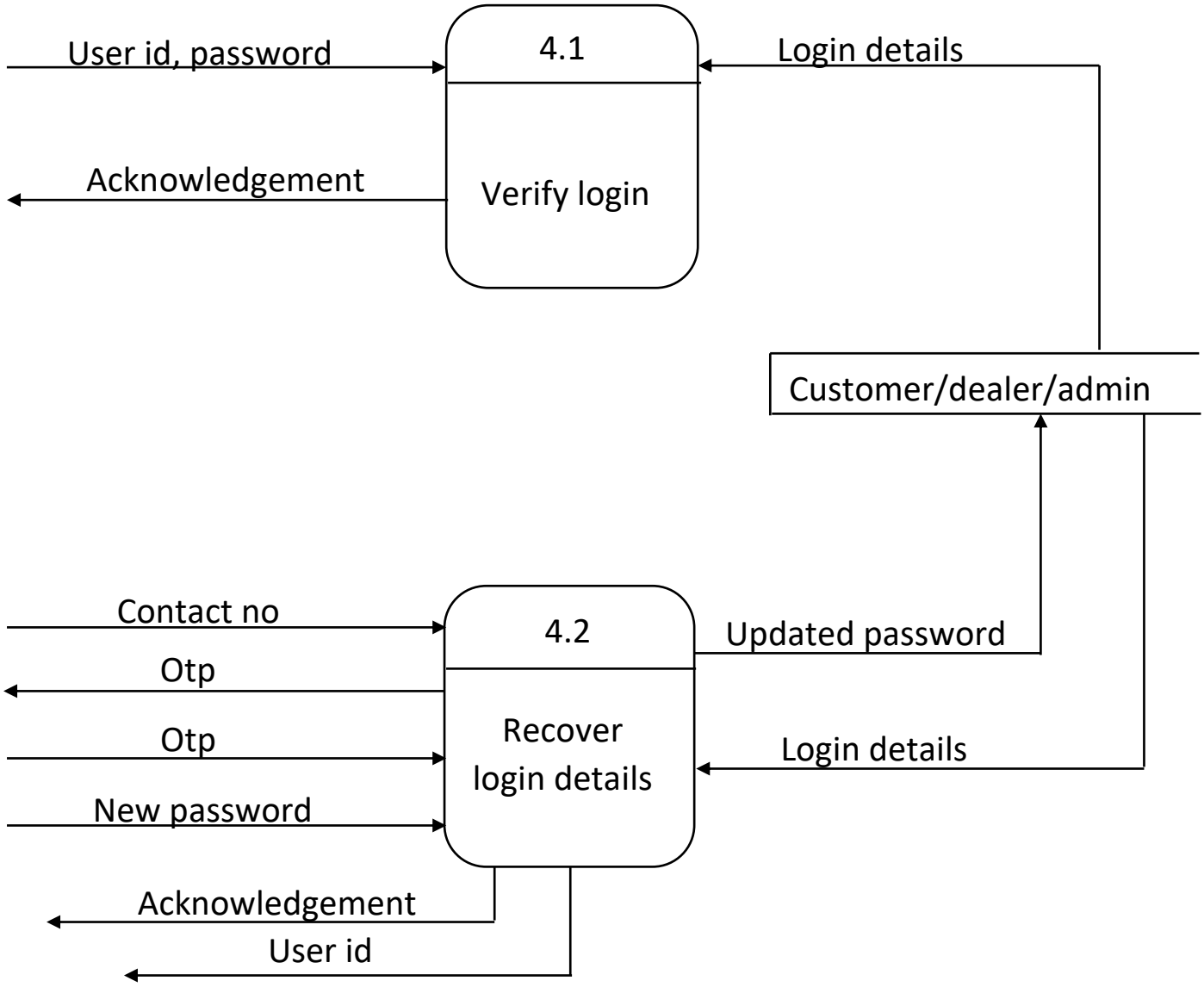
Level 2 Diagram: Manage service data



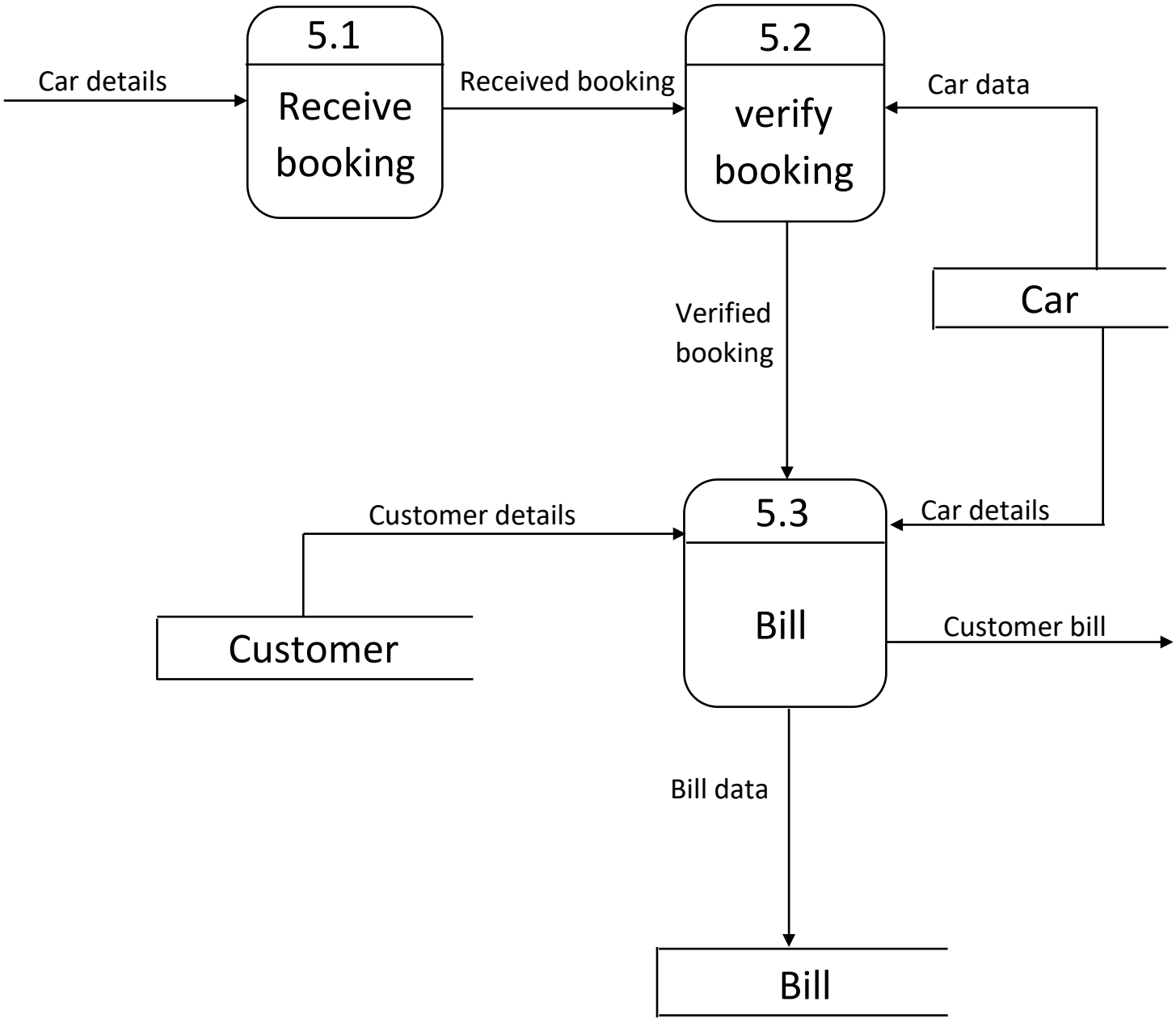
Level 2 Diagram: Manage Booking data



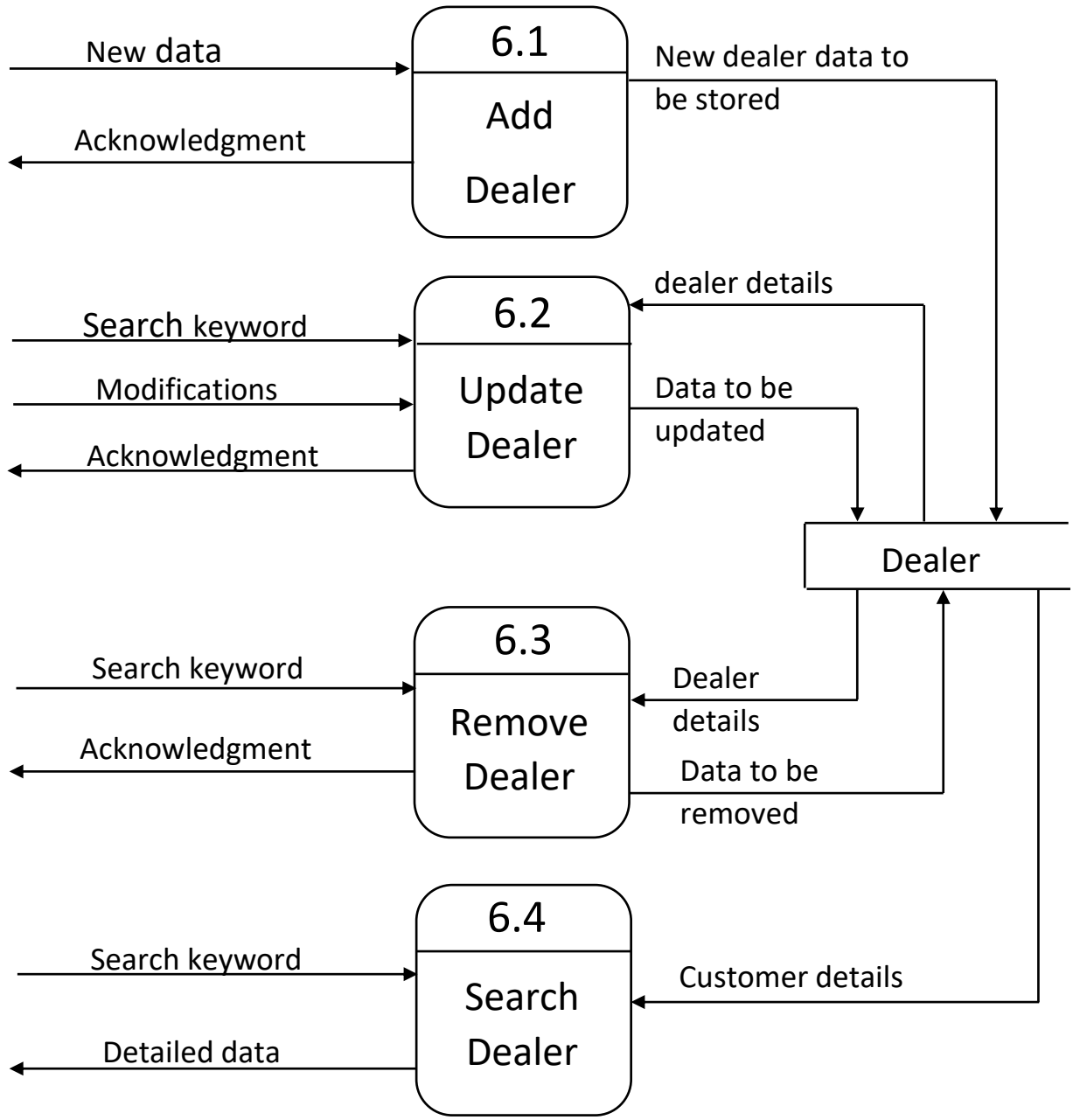
Level 2 Diagram: Manage login data



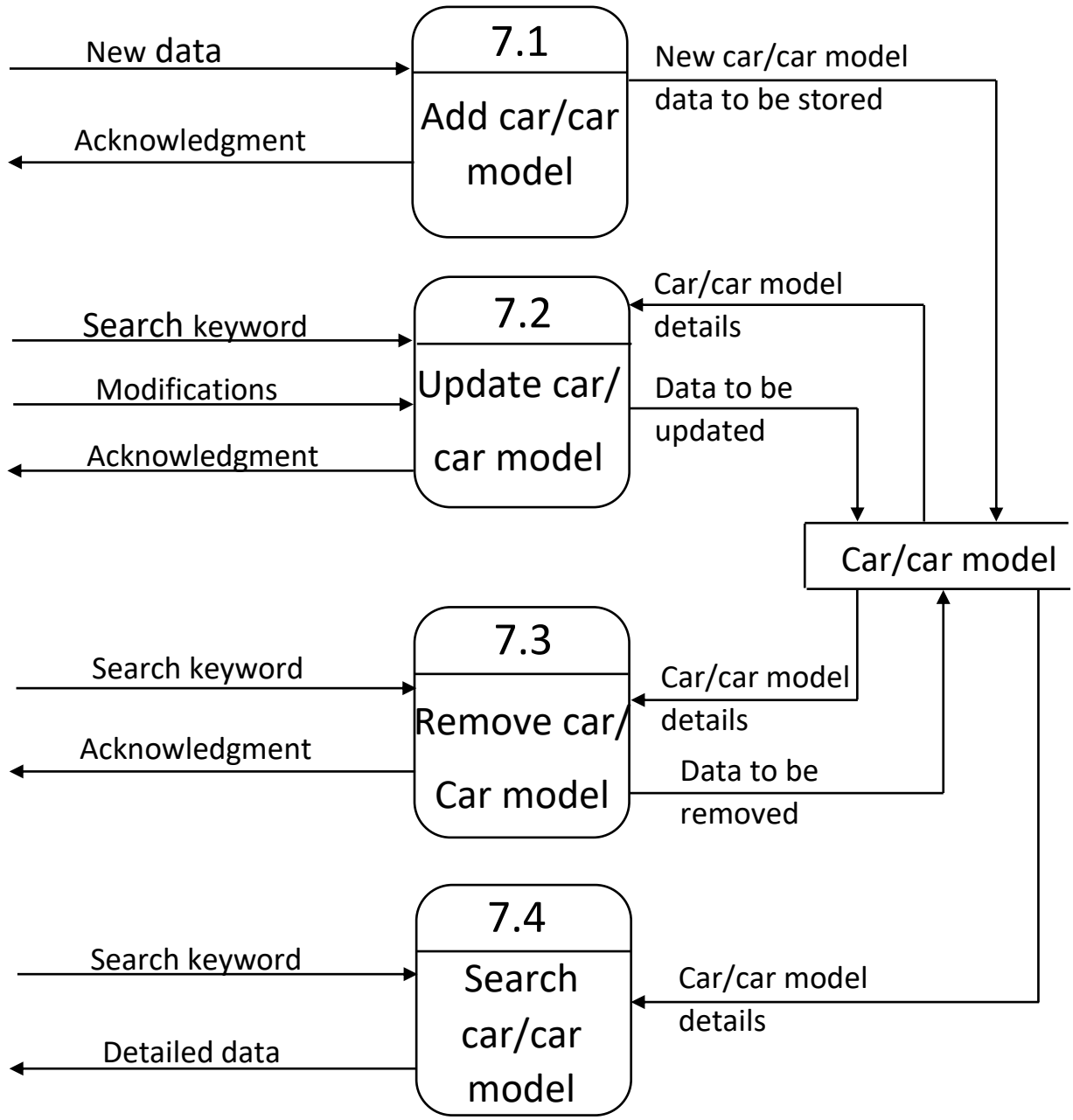
Level 2 Diagram: Manage Sales data



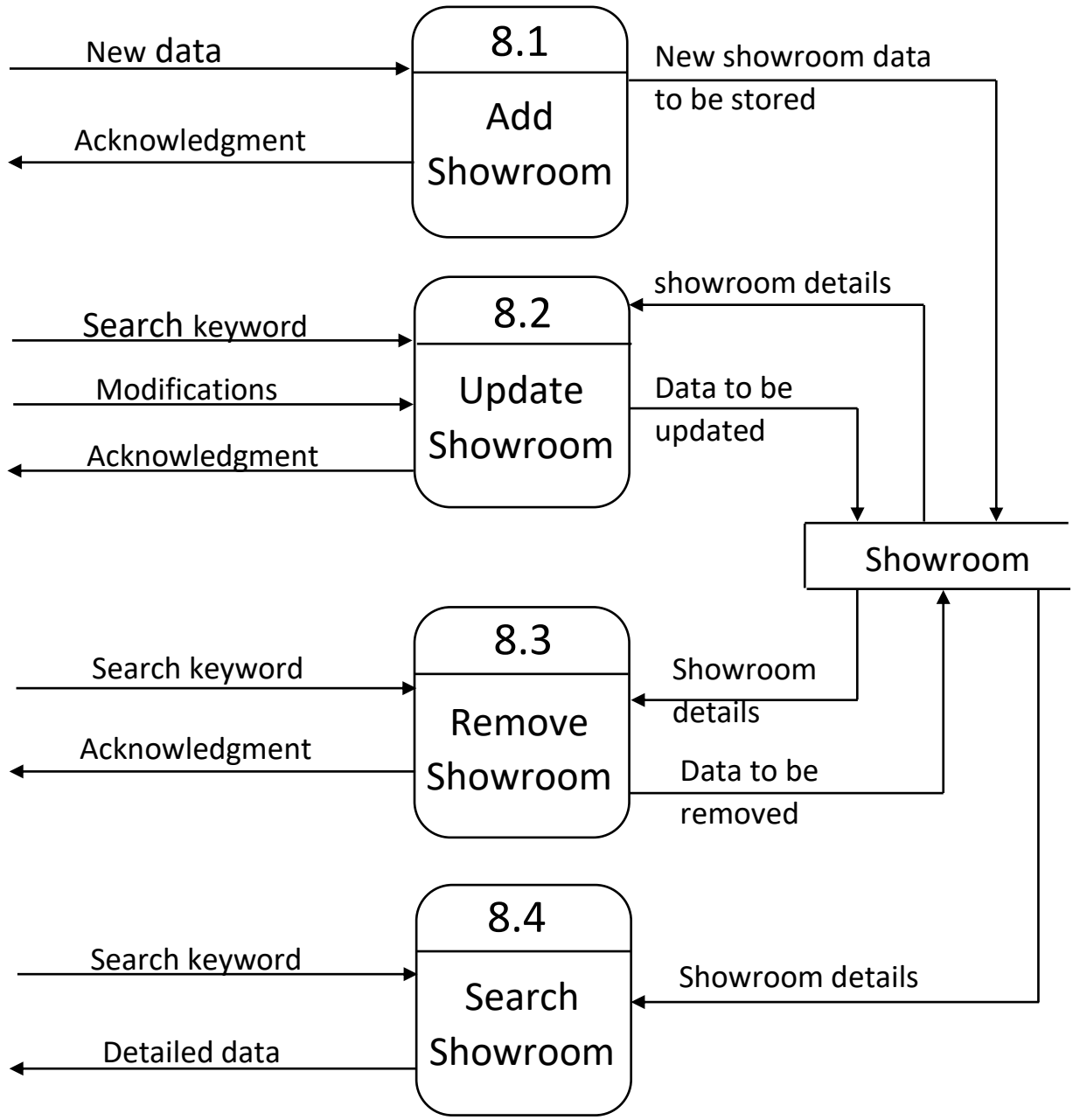
Level 2 Diagram: Manage Dealer data



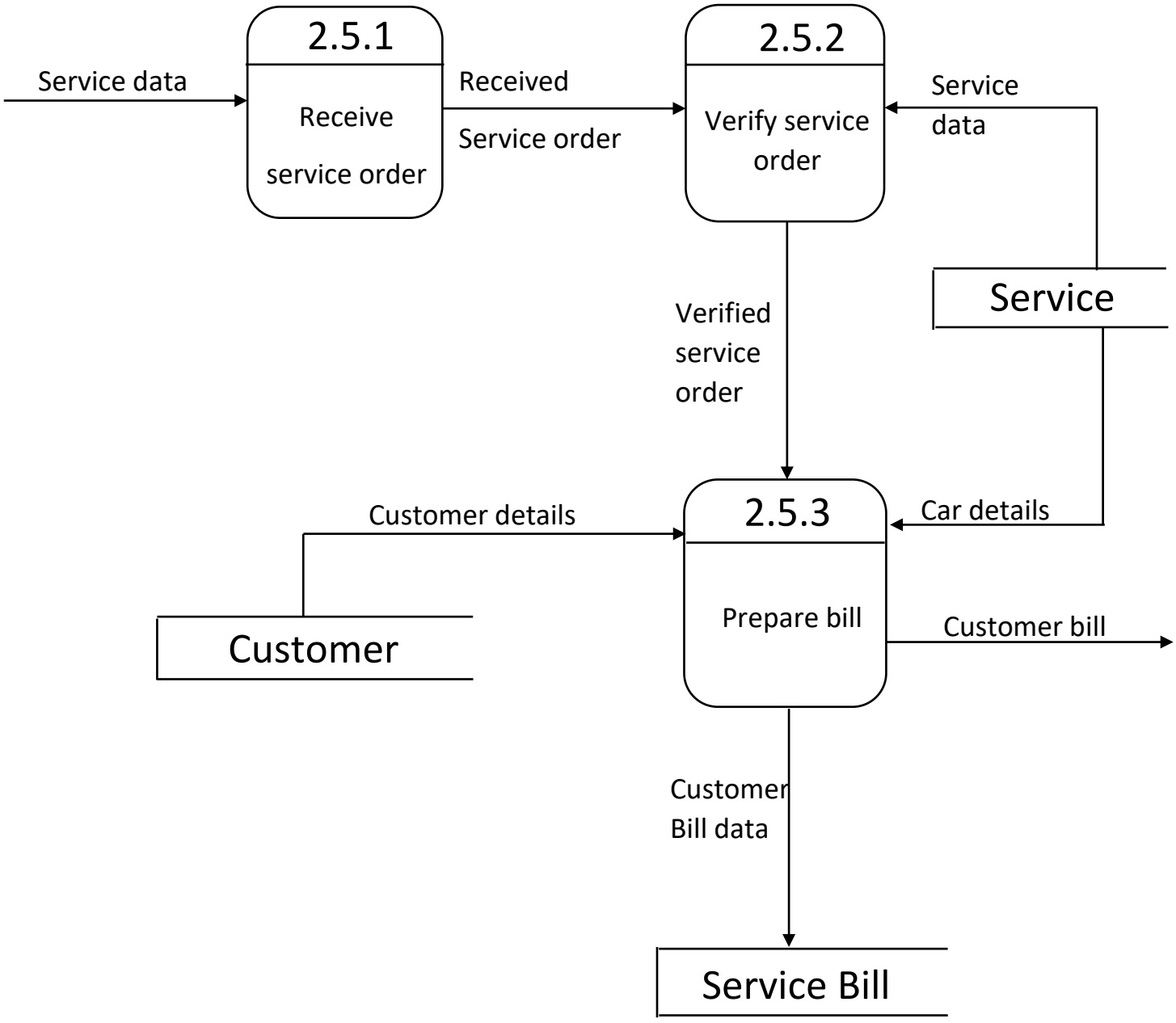
Level 2 Diagram: Manage Car/Car model data



Level 2 Diagram: Manage Showroom data



Level 3 Diagram: Manage Service Bill data

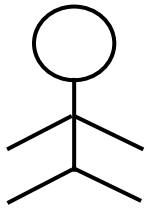
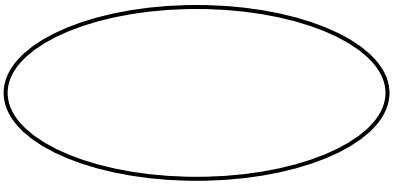


3.3 Use-case diagram:

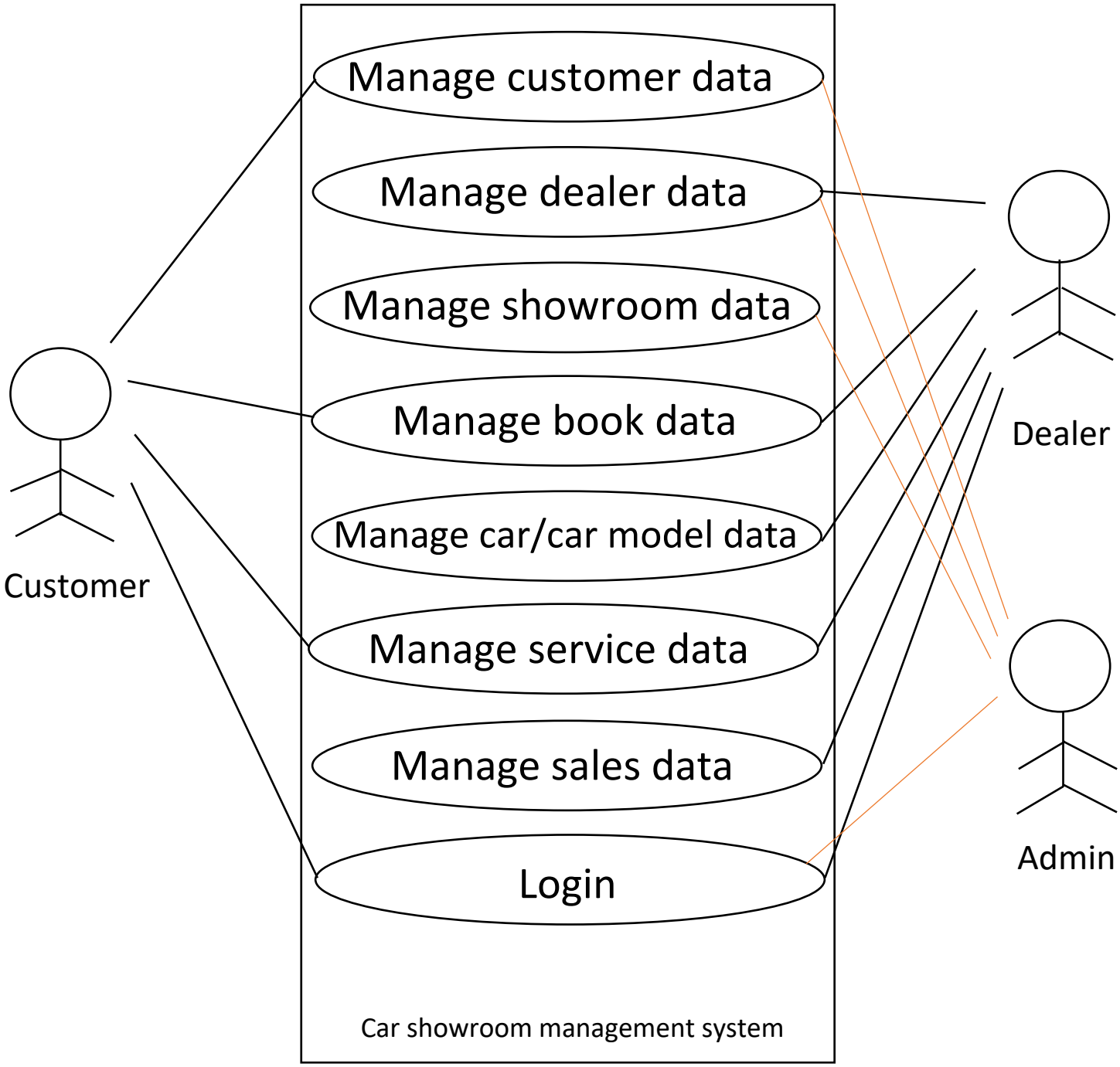
Use case diagrams are the diagrammatic representation depicting users' interactions with the system. This diagram shows different types of users and various ways in which these users interact with the system.

This diagram falls under the interaction model. This diagram involves a set of use such as: admin and student login, registration for faculty and students, upload documents, download documents, modify uploaded documents and generating report etc.

