A Project Report

on

Online driver hiring android app

Submitted in partial fulfillment of the

requirement for the award of the degree of

BACHELOR OF ENGINEERING IN COMPUTER SCIENCE & ENGINEERING

Under The Supervision of
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Submitted By

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INDIA
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SCHOOL OF COMPUTING SCIENCE AND ENGINEERING GALGOTIAS UNIVERSITY, GREATER NOIDA

CANDIDATE'S DECLARATION

I/We hereby certify that the work which is being presented in the project, entitled " **Online Driver Hiring Android App** " in partial fulfillment of the requirements for the award of the **BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING** submitted in the **School of Computing Science and Engineering** of Galgotias University, Greater Noida, is an original work carried out during the period of JULY-2021 to DECEMBER-2021, under the supervision of **Mr.V. ARUL, Assistant Professor, Department of Computer Science and Engineering** of School of Computing Science and Engineering , Galgotias University, Greater Noida

The matter presented in the project has not been submitted by me/us for the award of any other degree of this or any other places.

19SCSE1180108-AKHIL KUMAR RAJPOOT
19SCSE1010440-VANDANA KUMARI

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Supervisor (Mr.V.Arul, Assistant Professor)

CERTIFICATE

The Final Thesis/Project/ Dissertation Viva-Voce examination of **19SCSE1180108 – AKHIL KUMAR RAJPOOT, 19SCSE1010440 – VANDANA KUMARI** has been held on _____ and his/her work is recommended for the award of **BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING.**

Signature of Examiner(s) Signature of Supervisor(s)

Signature of Project Coordinator Signature of Dean

Date:

Place:

Abstract

Having car is easy but getting a private driver become pretty much hard sometimes so we came up with a project named online driver hiring android app from where user in need can hire a driver for their ride. This application will make it truly simpler to employ a driver for the individuals who don't have a clue how to drive .There are individuals who knows how to drive a vehicle but what if they fell ill, or what is they went to do party by driving but can't drive back home since they are drunk in this scenario they can hire a driver very easily and head back to home safely without causing any trouble. Also, there are some scenarios where they have vehicle yet due to old age they can't drive for those situation they can enlist a driver without any problem.

In this app customer can even know the price to pay to the driver for and his/her driving experience. And they can get refund whey they cancel the driver they have booked. You just simply needs to put the destination and time in the app and you will find the list of drivers who are available at that time. The plus point of this app is not only the customer can cancel the ride even the driver can cancel the ride if he is not available at that particular time.

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Acronyms

DFD	Data Flow Diagarm
UML	Unified modeling language
ER	Entity –Relationship
PC	Personal Computer
RAM	Random Access Memory
ROM	Read Only Memory
GB	GigaByte

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CHAPATER-1
Introduction

Numerous individuals own a vehicle yet can't drive, thus they lean toward employing a driver for long rides. What's more, it is hard to track down a private driver who is capable and respectful. This Online Driver Hiring Android App will assist you with discovering the all-around experienced driver within no time for your ride. Both the clients and drivers can get to the application by enlisting themselves on the online driver employing application. It will even more useful for driver to get job simply by registering and uploading their driving license and required necessary documents. The driver & user can see the allotted ride details and can also check the details of previous, upcoming & cancelled rides. The users can get a list of the available drivers along with their details based on the route selected. The user can track the location during the rides & can also rate the driver once the ride is complete. Thus, this android-based driver booking application will provide a user-friendly experience to both the users & drivers.

The excellent point of this android application to give best driver to the client for their ride. In this system, the User is able to hire a driver by entering the details such as place, dates, days, vehicle type, etc. And they can pick the driver on the basis of rating also. This android app will reduce the number of car accident that occurs due to lack of experience and mobile usage by driver during their ride.

This project is basically an online driver hiring android app. The clients can download the application from play store and can open and sign in. In this framework, the User can recruit a driver by entering the subtleties like spot, dates, days, vehicle type etc. The system will list down the drivers based on Experience & ratings best suited for the User. It is similar like other app i.e. ola, uber etc. the main difference is that here we hire only the driver.

