DRIVEIO

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Introduction

The project we worked on is called ‘**Driveio’**. The main goal of our project was to make the transportation system easier for our users. The main users of our mobile application are car owners, drivers and the people who need a vehicle in terms of emergency. A car owner can rent his car to someone in need. A customer can borrow a car for some hours to days for his personal uses. Besides, someone can also hire a driver for few hours to drive their car.

Features of DRIVEIO

01

Customer’s Profile

02

Driver’s Profile

03

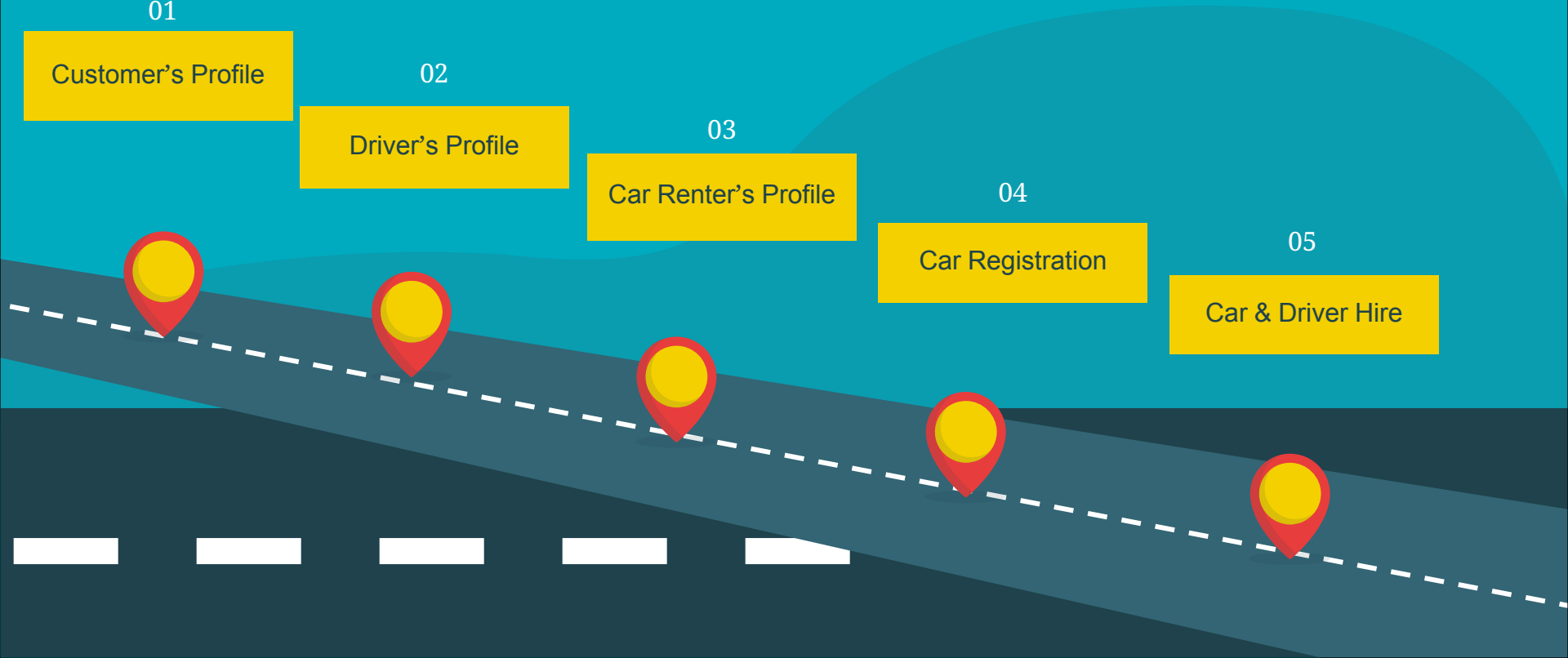
Car Renter’s Profile

04

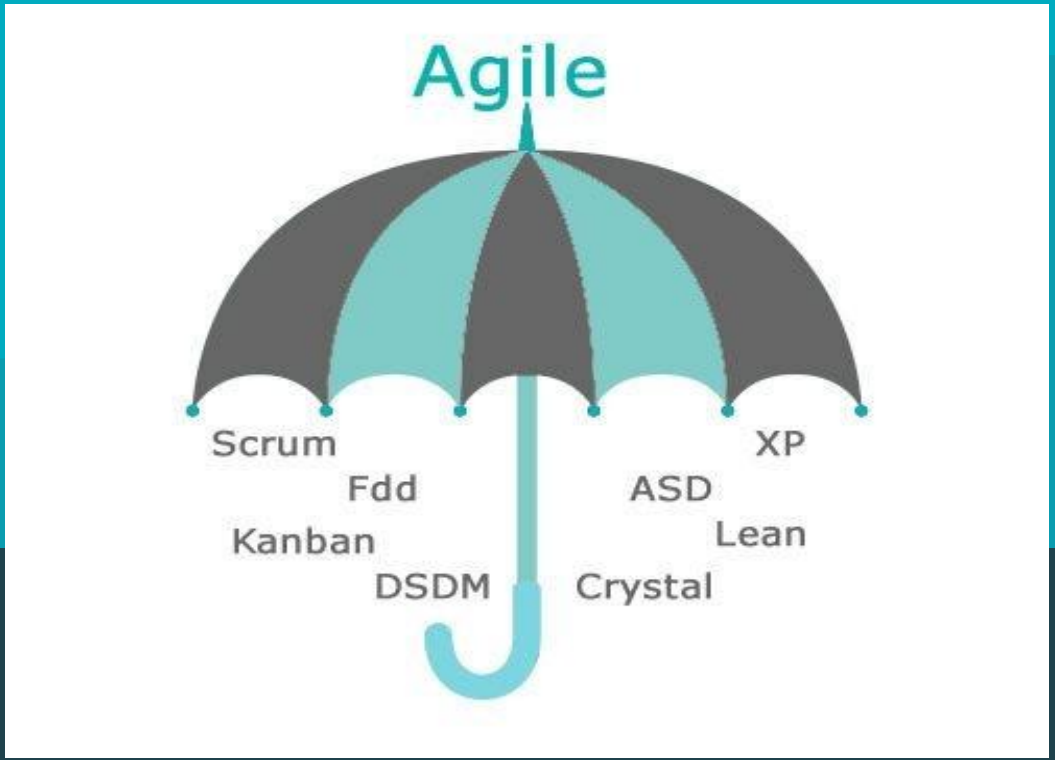
Car Registration

05

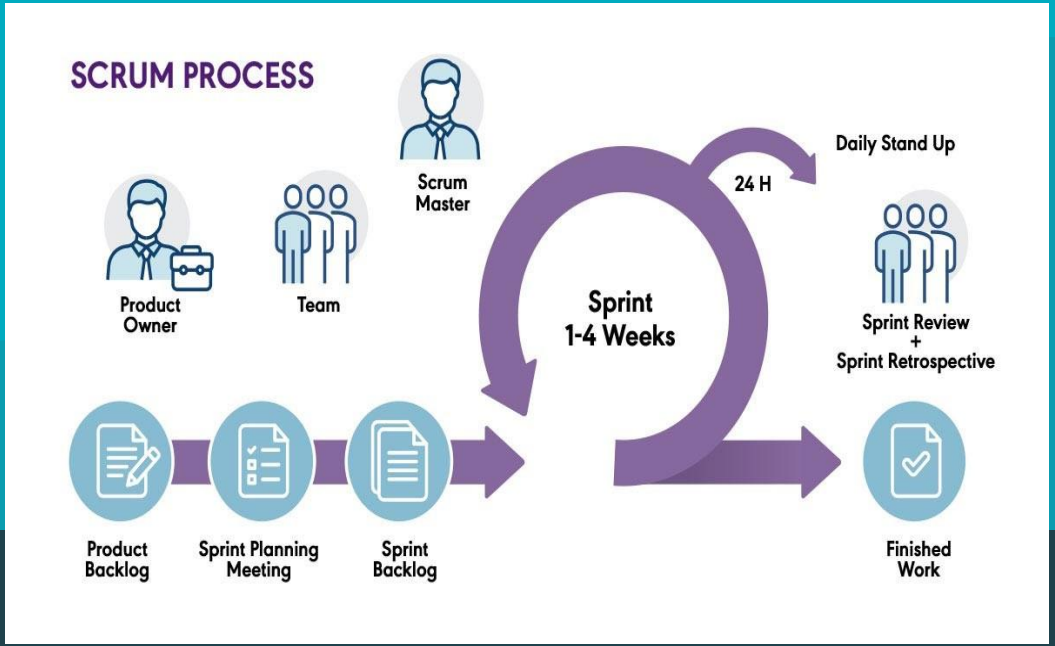
Car & Driver Hire



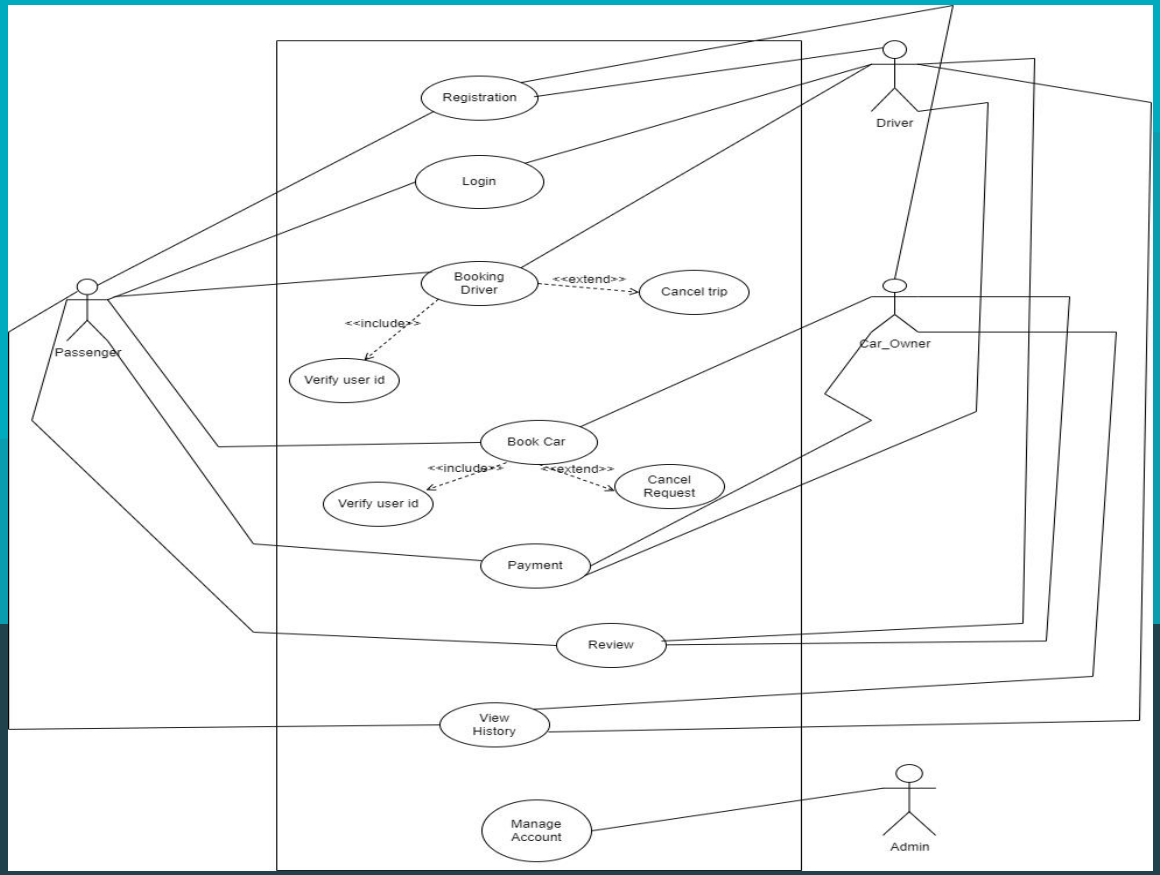
Process Model