Use case diagrams are used to gather the requirements of a system including internal and external influences. These requirements are mostly design requirements. So, when a system is analysed to gather its functionalities use cases are prepared and actors are identified.

Symbol	Notation	Represents
	Stick person	Actor
	Ellipse	Use Case
	Rectangle	System boundary
	Line	Communication Relationship

Use-Case Diagram:



4. Conclusion:

- It has been a great pleasure for us to work on this exciting and challenging project. This project proved good for as it provided practical knowledge of system analysis and designing.
- This is a completely android -based application. We have successfully completed system analysis and design process.
- In function-oriented designing we designed DFD and in the object oriented designing we draw ER diagram and under UML we draw the use case diagrams.
- We will do the developing part as a project-I in the next semester. In this part we will implement the coding in PHP and JAVA and ANDROID STUDIO.

Bhailalbhai & Bhikhabhai Institute of Technology
Computer Engineering Department (GIA)

Semester: 5 Subject: Project-1 (3350706)

Students progress report

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Shah Harsh Pankajkumar (186040307050)	6353142650
Patel Jay Kalpeshbhai (186040307032)	7621867511

Project Title: Car showroom management system

Technology Front-end: Android Studio

Back-end: MySQL

Email:

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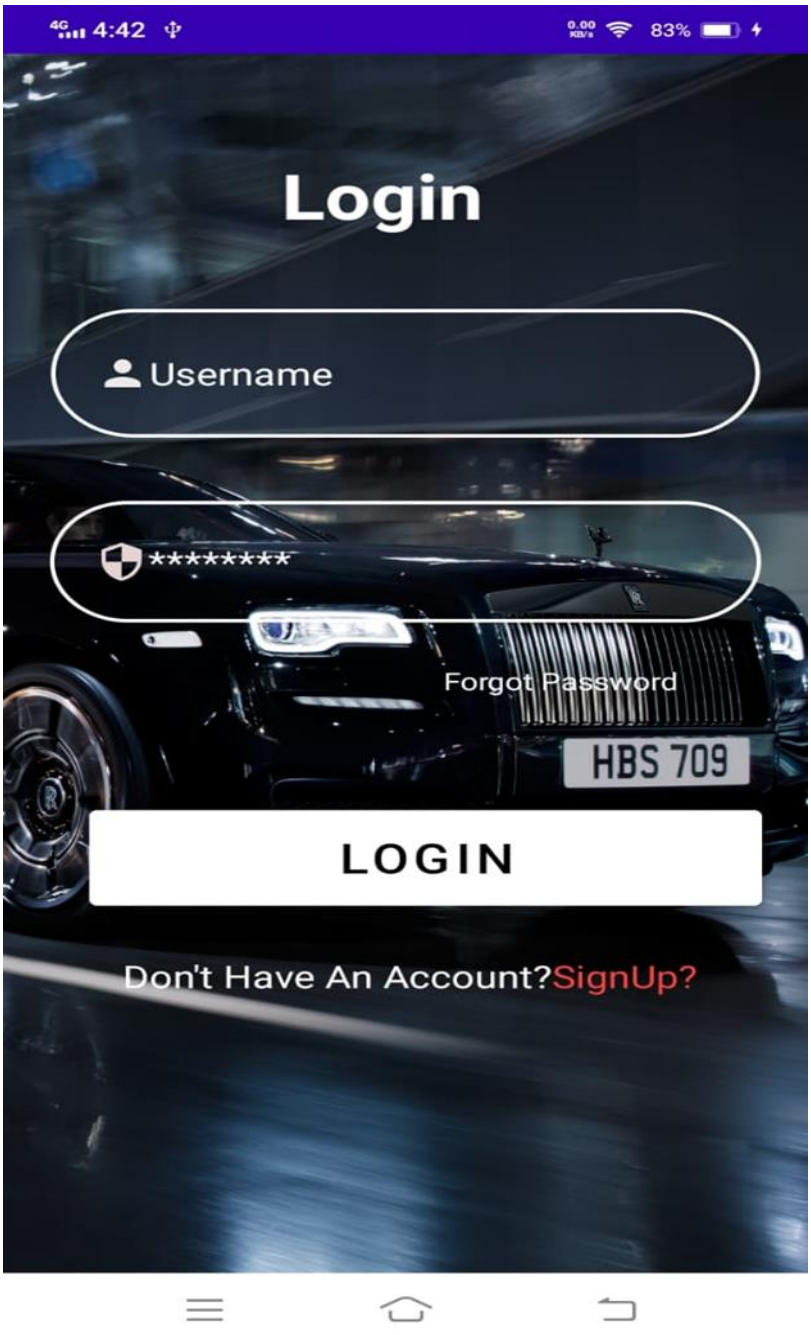
Sr. No	Date of meeting	Time of meeting	Objective of meeting	Out come				Sign of guide
				Excellent	Good	Average	Poor	
1	18/7/2020	02:18 pm	Project topic		√			
2	20/7/2020	02:30 pm	Front end and backend technology		√			
3	25/7/2020	03 pm	Abstract		√			
4	27/7/2020	10 am	Modification for abstract		√			
5	30/7/2020	11 am	Modified abstract submitted		√			
6	06/8/2020	11 am	Abstract submitted		√			
7	07/8/2020	10 am	Implementation planning			√		
8	20/8/2020	2 pm	ER diagram for review			√		
9	22/8/2020	10 am	ER modification from guide			√		