The main purpose are as follow:

- User will get the best result of drivers based on experience, vehicle type and ratings
- User will be able to see the driver’s current location during the ride.
- The ride can be cancelled.
- User friendly and less time taking

Tools and Technology Required

- IntelliJ IDEA
- Android Studio
- Visual studio

Scope

The scope of online driver hiring app includes:

- As the phone is used by everyone so the customer can access this application very easily and conveniently.
- It will assists with giving employment opportunity to individuals.
- It will serves to any age of individuals who don't how to drive, and the individual who knows yet can't drive due to their old age or terrible medical issue.
- Person who hesitate to buy a car due to lack of driving skills can buy a car and can hire driver online within no time.
- If the Booking is cancelled by the user, he will get a refund.

Limitations

- Wrong inputs will affect the project outputs.
- Internet Connection is mandatory
- Drivers' data is not verified by anyone.

Overview

The online driver hiring app will be easy to customer for hire a driver. Customer can book the driver as per their requirement and get the driver details with acknowledgement to/from the driver online thereby saving time and money. Most user-friendly and fast way to hire a good driver for at any time.

CHAPTER-2
Literature Survey

1. Sandeep Gupta, Attaullah Buriro, Bruno Crispo "DriverAuth: Behavioral biometric-based driver A behavioural-biometric-based authentication [1] scheme in the context of on-demand ride and the rideshare services. The approach can be extremely useful to verify drivers remotely. This scheme can be extended to verify the intended riders as well the scheme is unobtrusive as verification is performed in the background and is invisible to the driver. The scheme has shown resistance to mimicry attacks as the invisible person-specific behavioural modalities. Owing to space limitations, they will report the detailed methodology and the results of an extended empirical evaluation in a future paper. They will also explore the impact of its extension in terms of more modalities and they will evaluate them in terms of their accuracy, performance, and usability.

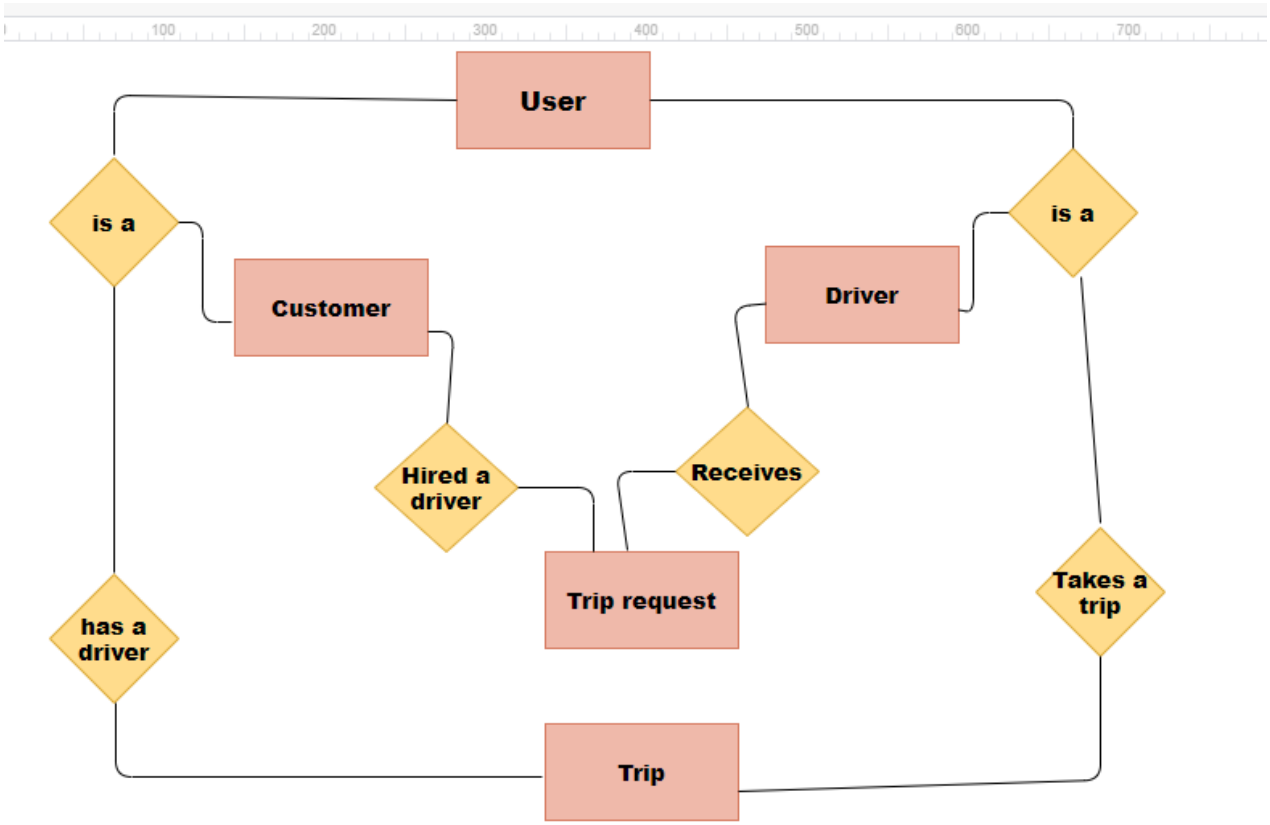
2. Kacem Abida, Rainer Stahlmann, Florian Netter, and Carlo Ratti "Driving Behavior Analysis through CAN Bus Data in an Uncontrolled Environment." Driving behavior analysis has been studied from a new point of view, that bridges the gap between driving behavior studies through uncontrolled experiments leveraging only the GPS signal and studies exploiting CAN bus data through very controlled experiments. This work proposes a methodology for delineating similarities among drivers using data collected in a completely uncontrolled experiment, through a clustering algorithm performed on seven different features of eight signals recorded by CAN bus sensors, with a distributional approach.