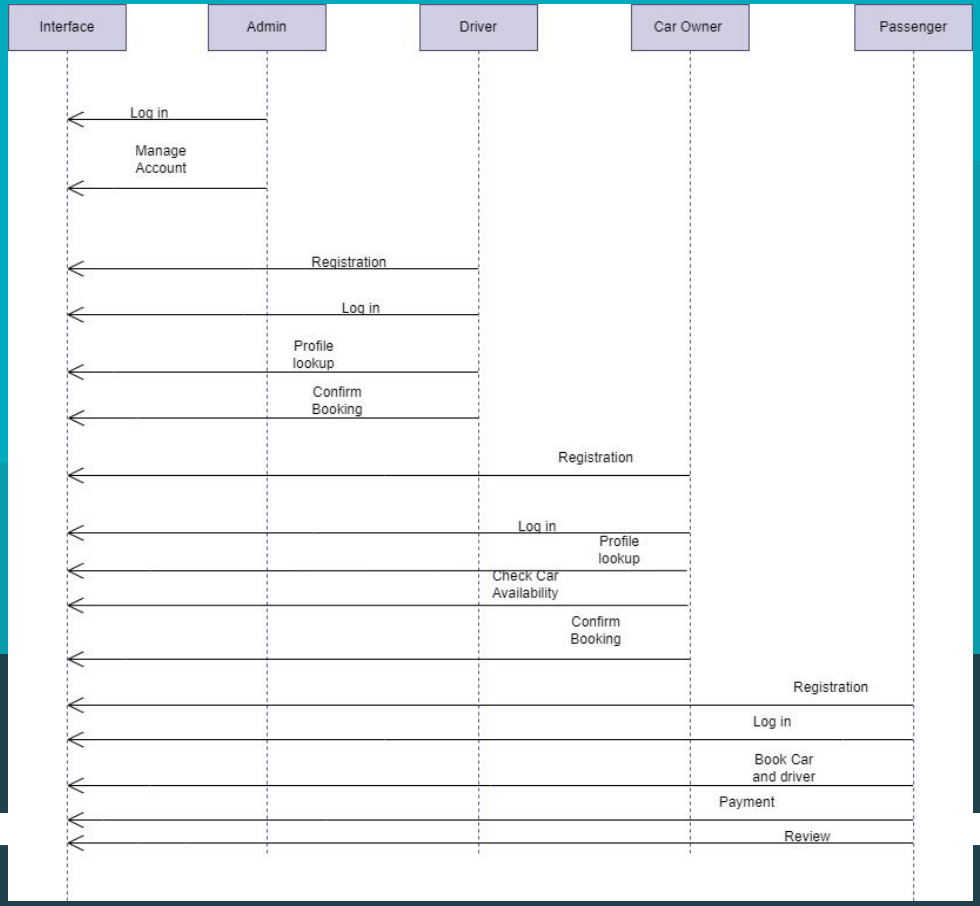
Process Model



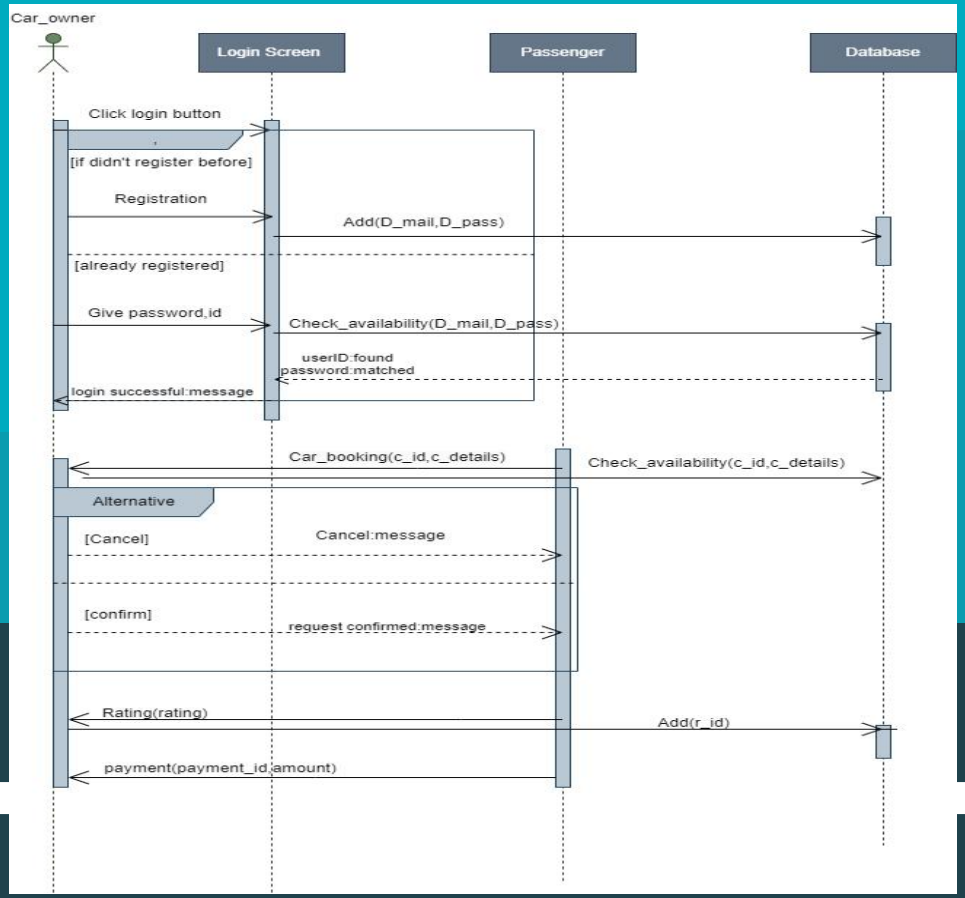
Use Case Diagram



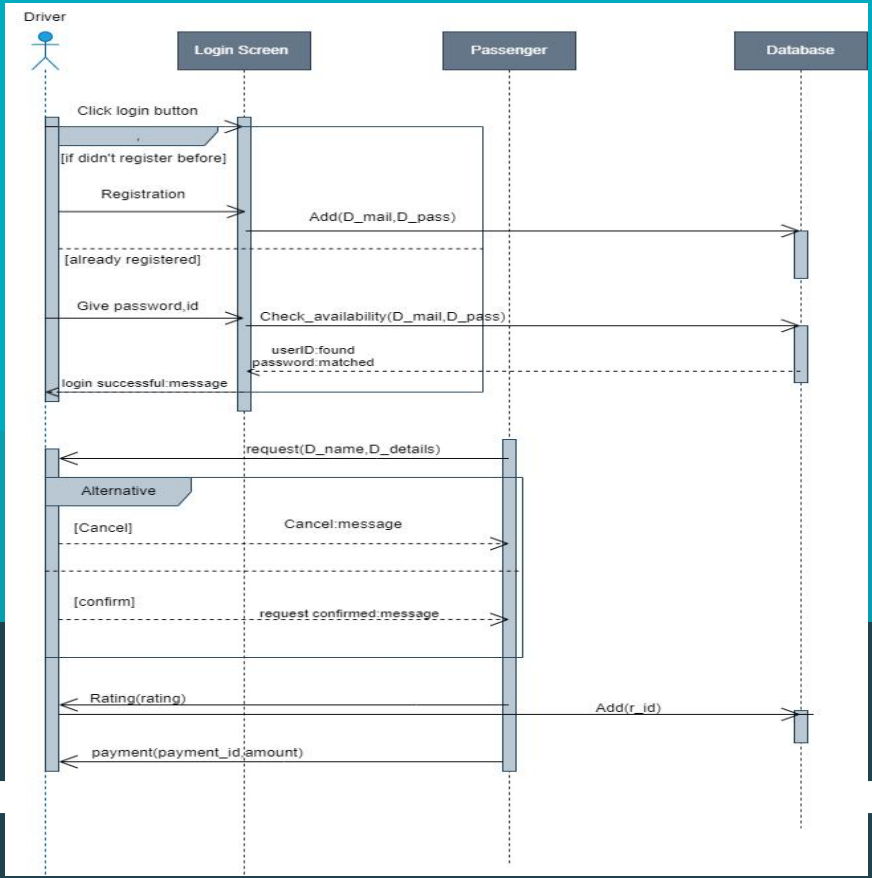
Sequence Diagram



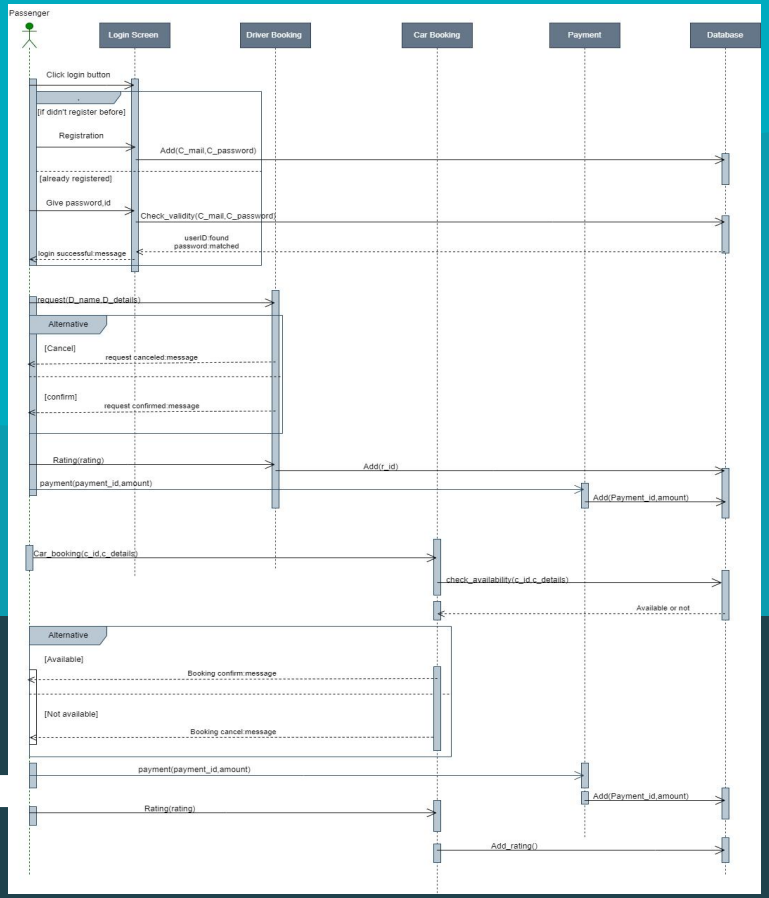
Sequence Diagram



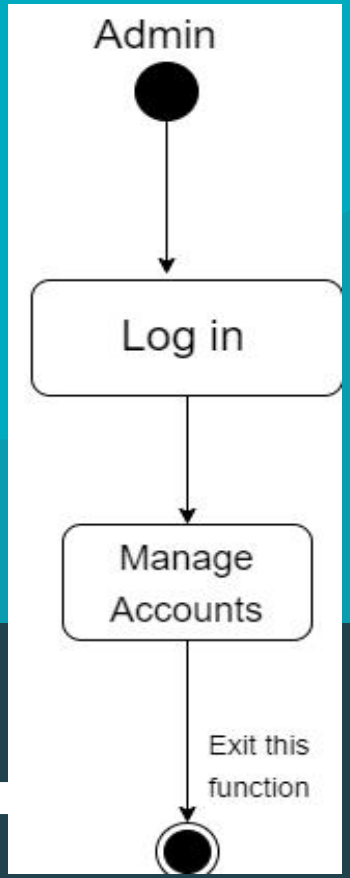
Sequence Diagram



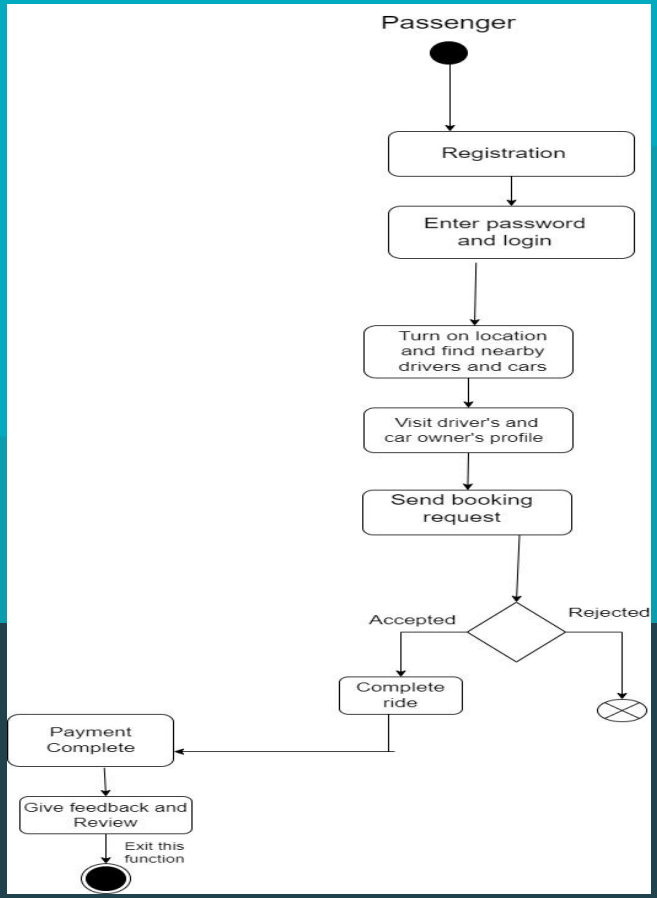
Sequence Diagram



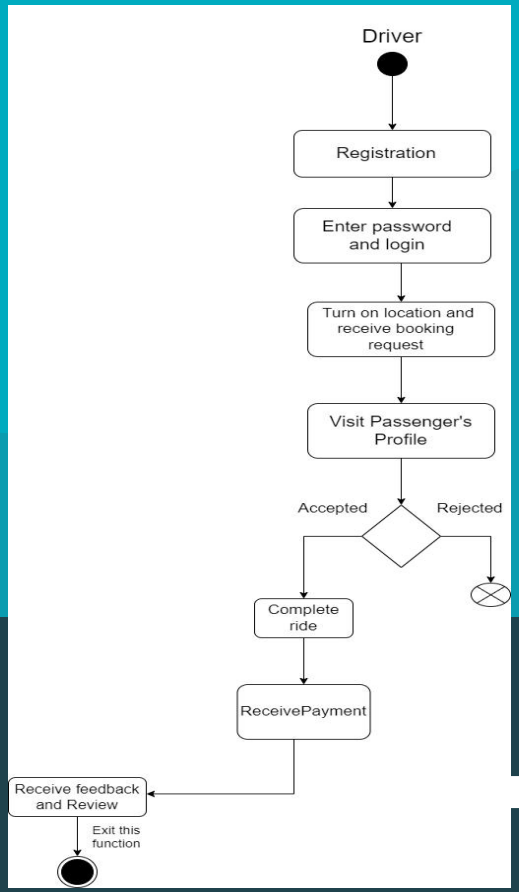
Activity Diagram