10	24/8/2020	10 am	ER modification completed		√			
11	24/8/2020	1 pm	for advantages, disadvantages and scope		√			
12	24/8/2020	7 pm	PPT for review		√			
13	24/8/2020	11 pm	PPT completed		√			
14	25/8/2020	7 pm	For rejected ER restructure		√			
15	27/8/2020	11 am	Review for entity set		√			
16	9/9/2020	10 am	Re-structured ER diagram review		√			
17	29/9/2020	11 am	DFD level 0-1	√				
18	2/10/2020	11 am	All DFD & Use case	√				
19	4/10/2020	10 am	PPT For review	√				
20	7/10/2020	11 am	Modified DFD	√				
21	4/11/2020	10 am	Report review	√				
22	6/11/2020	7 pm	Report approval	√				
23	13/11/2020	11 pm	Modified report approved	√				

Sign and Name of Guide:

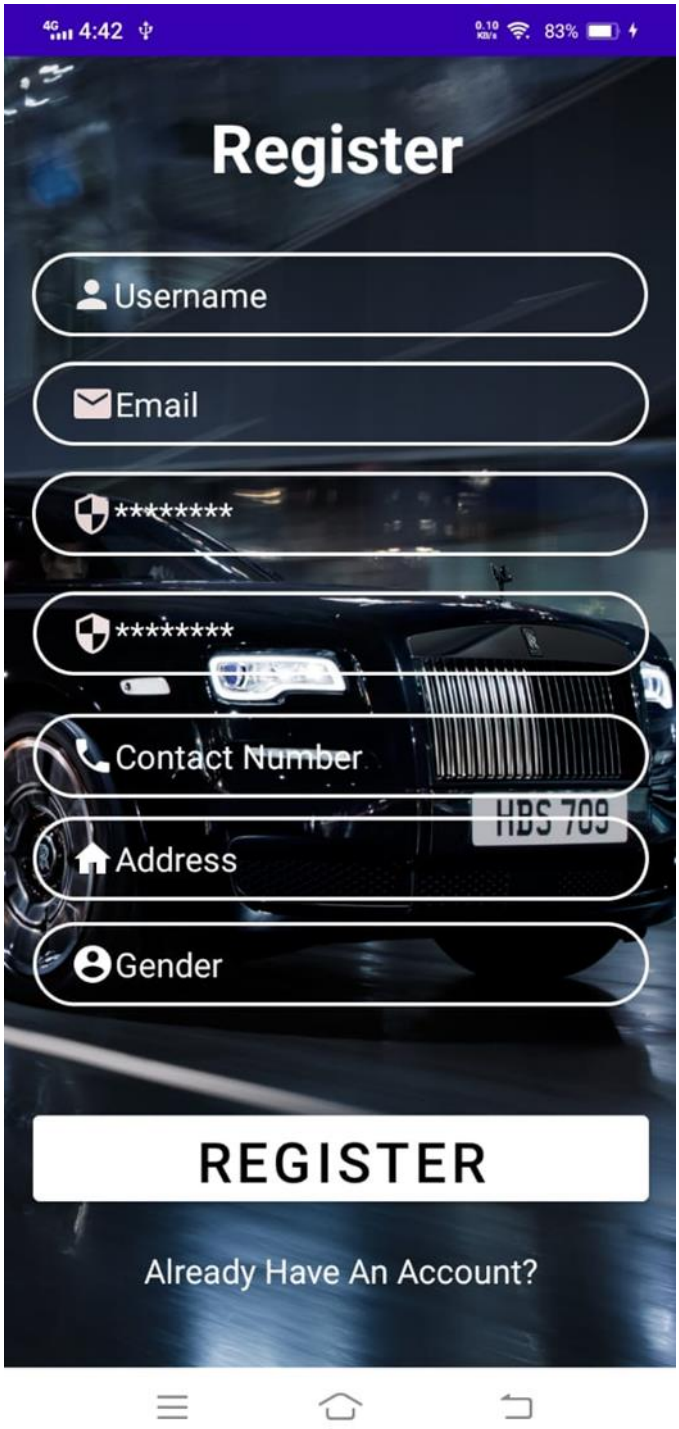
6. Output:

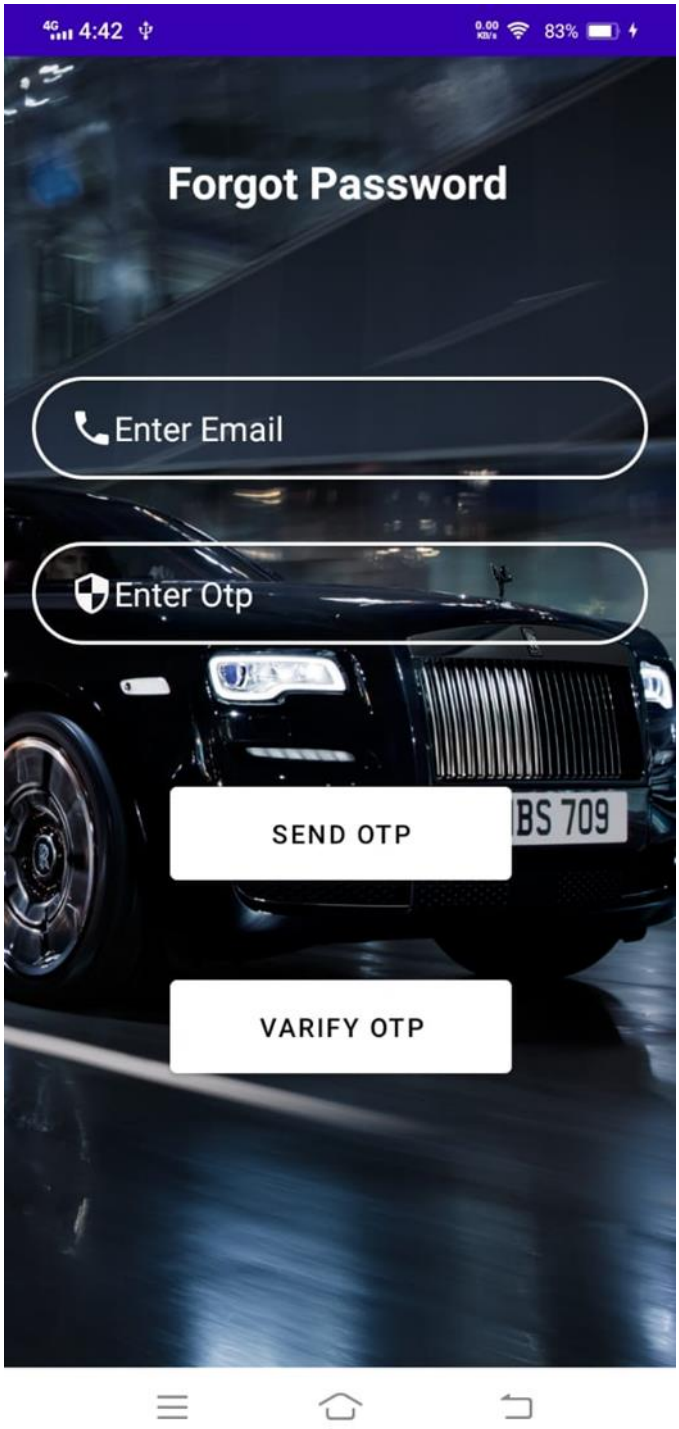
- Client Side:



Description:

This Photo is The Login Page For Client:

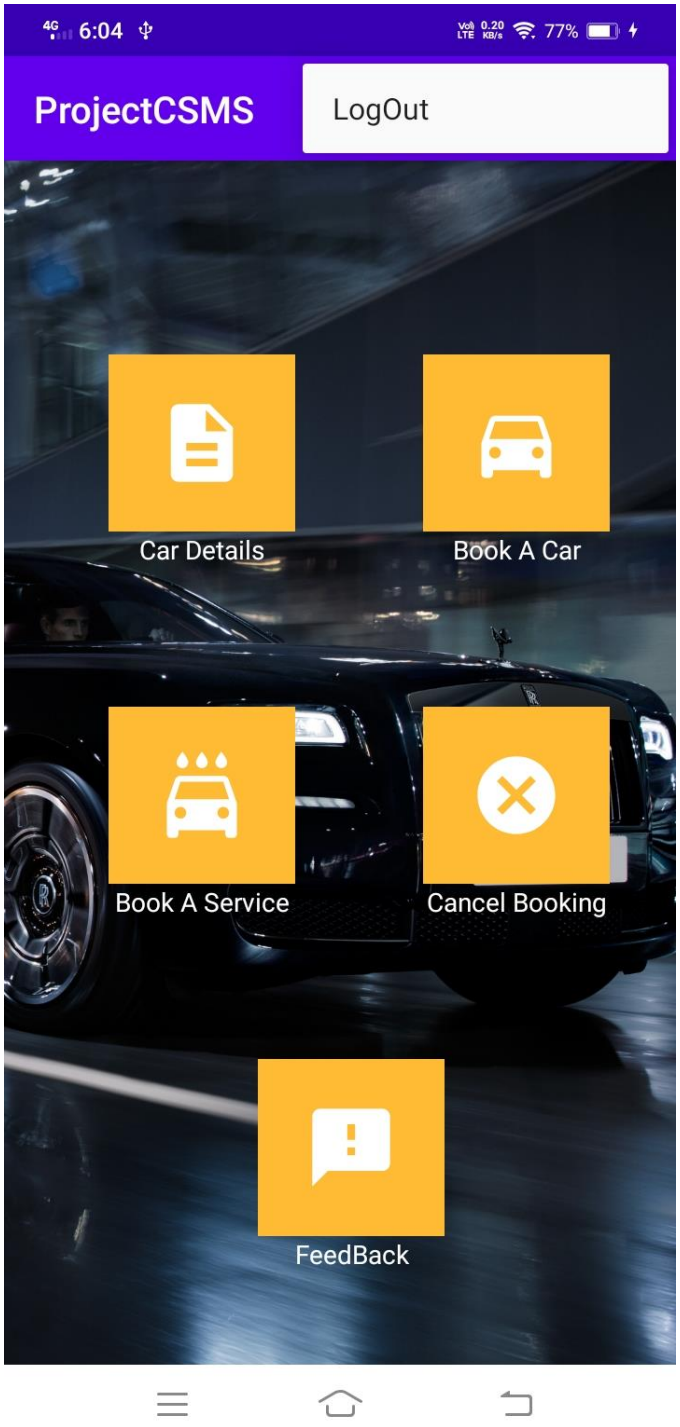


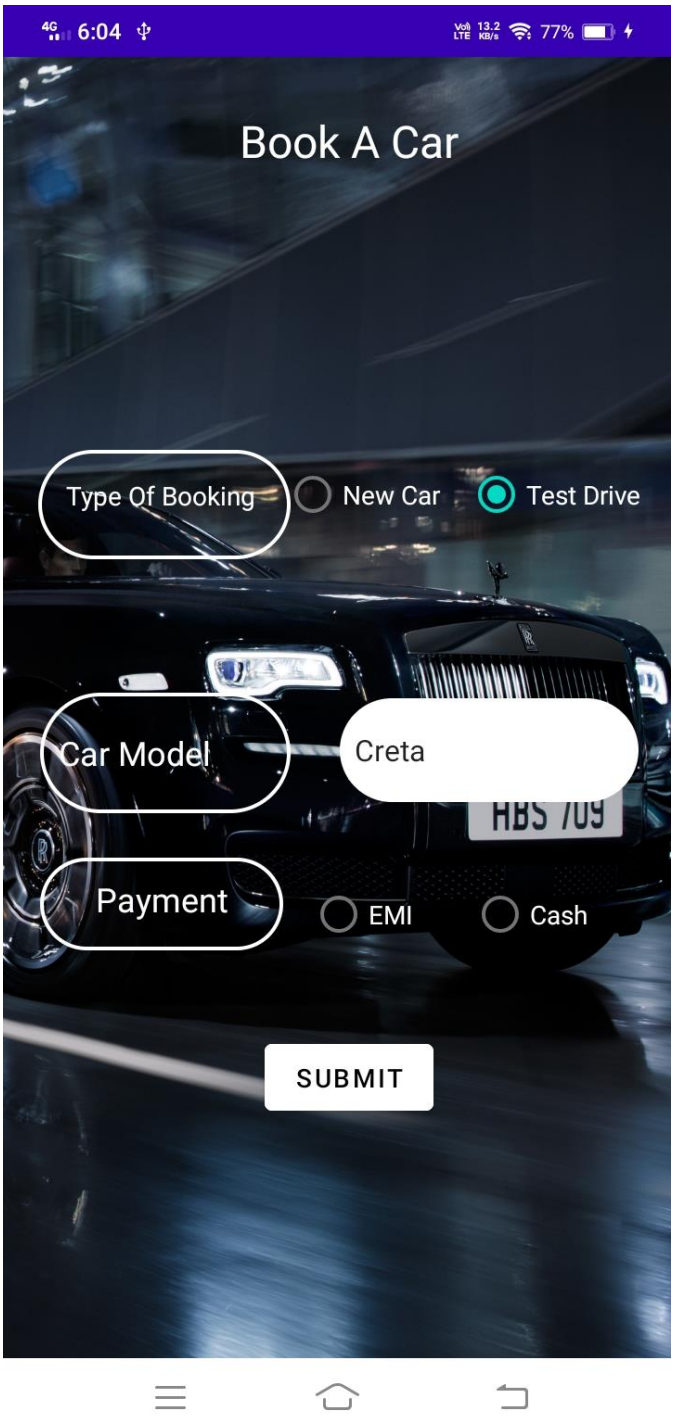


Description:

Register Photo is use To Register Any New Client.

Forgot Password Page Is Use When Client Forgot the login Password.

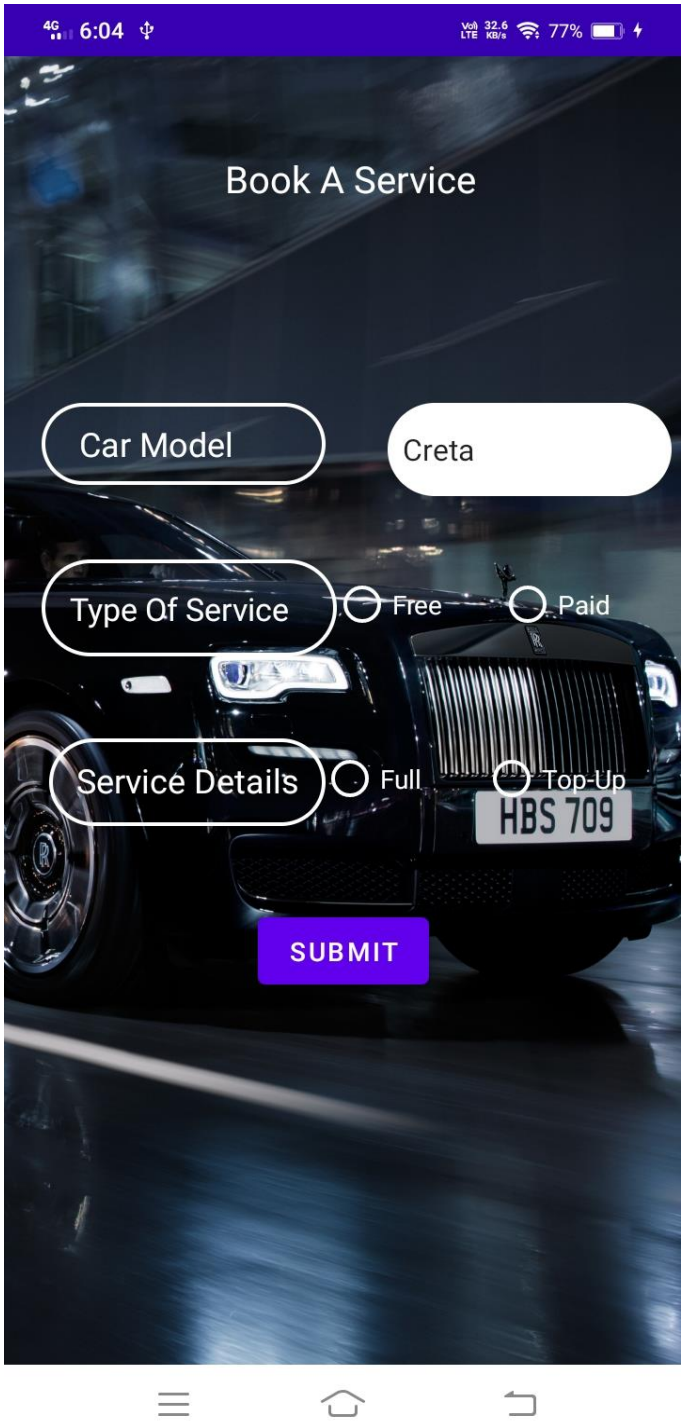


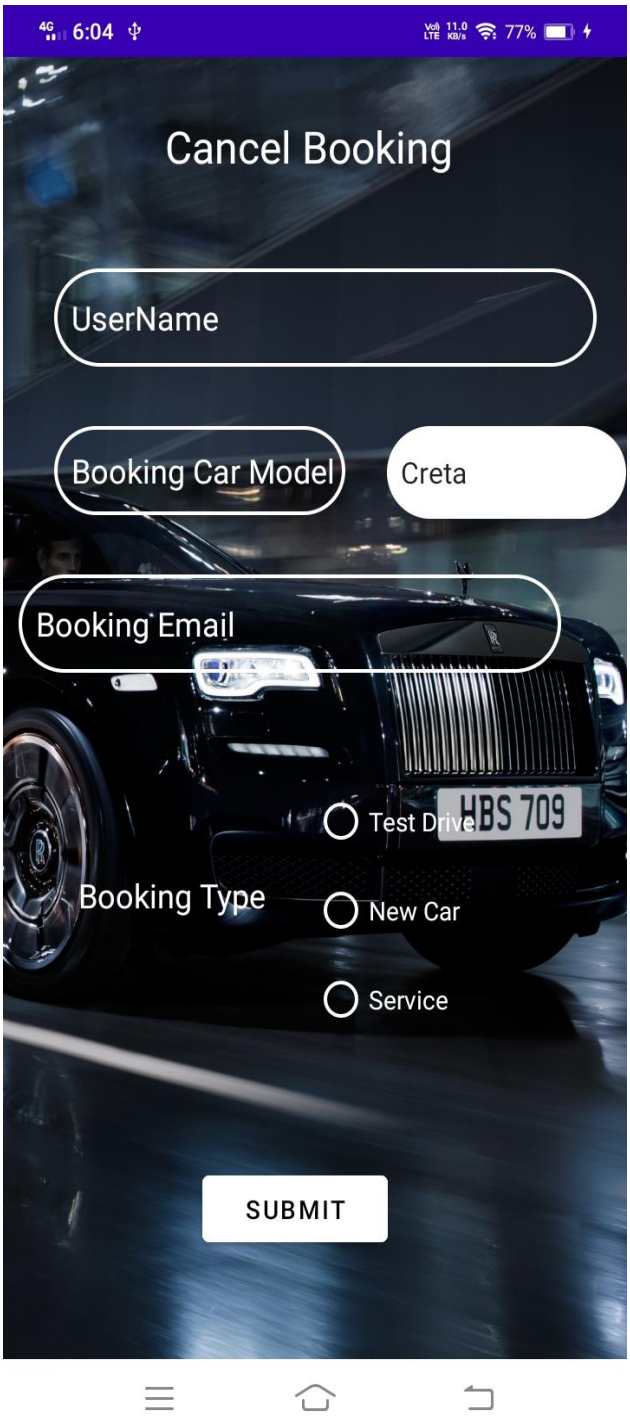


Description:

First Photo Is Main Page Of Client Side.