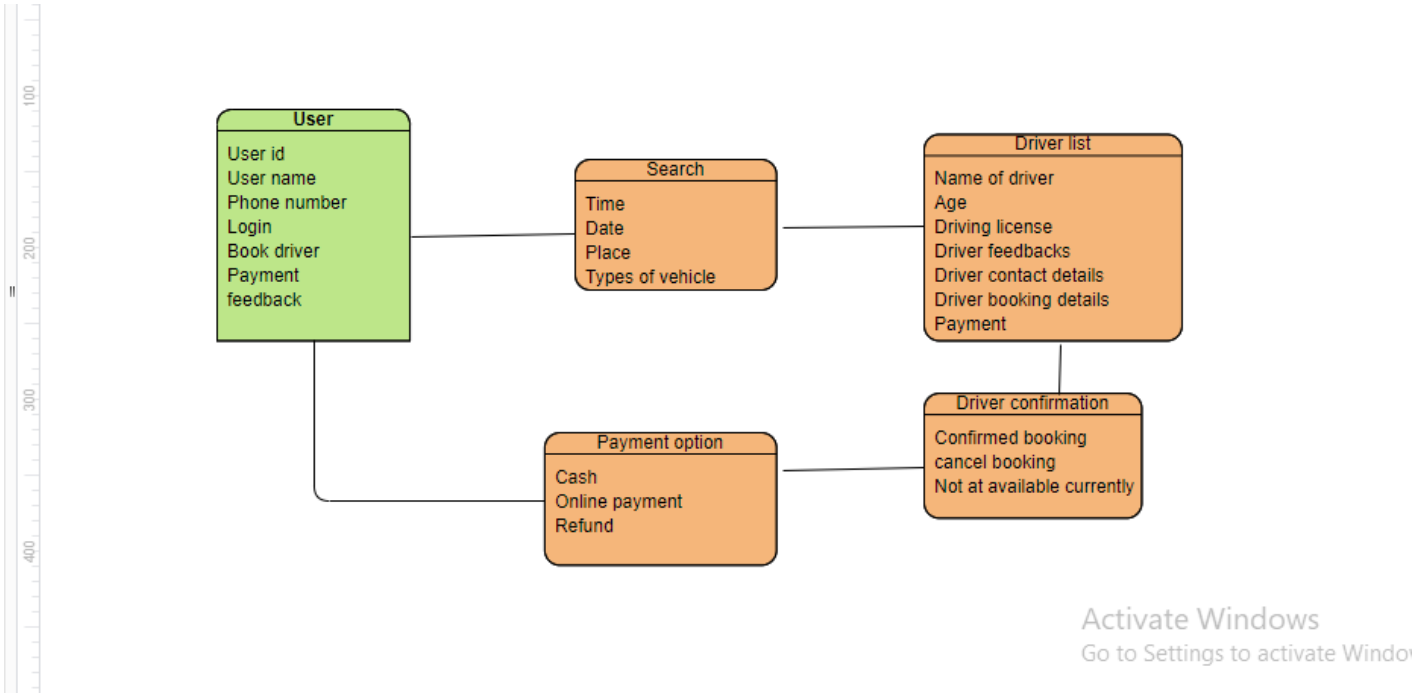
3. Hemanth Kumar and K. Sentamilselvan "Customer Satisfaction towards Call Taxi Services A study with reference to Chennai." There is stringent competition in the organized cab services industry therefore organization need to motivate consumers through coupons. The innovative behaviour of consumers helps to download mobile apps and further motivates them to redeem coupons while booking cabs. The results of this study are consistent with earlier research studies because it is found that price conscious consumers are likely to redeem coupons. The modern consumers are innovative and at the same time they are price sensitive therefore coupon redemption helps for customer retention. [3] The brand image also plays a vital role in customer retention apart from offering coupons.