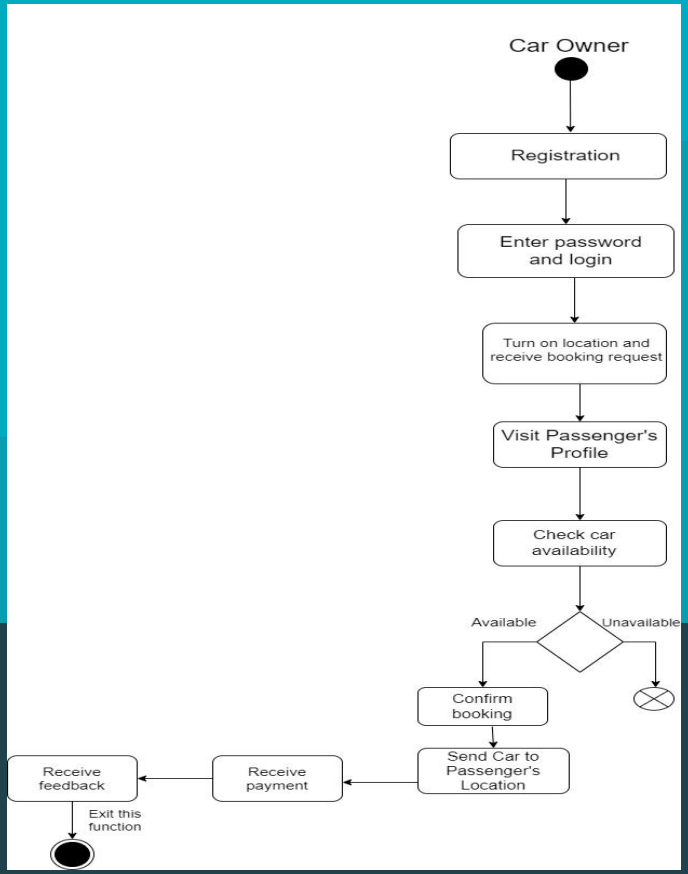
Activity Diagram



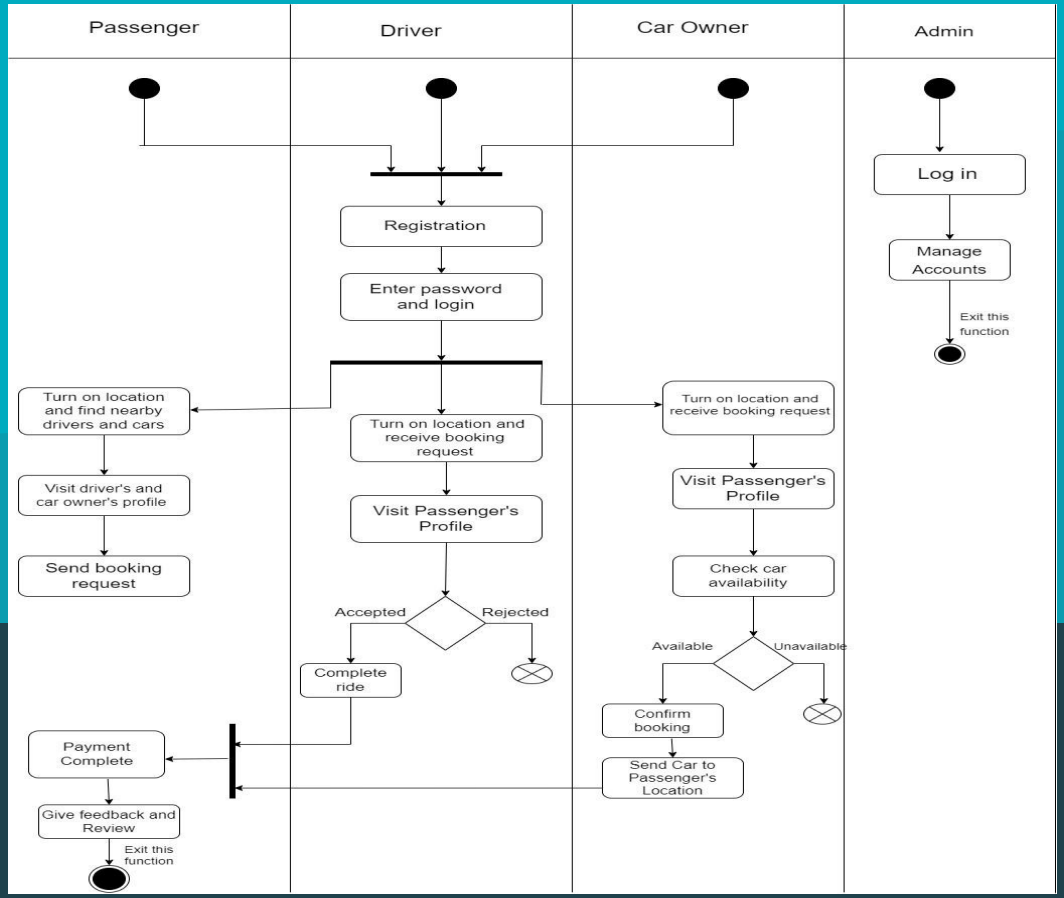
Activity Diagram



Activity Diagram

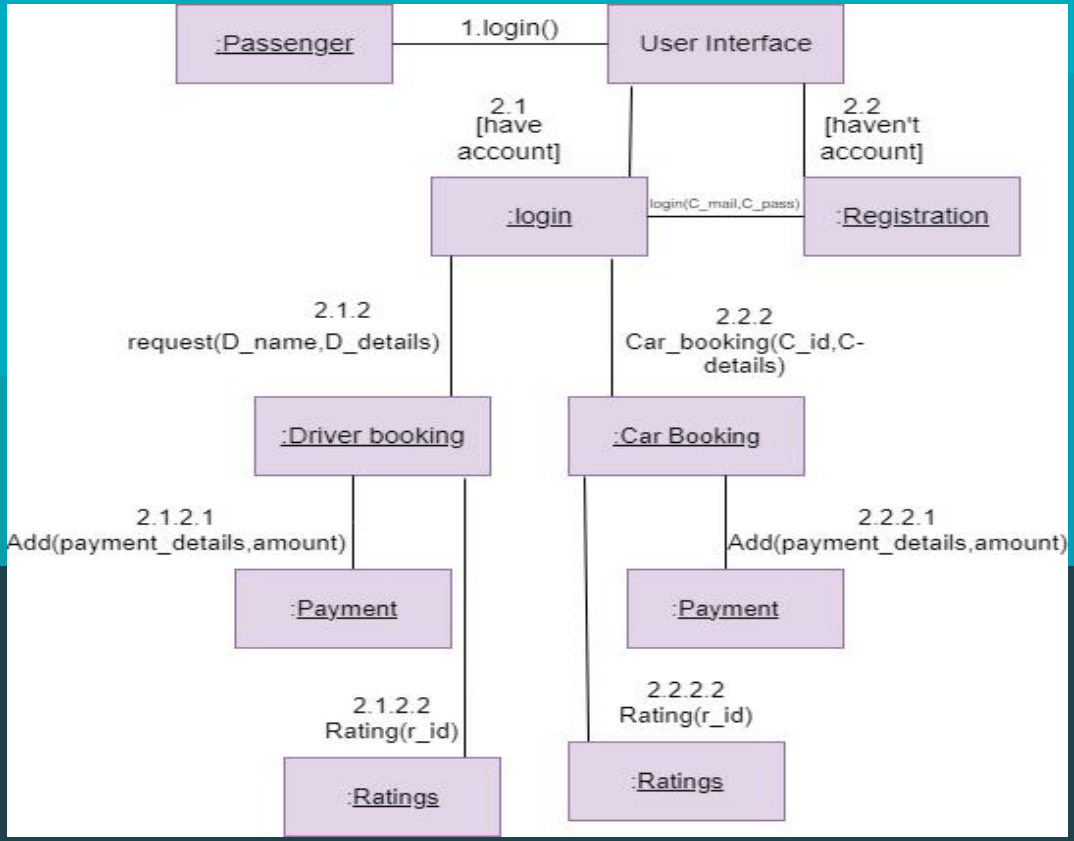


Swim Lane Diagram



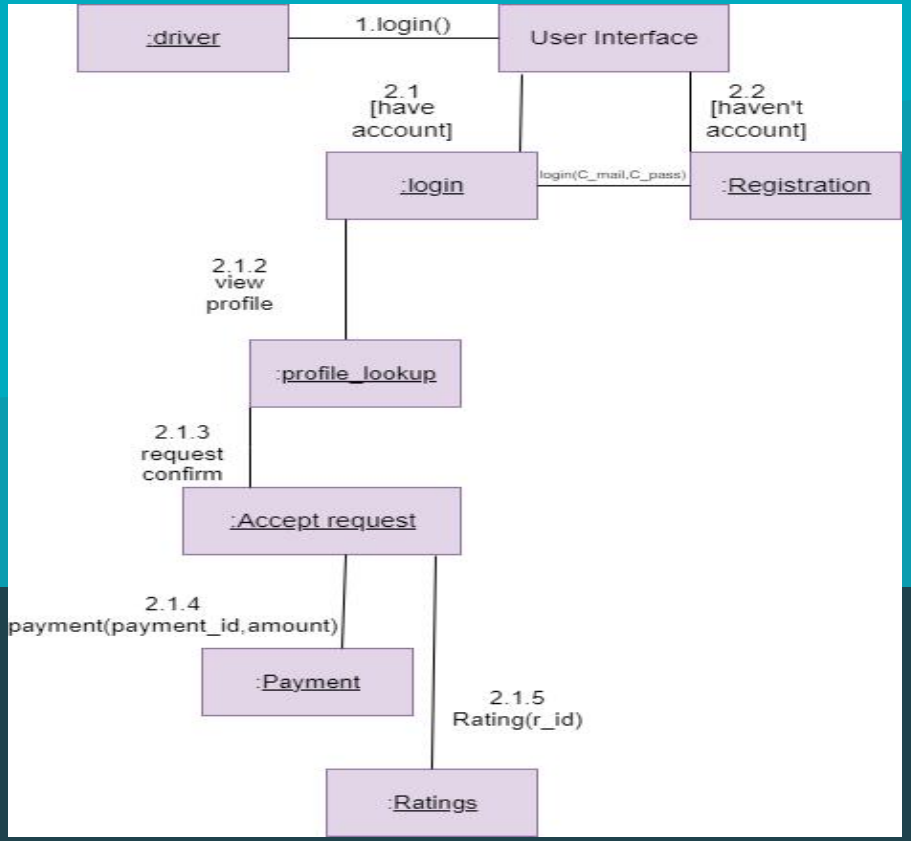
Collaboration Diagram

For passengers:



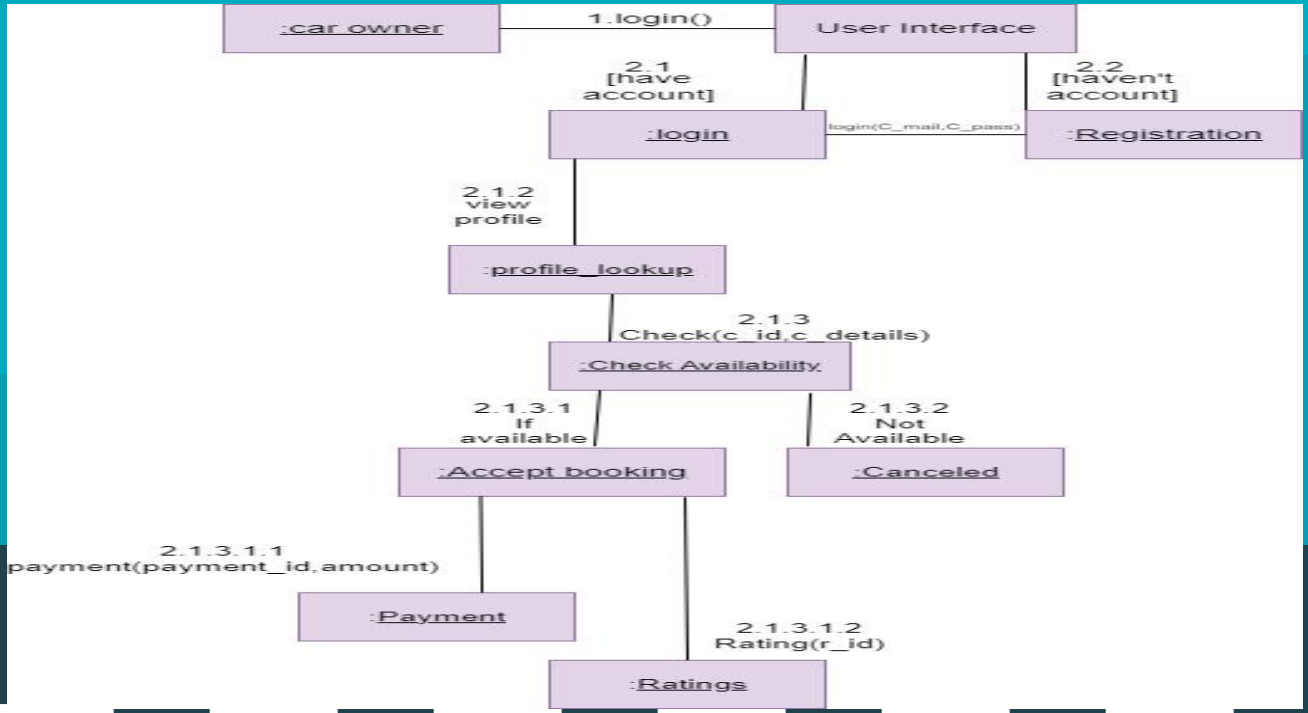
Collaboration Diagram

For drivers:



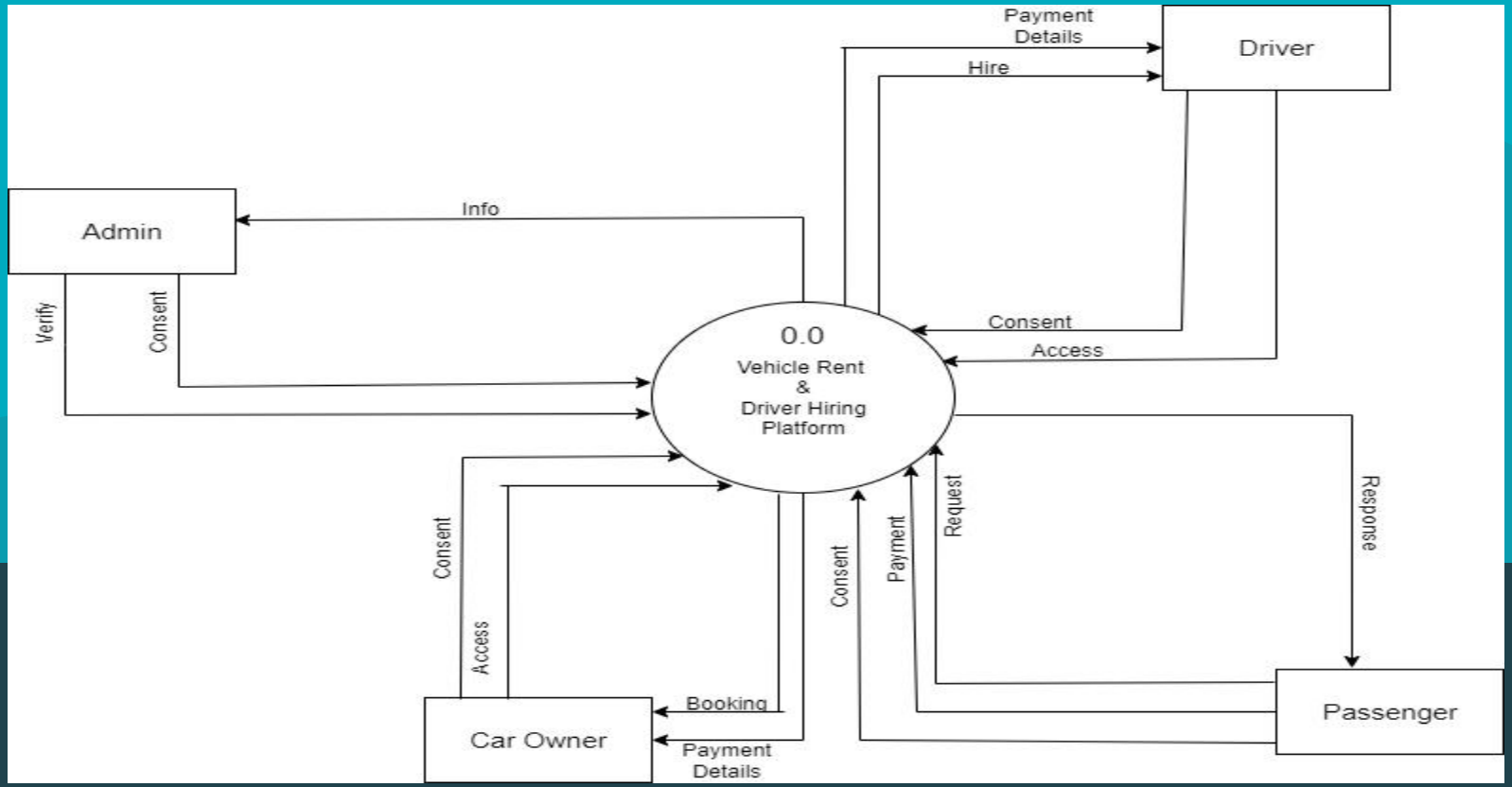
Collaboration Diagram

For car owners:



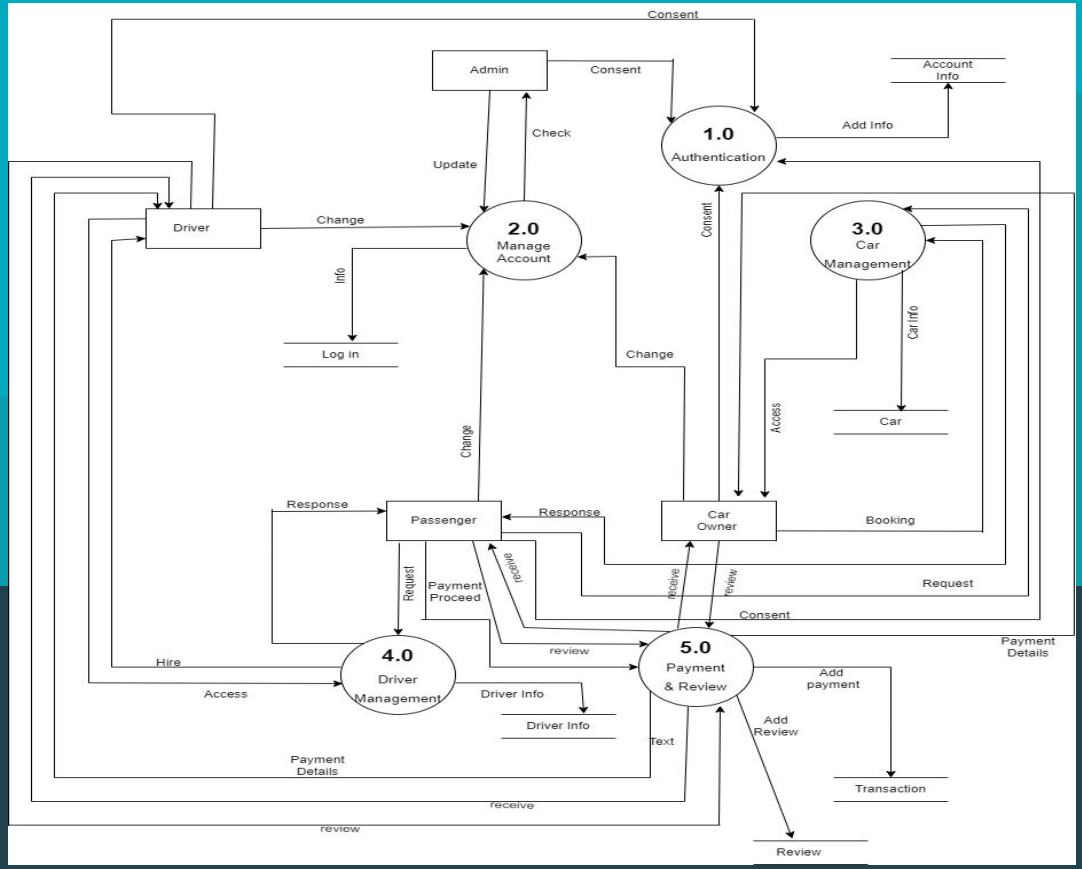
Data Flow Diagram

Level 0 context diagram:



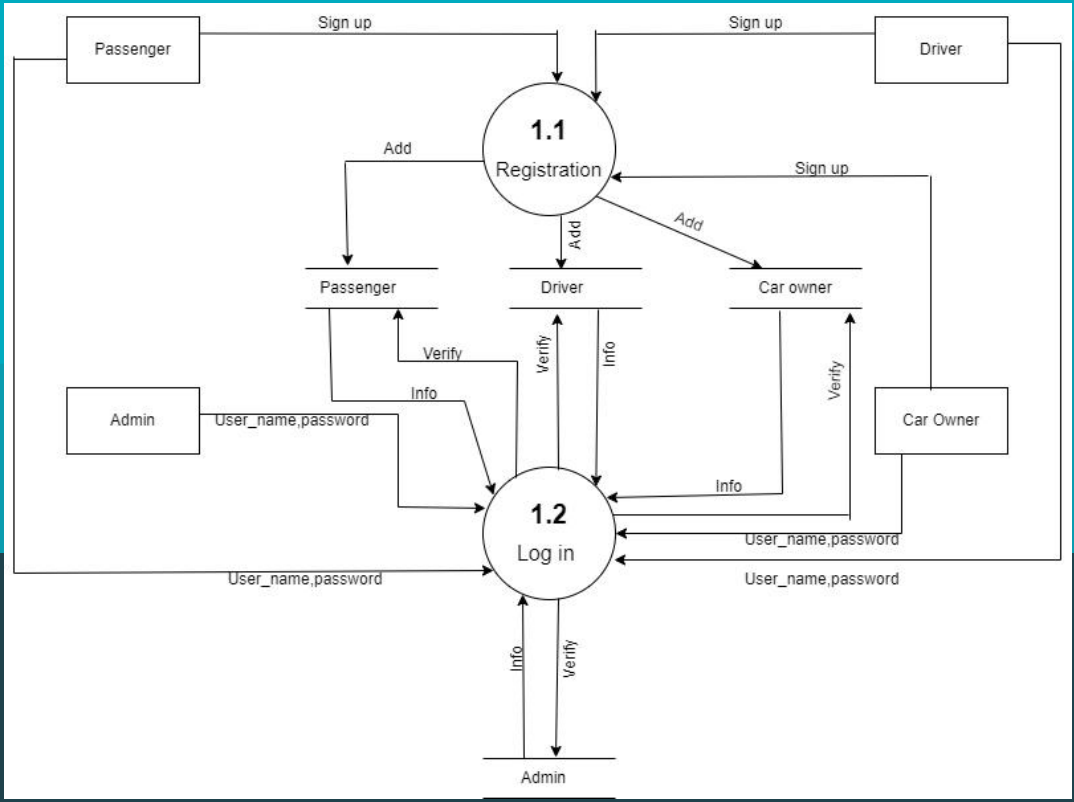
Data Flow Diagram

Level 0 construction diagram:



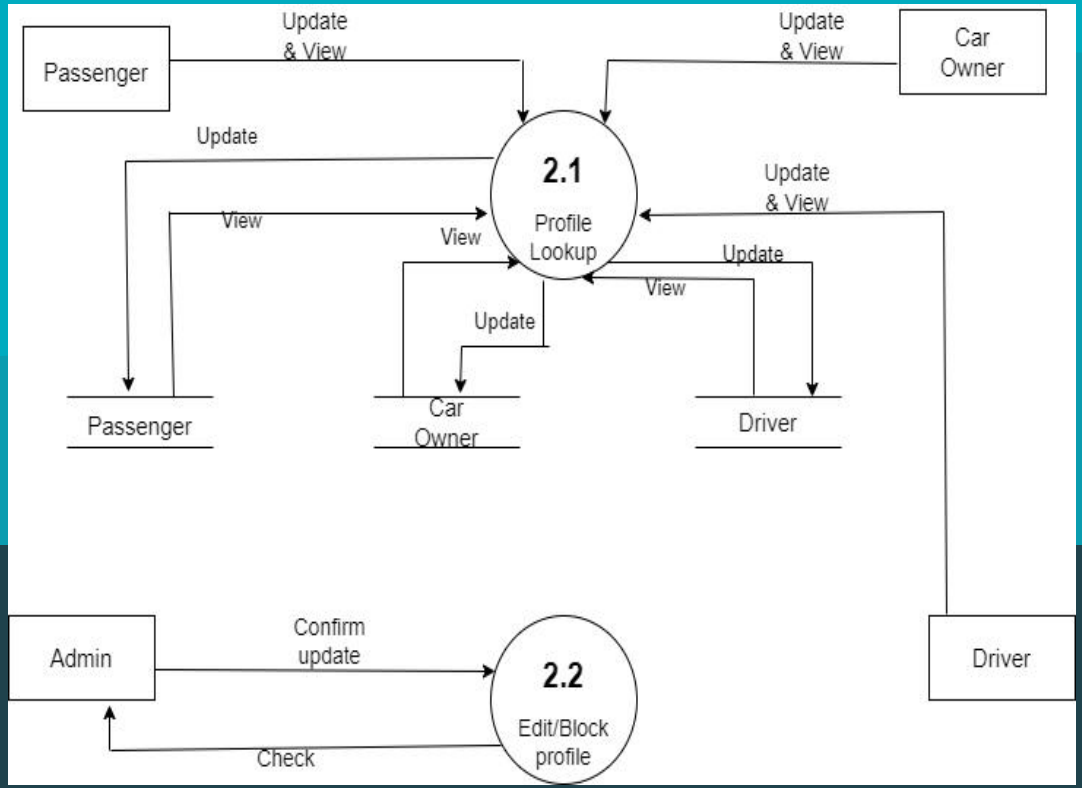
Data Flow Diagram

Level 1-1 diagram:



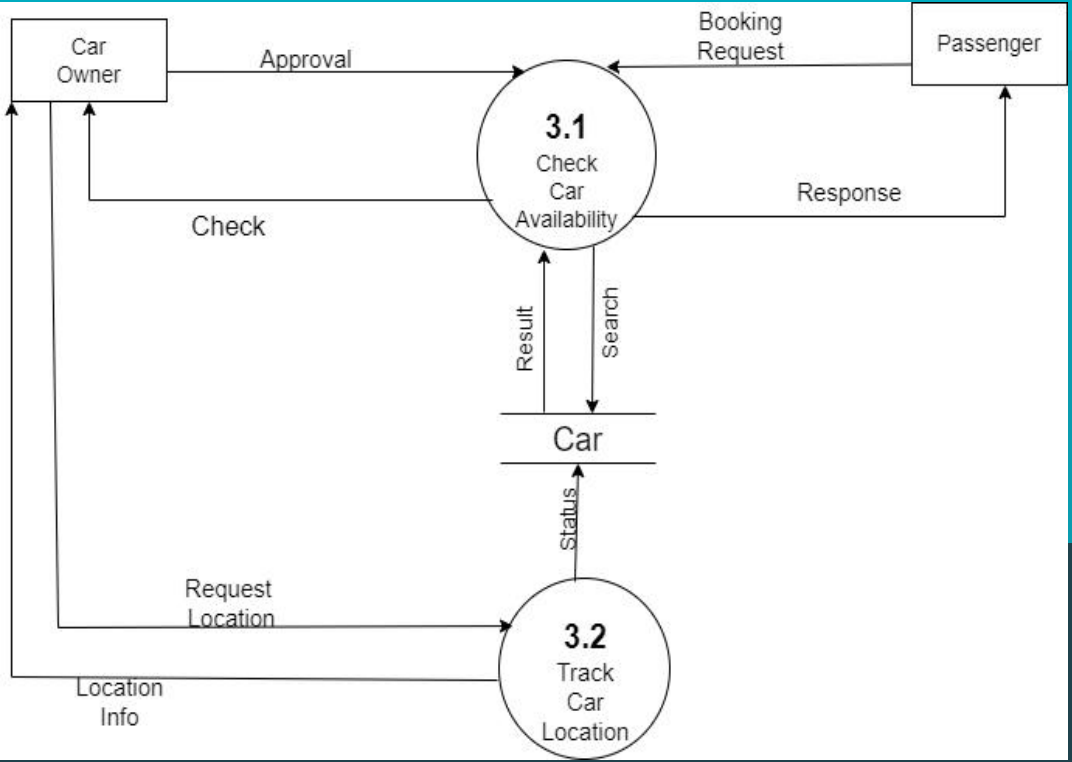
Data Flow Diagram

Level 1-2 diagram:



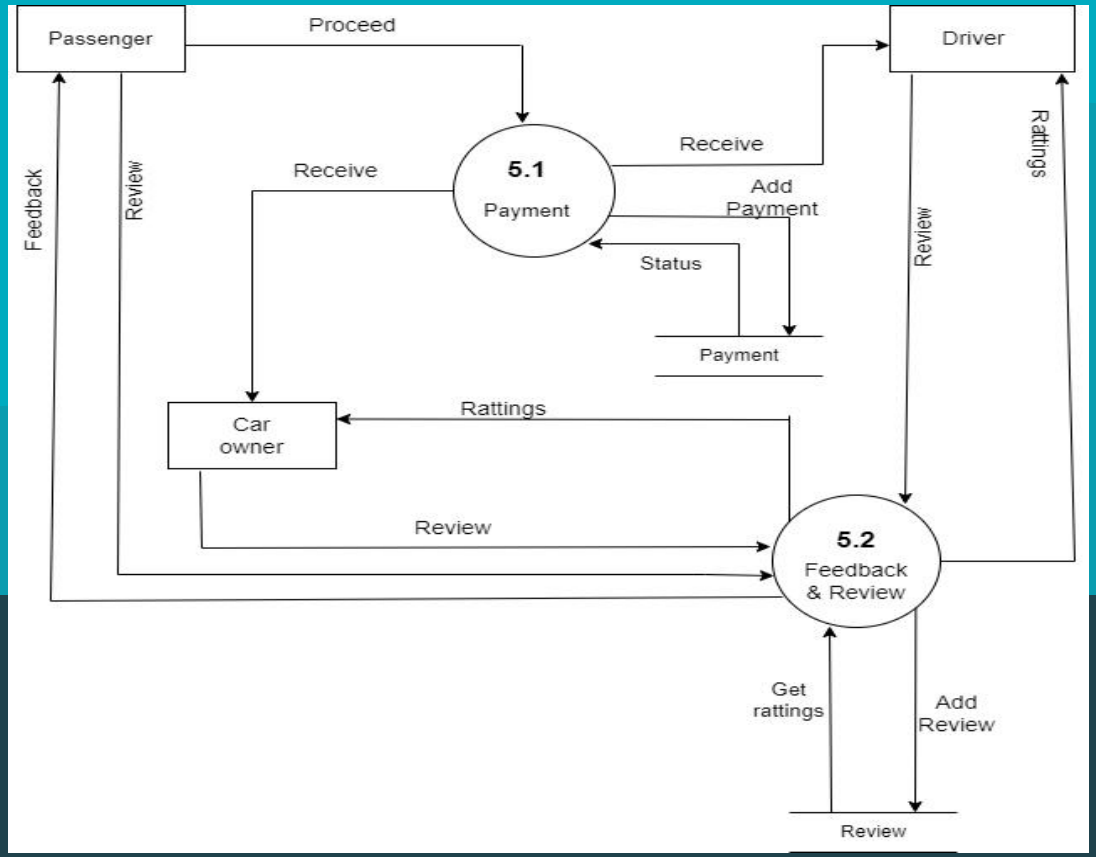
Data Flow Diagram

Level 1-3 diagram:



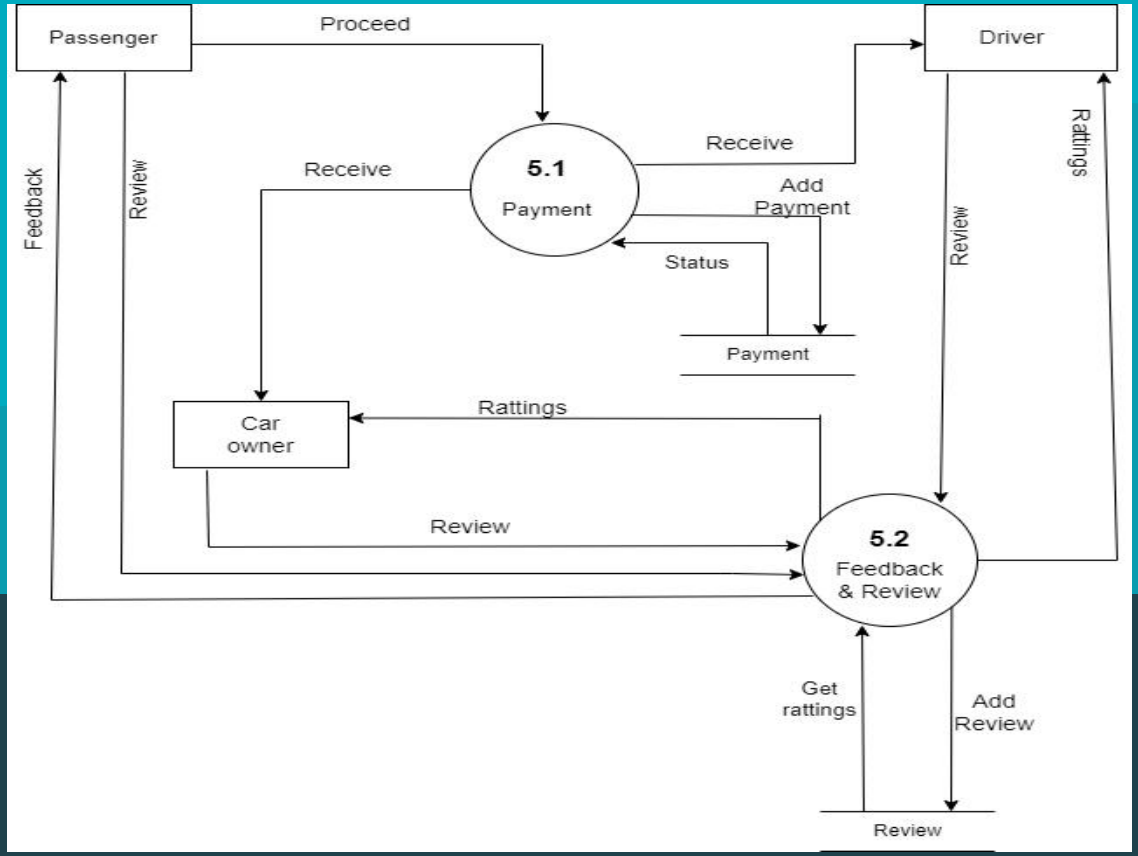
Data Flow Diagram

Level 1-4 diagram:

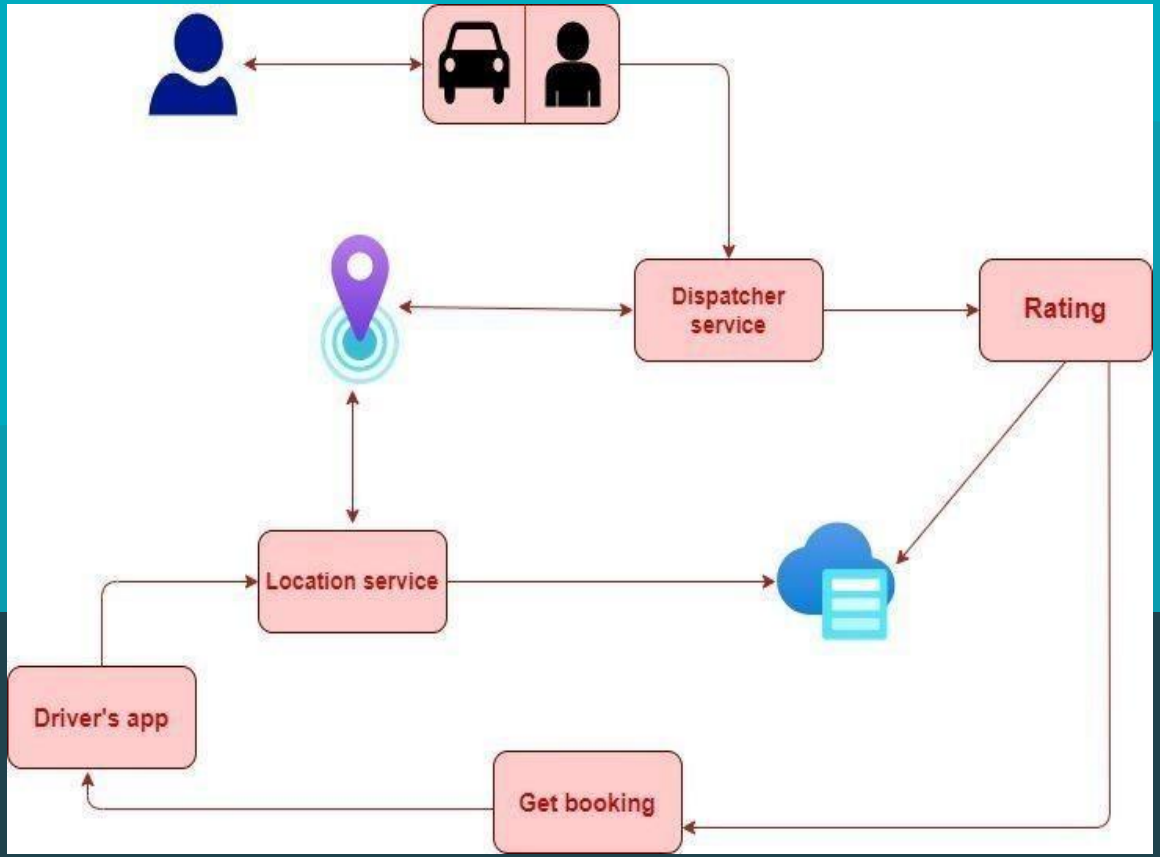


Data Flow Diagram

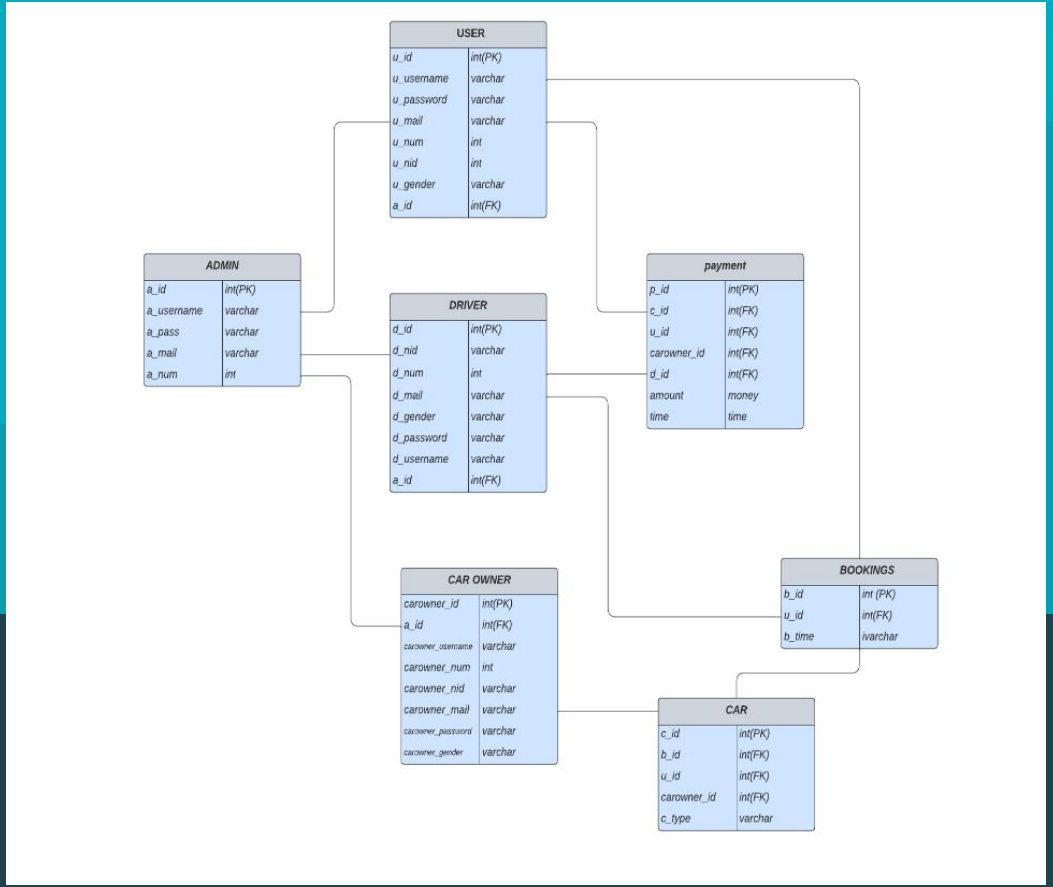
Level 1-5 diagram:



Architecture Flow Diagram



Schema Diagram



Normalization

Admin Table:

a_id	a_username	a_pass	a_mail	a_num
1	prome	###	promemahazabin@gmail.com	01789312356
2	naisha	###	naisha@gmail.com	01789312356

Here, we can see the admin table and it satisfies all the conditions.