Second Photo is Use For Book New Car And Test Side.

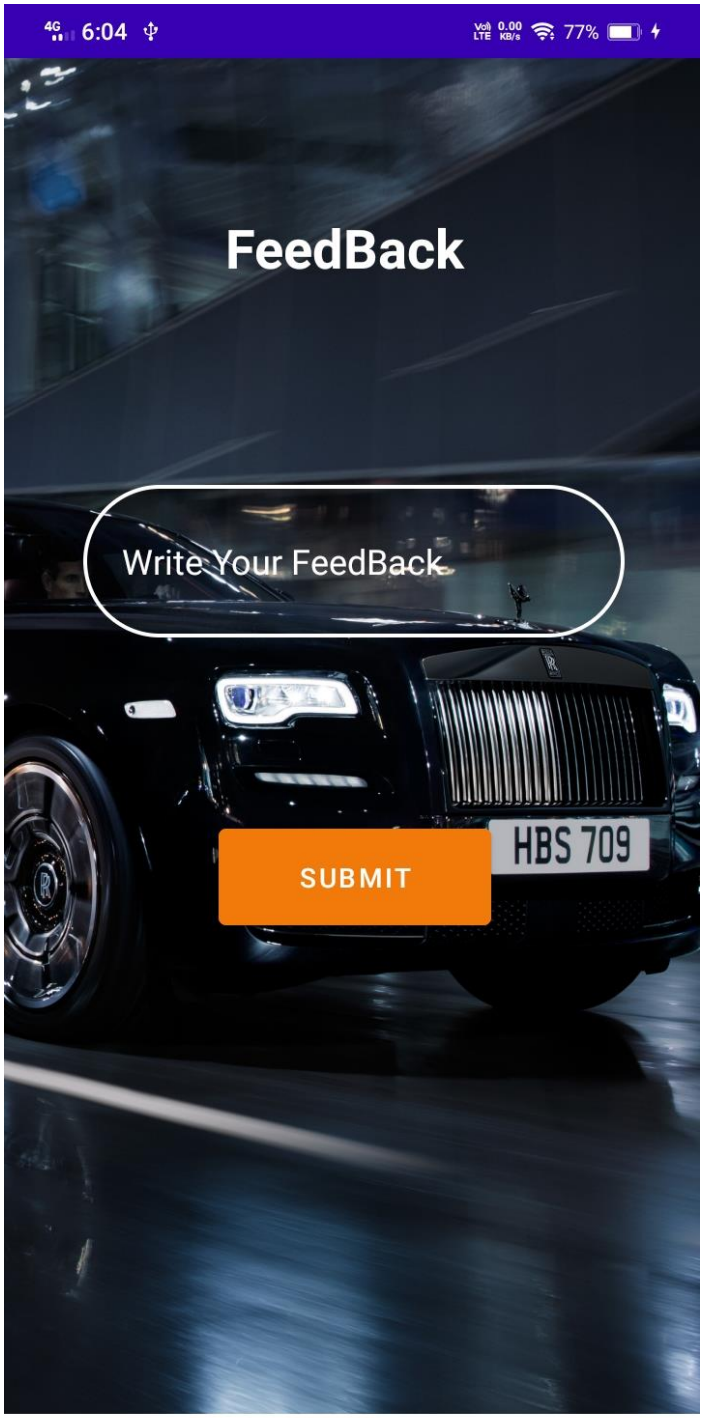




Description:

First Page Is Use For Book Service by Client.

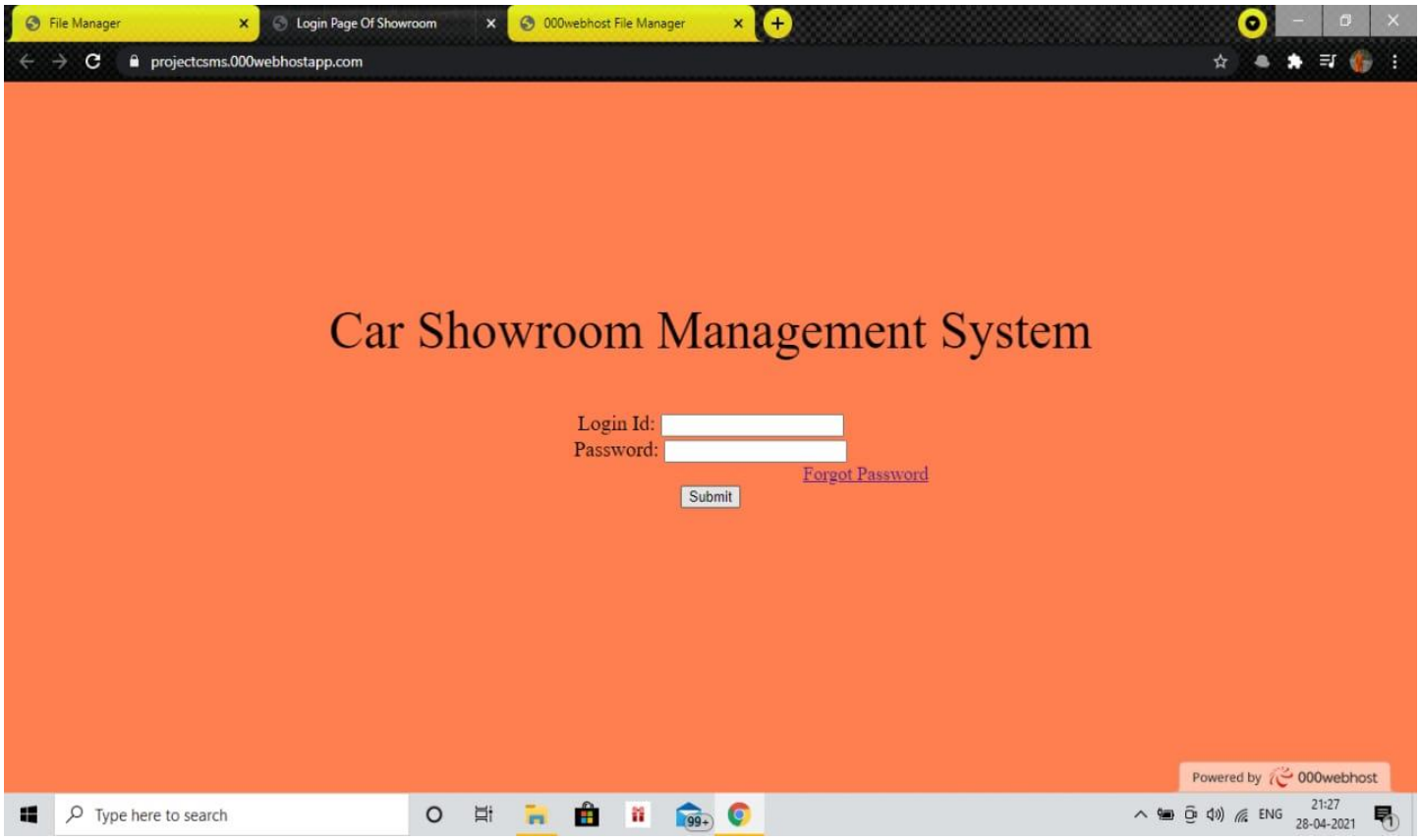
Second Page Is Use For Cancel Booking For Any Booking By Client.

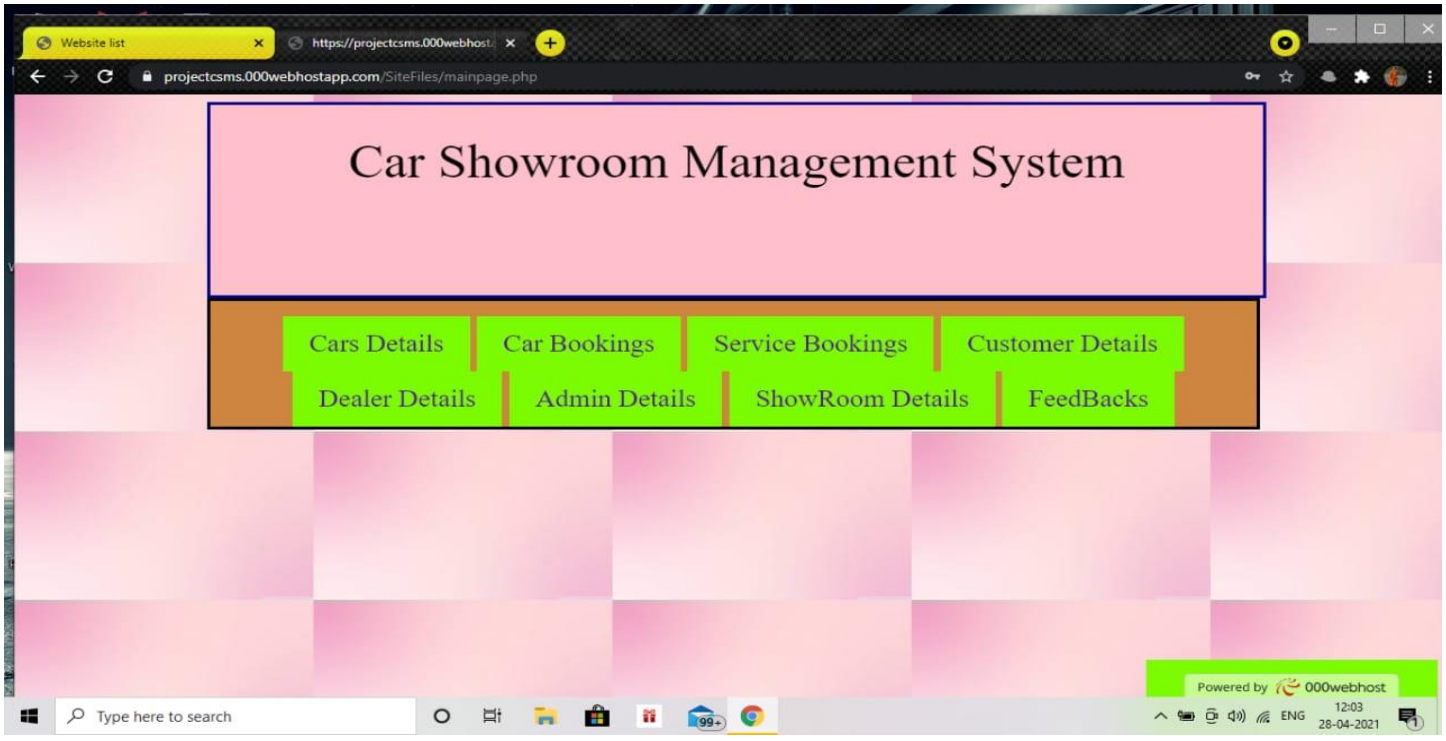


Description:

This Page is use by Client To Give Feedback In App.