4. Dr. Ruchi Shukla, Dr. Ashish Chandra & Ms. Himanshi Jain "OLA VS UBER: The Battle of Dominance." India's major attractiveness lies in its market size and increased purchasing power resulting in uplifting lifestyles. On the other hand, Indian consumers are smart, very demanding and highly price-sensitive with no brand loyalty; managing such market is not an easy task. Companies need to constantly be on their toes and keep designing new packages and offers to allure the customers for long which at times result in a lot of cash burn.

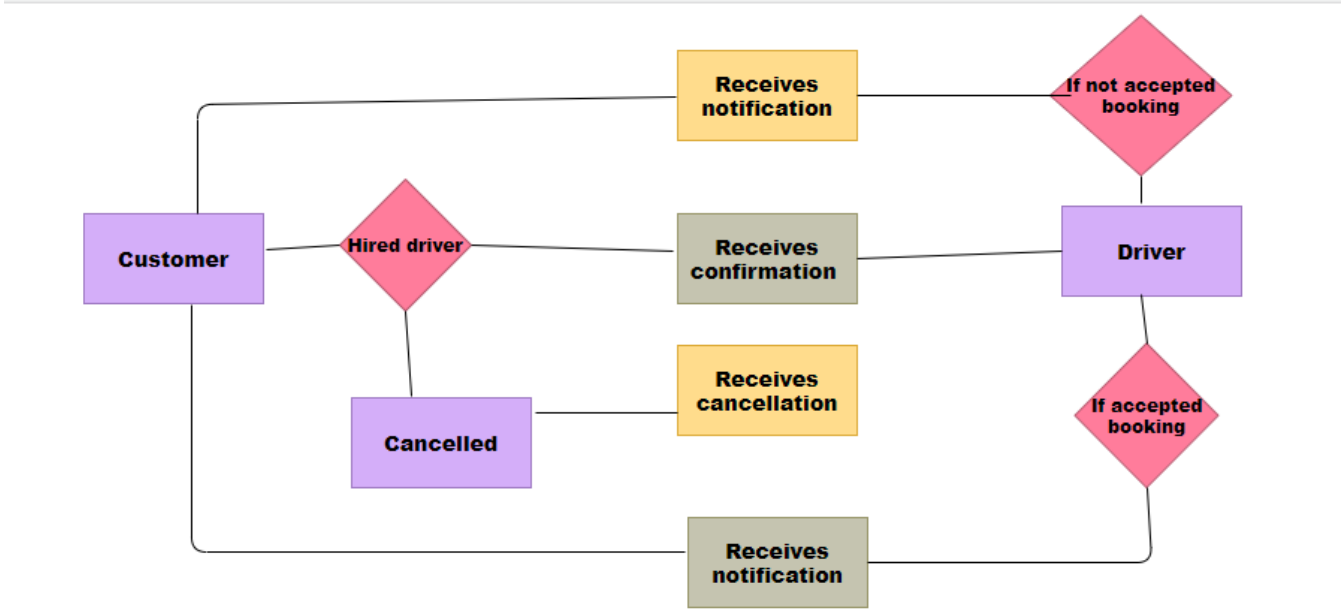
5. Dr. P. Kishore Kumar1, Dr. N. Ramesh Kumar2 “A Study on Factors Influencing the Consumers in Selection of Cab Services.” The customer satisfaction about the call taxi services, the factors they give importance in selection of the service provider, tariff, comfort, convenience, service quality and customer care rendered [5]. The finding depicts the exact replica of the customer’s mindset and level of satisfaction towards the service providers operating the call taxi in the Chennai market. Appropriate suggestions were provided considering the facts and feasibility, if the market players take these outcomes into account and act, it’s sure to create fullest satisfaction rather delight the customers and expand the market base. This will also help the service providers full fill the customer expectation that fetches the good will and develop their brand image in the market.