2NF: A relation is in 2NF if it is satisfied the following conditions.

- It should be in the First Normal form
- And, it should not have Partial Dependency
- So, all non-key attributes are fully functional dependent on primary key.

User Table:

u_id	a_id	u_username	u_password	u_mail	u_gender	u_nid
1	1	sharika	###	sharika@gmail.com	female	####
2	2	fariha	###	fariha@gmail.com	female	####

Normalization

Here, we can see a_id is not dependent on u_id. U_username, u_password, u_mail, u_gender, u_nid is dependent on u_id. This violates the rules of 2NF.

User_Admin Table:

u_id	a_id
101	1

User_info Table:

u_username	u_password	u_mail	u_gender	u_nid
sharika	###	sharika@gmail.com	female	####
fariha	###	fariha@gmail.com	female	####

Car_Owner Table:

Carowner_id	a_id	carowner_username	carowner_password	Carowner_mail	carowner_gender	carowner_nid
1	1	sharika	###	sharika@gmail.com	female	####
2	2	fariha	###	fariha@gmail.com	female	####

Here, we can see a_id is not dependent on Carowner_id. Carowner_username, carowner_password, carowner_mail, carowner_gender, carowner_nid is dependent on carowner_id. This violates the rules of 2NF.

Normalization

CarOwner_Admin Table:

carowner_id	a_id
1001	1
1002	2

CarOwner_Info Table:

carowner_username	carowner_password	Carowner_mail	carowner_gender	carowner_nid
sharika	###	sharika@gmail.com	female	####
fariha	###	fariha@gmail.com	female	####

Driver Table:

d_id	a_id	d_username	d_password	d_mail	d_gender	d_nid
201	1	sharika	###	sharika@gmail.com	female	####
202	2	fariha	###	fariha@gmail.com	female	####

Here, we can see a_id is not dependent on d_id. d_username, d_password, d_mail, d_gender, d_nid is dependent on d_id. This violates the rules of 2NF.

Driver_Admin Table:

d_id	a_id
201	1
202	2

Normalization

Driver_Info Table:

d_username	d_password	d_mail	d_gender	d_nid
sharika	###	sharika@gmail.com	female	####
fariha	###	fariha@gmail.com	female	####

Bookings Table:

b_id	u_id	b_time
501	1	11:08 pm
502	1	1:00 am

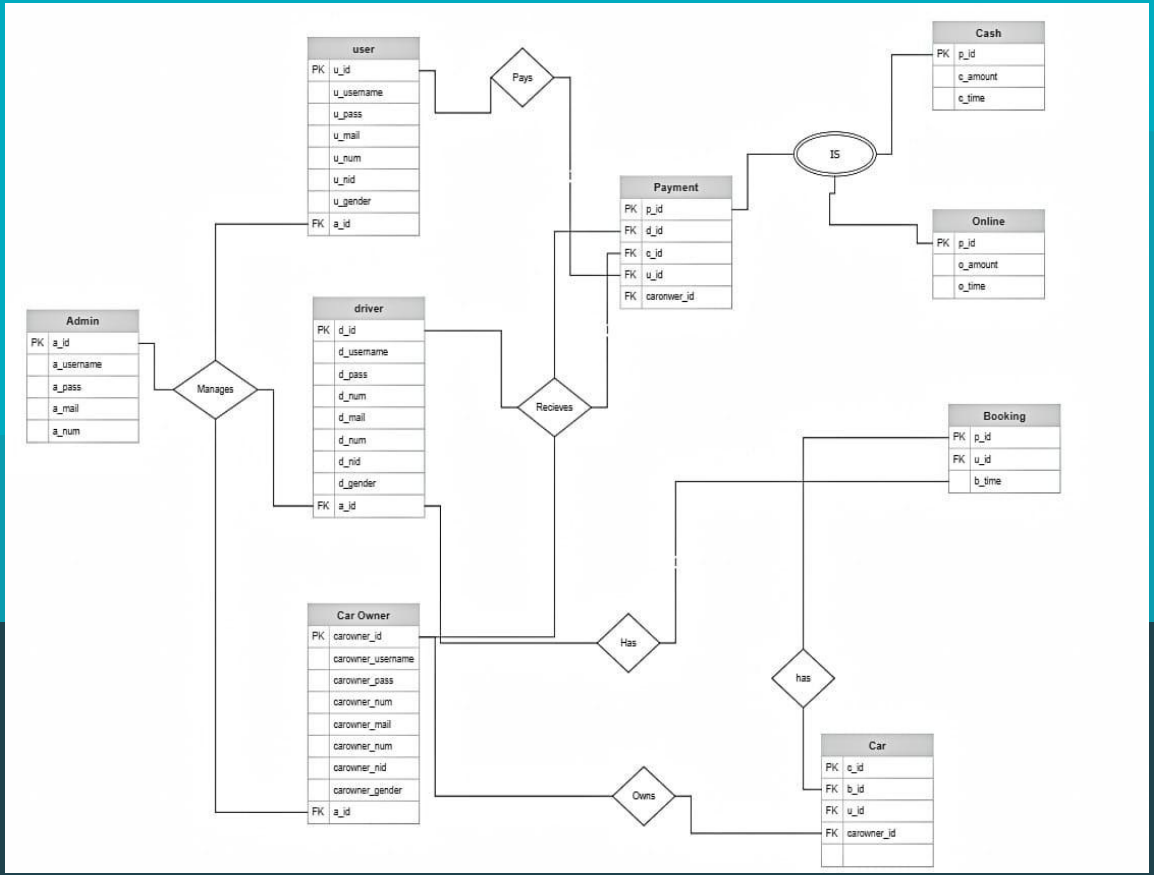
Car Table:

C_id	u_id	carowner_id	b_id	c_type
301	101	1001	501	luxury
302	102	1002	502	car

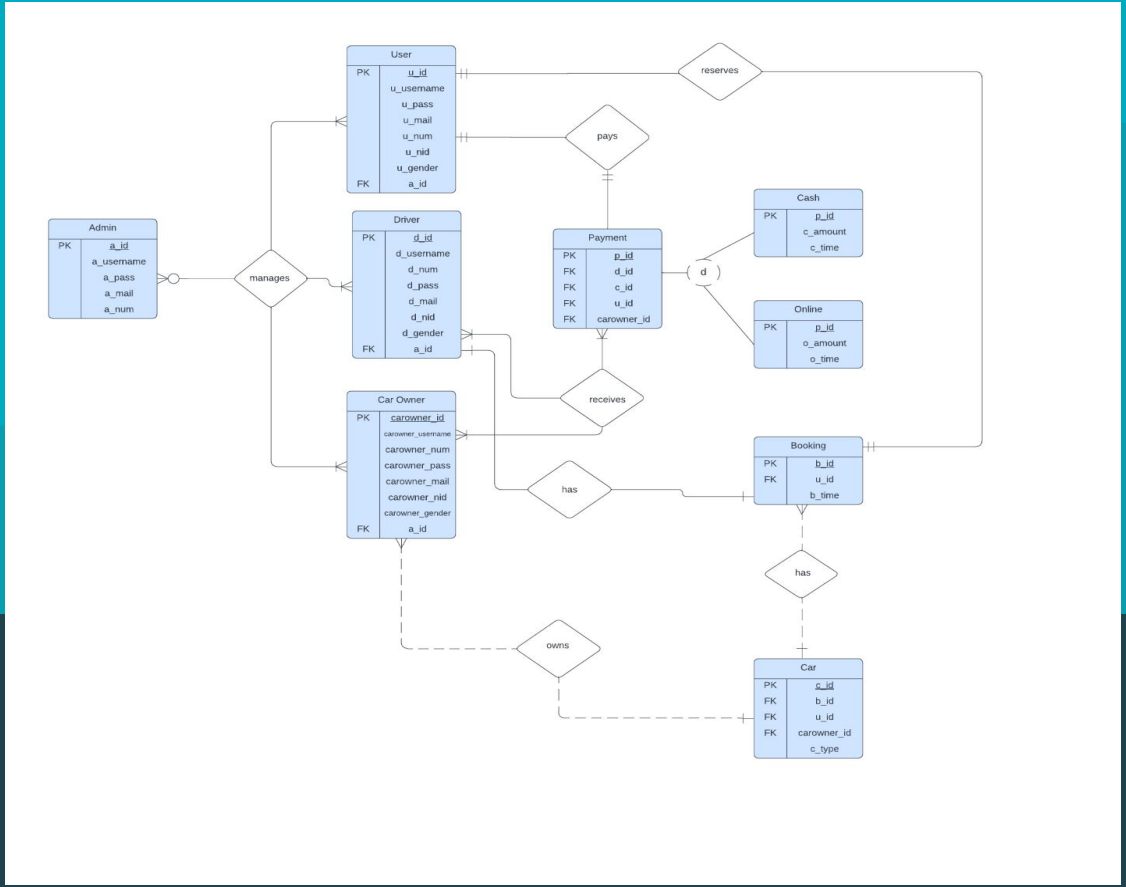
Payment Table:

p_id	u_id	carowner_id	c_id	d_id	p_type
1	101	1001	301	201	online
1	102	1002	302	202	cash