- Admin Side:

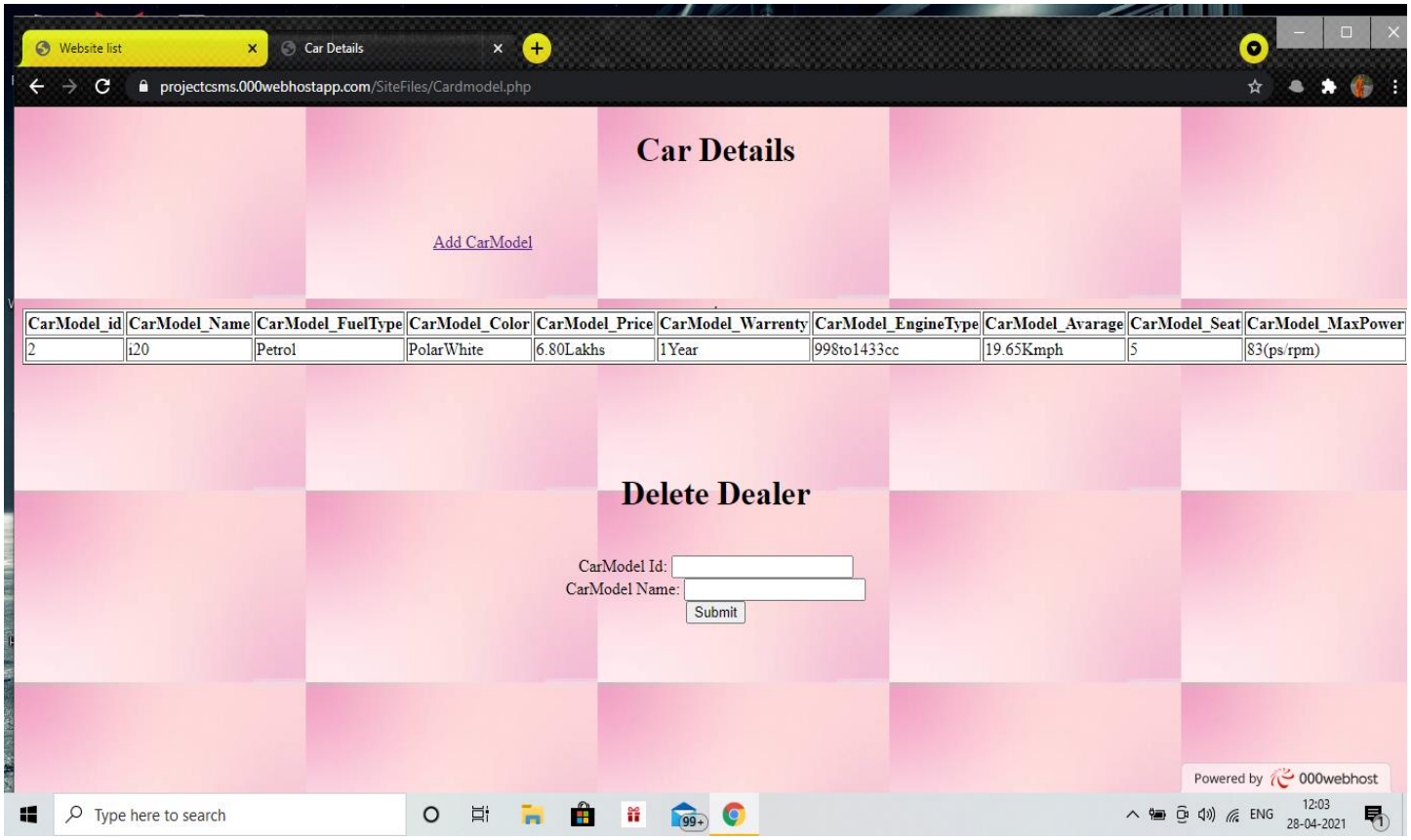


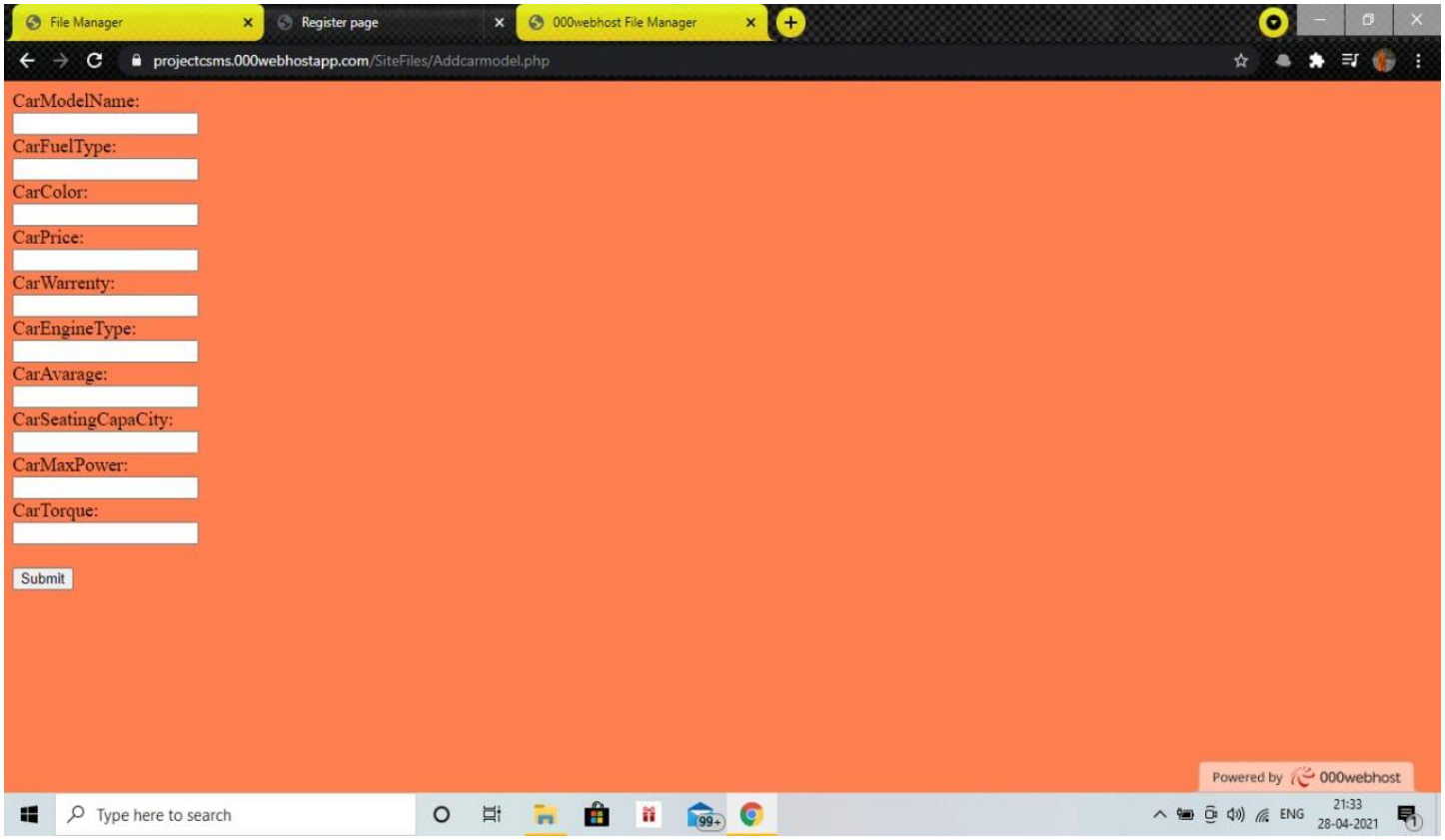


Description:

First Photo is Use as Login Page For Admin.

Second Photo Is The Main Page Of Admin Panel.

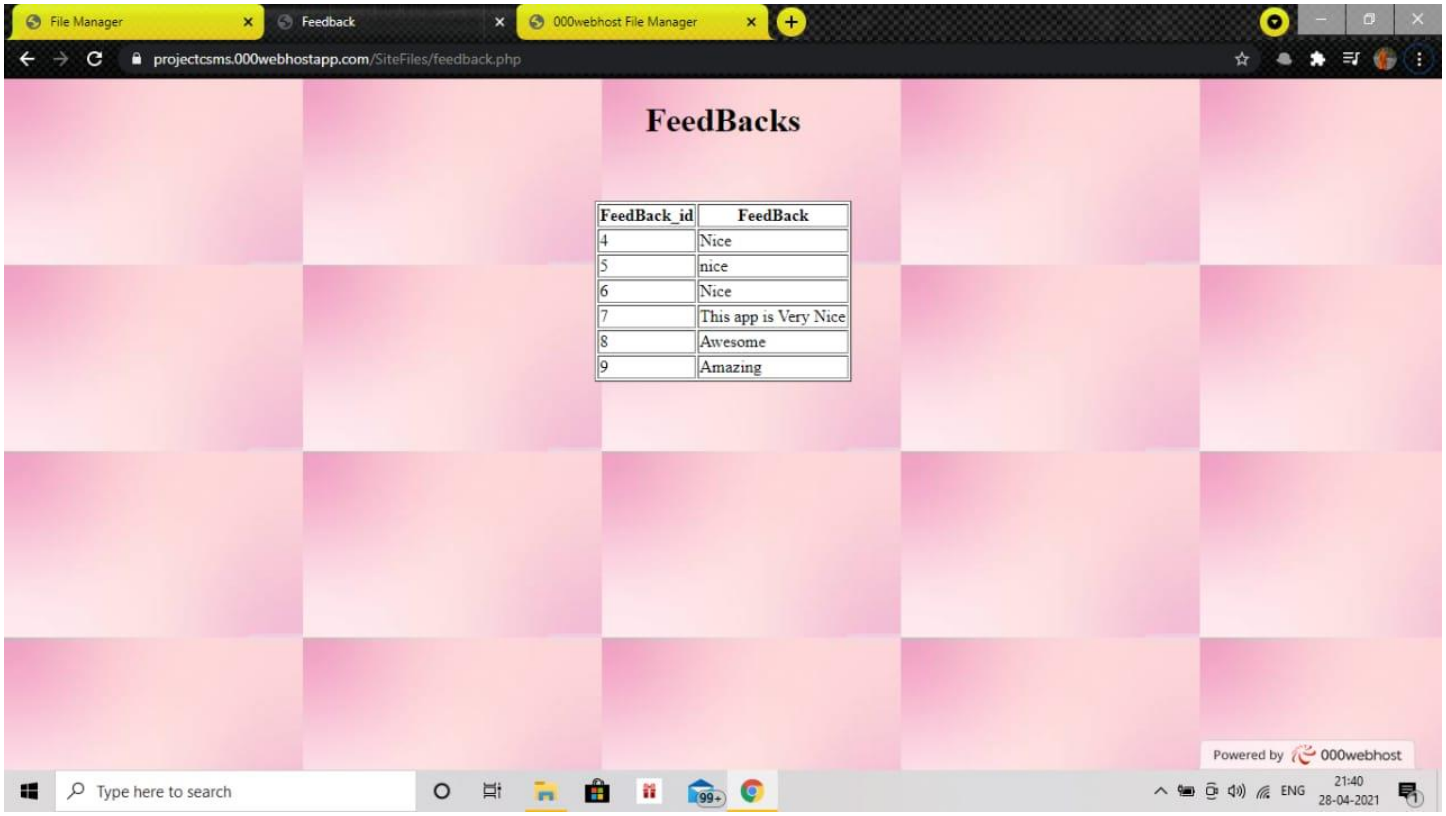




Description:

This Both Photos Use To Add, Check And Delete Any Car Model Details.

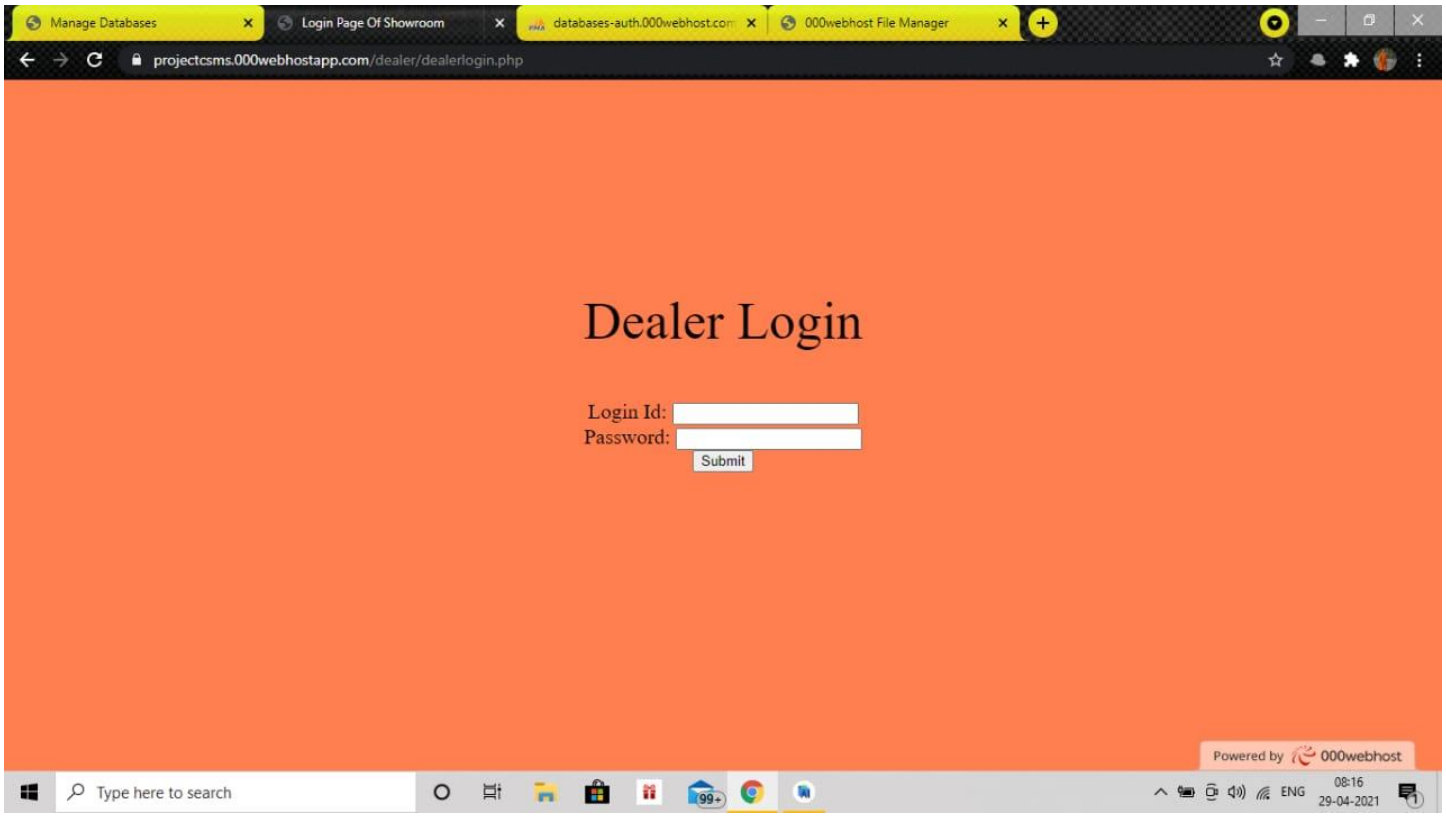
This Same Type Of Pages is use For Dealer, Showroom , Client , Booking Details.

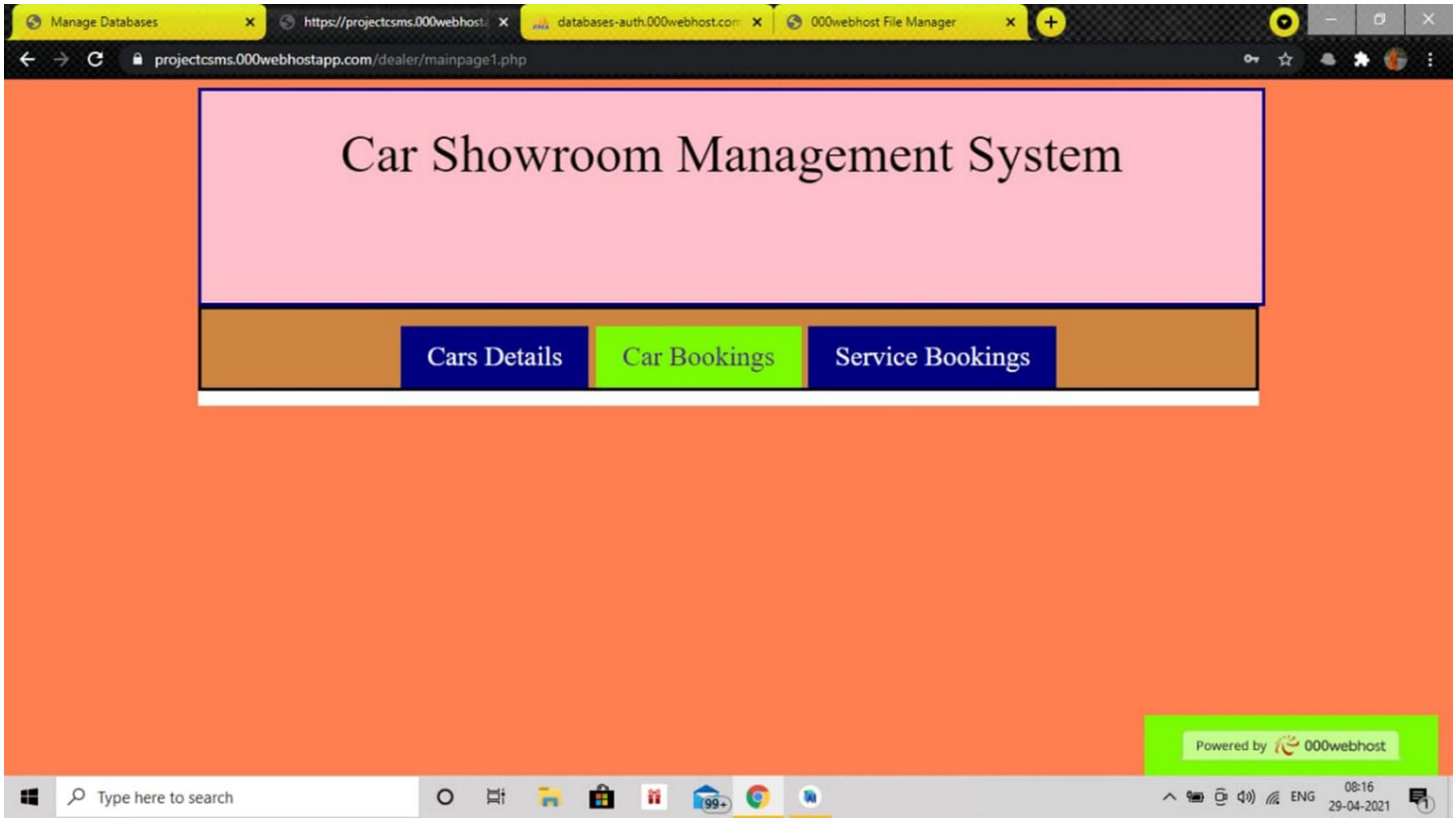


Description:

This Page Show The Feedback Which Given By Clients.

Dealer Panel:





Description:

First Photo Is The Login Screen Of Dealer.

Second Photo Is the Main Screen Of Dealer.

Three Option Is Given To Dealer For Check Car Details , Car Booking And Service Booking.

7. Bibliography:

- Database Management System, Bharat V. Chawda
- Advance Management System, Bharat V. Chawda
- Fundamental of software engineering, Rajib mall
- Advance Data base Management System
- Mobile computing and development, J. B. Patel
- Advance java programming

Website:

www.computerscienceknowledge.com

Android App Development Fundamentals for Beginners ...

Android Tutorial - Tutorialspoint

Android Connect MySQL Database Programmatically ...

Here, we are very Thankful and feel glad that our project report on "Car Showroom Management System" is fully guided under our respective guide Mr. Jiten P. Parmar. (I/C head dept.) and his supportive and helpful nature. This project report is finalized and approved by honourable Mr. Jiten Parmar (I/C head dept.)