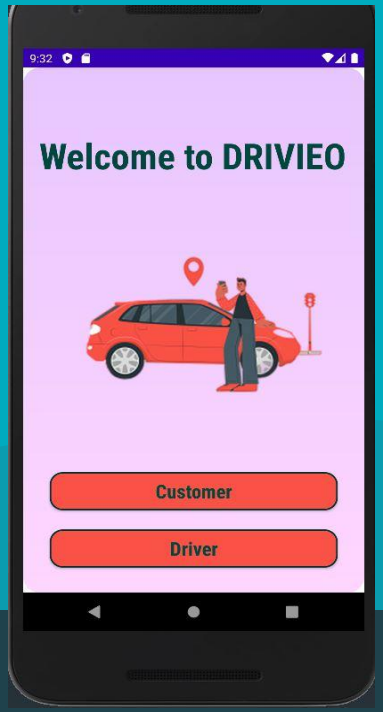
Normalization

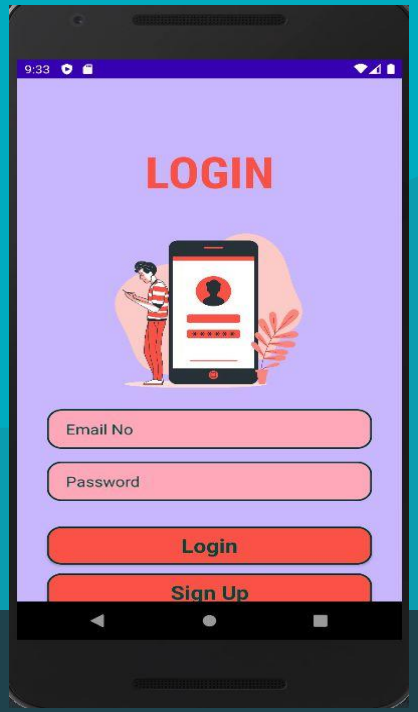


ERD


User
PK u_id
u_username
u_pass
u_mail
u_num
u_nid
u_gender
FK a_id
reserves
pays
Admin
PK a_id
a_username
a_pass
a_mail
a_num
manages
Driver
PK d_id
d_username
d_num
d_pass
d_mail
d_nid
d_gender
FK a_id
Payment
PK p_id
FK d_id
FK c_id
FK u_id
FK carowner_id
d
Cash
PK p_id
c_amount
c_time
Online
PK p_id
o_amount
o_time
receives
Car Owner
PK carowner_id
carowner_username
carowner_num
carowner_pass
carowner_mail
carowner_nid
carowner_gender
FK a_id
has
Booking
PK b_id
FK u_id
b_time
has
owns
Car
PK c_id
FK b_id
FK u_id
FK carowner_id
c_type

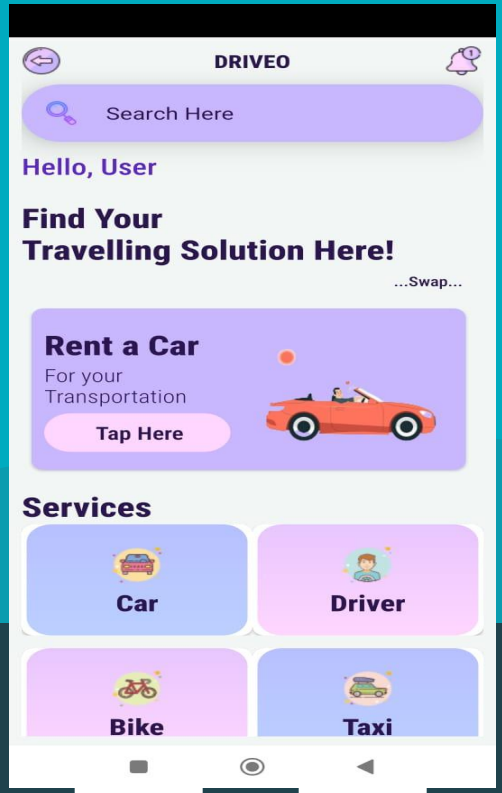
Ui/Ux Design

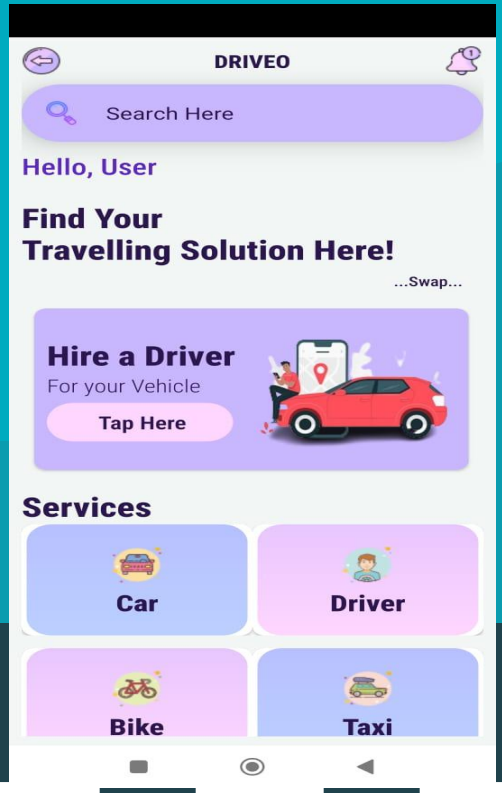

9:32
Welcome to DRIVIEO
Customer
Driver

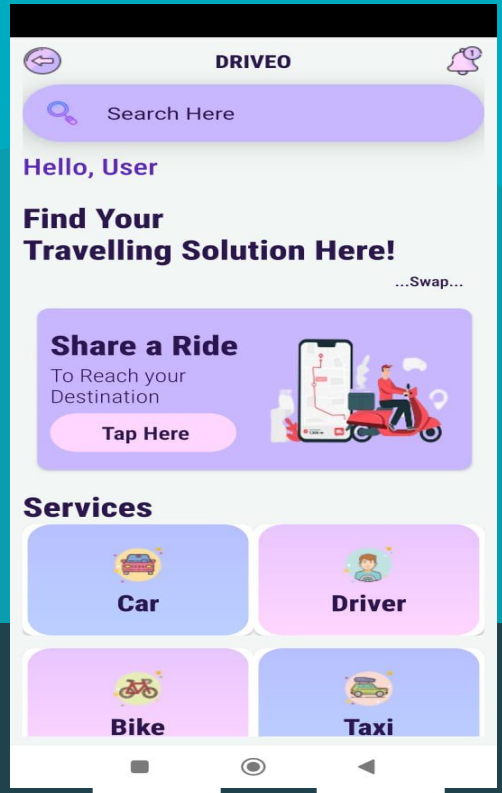

9:33
LOGIN
Email No
Password
Login
Sign Up


SIGNUP
Username
Email
Mobile No
Driver License No
Password
SignUp
Return to Home Page

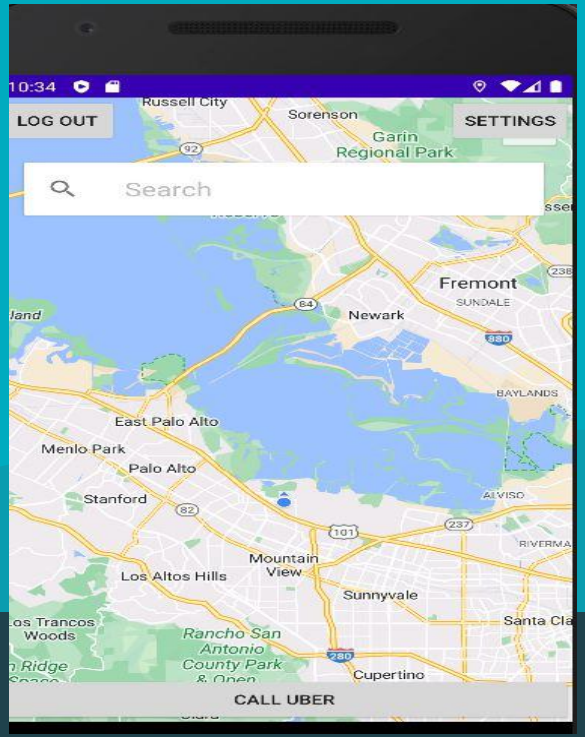
Ui/Ux Design


DRIVEO
Search Here
Hello, User
Find Your
Travelling Solution Here!
...Swap...
Rent a Car
For your
Transportation
Tap Here
Services
Car
Driver
Bike
Taxi


DRIVEO
Search Here
Hello, User
Find Your
Travelling Solution Here!
...Swap...
Hire a Driver
For your Vehicle
Tap Here
Services
Car
Driver
Bike
Taxi


DRIVEO
Search Here
Hello, User
Find Your
Travelling Solution Here!
...Swap...
Share a Ride
To Reach your
Destination
Tap Here
Services
Car
Driver
Bike
Taxi

Ui/Ux Design


10:34
LOG OUT
SETTINGS
Search
Russell City
Sorenson
Garin Regional Park
Fremont
SUNDALE
Newark
BAYLANDS
East Palo Alto
Menlo Park
Palo Alto
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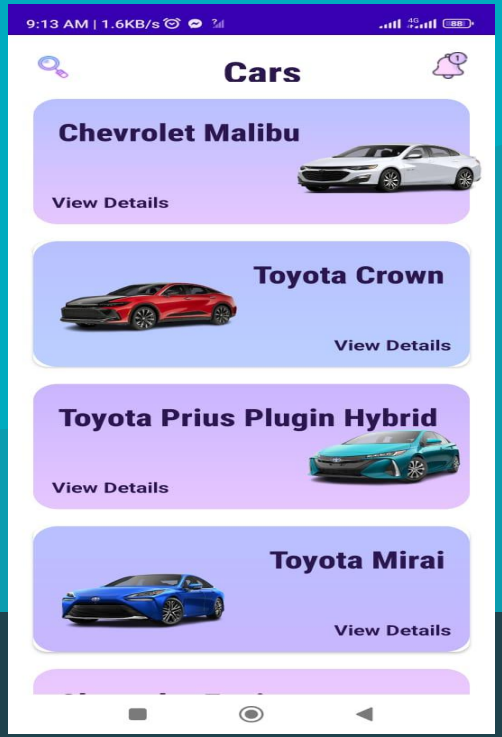
ALVISO
Mountain View
Los Altos Hills
Sunnyvale
Los Trancos Woods
Rancho San Antonio County Park
Cupertino
CALL UBER


9:13 AM | 1.6KB/s
Cars
Chevrolet Malibu
View Details
Toyota Crown
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Toyota Prius Plugin Hybrid
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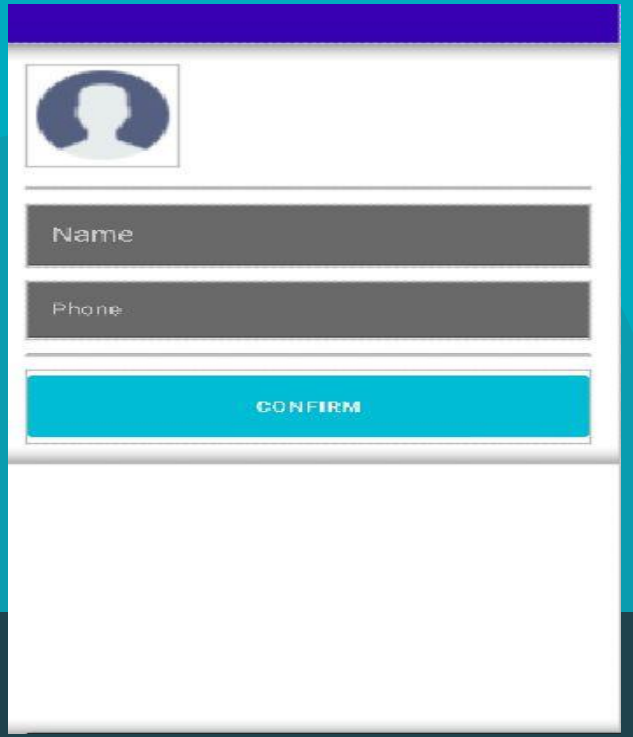
Toyota Mirai
View Details


Name
Phone
CONFIRM

Conclusion:

Our app will make travelling easier. We won't have to worry about transportation. We won't have to worry if our car driver doesn't come. We can simply login to this app and call our desired transportation or driver anytime and anywhere. And not only this, we can also earn some money by registering our cars to the system or by registering as a driver.

Thank you!

Any Question?