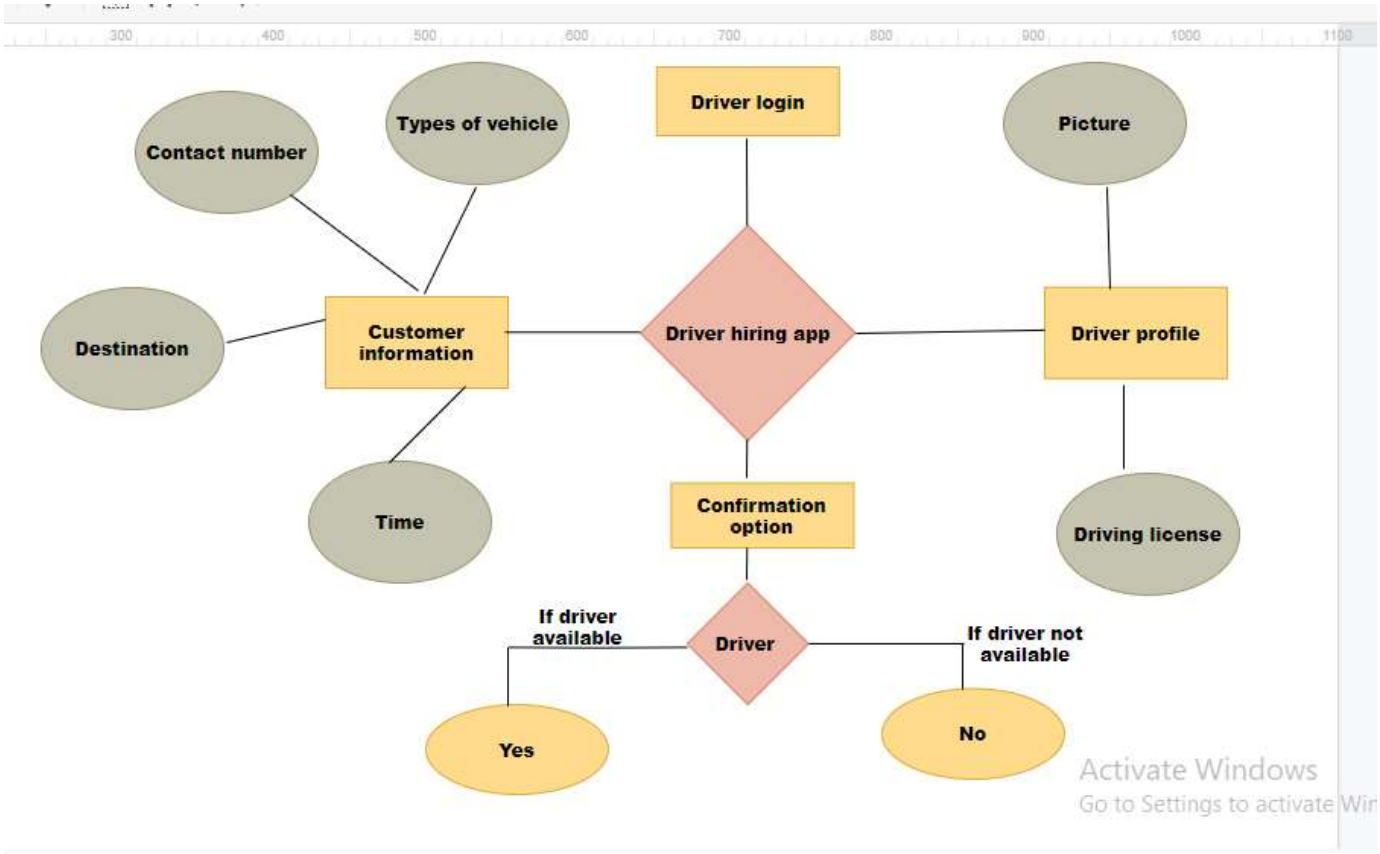
ER diagram:-



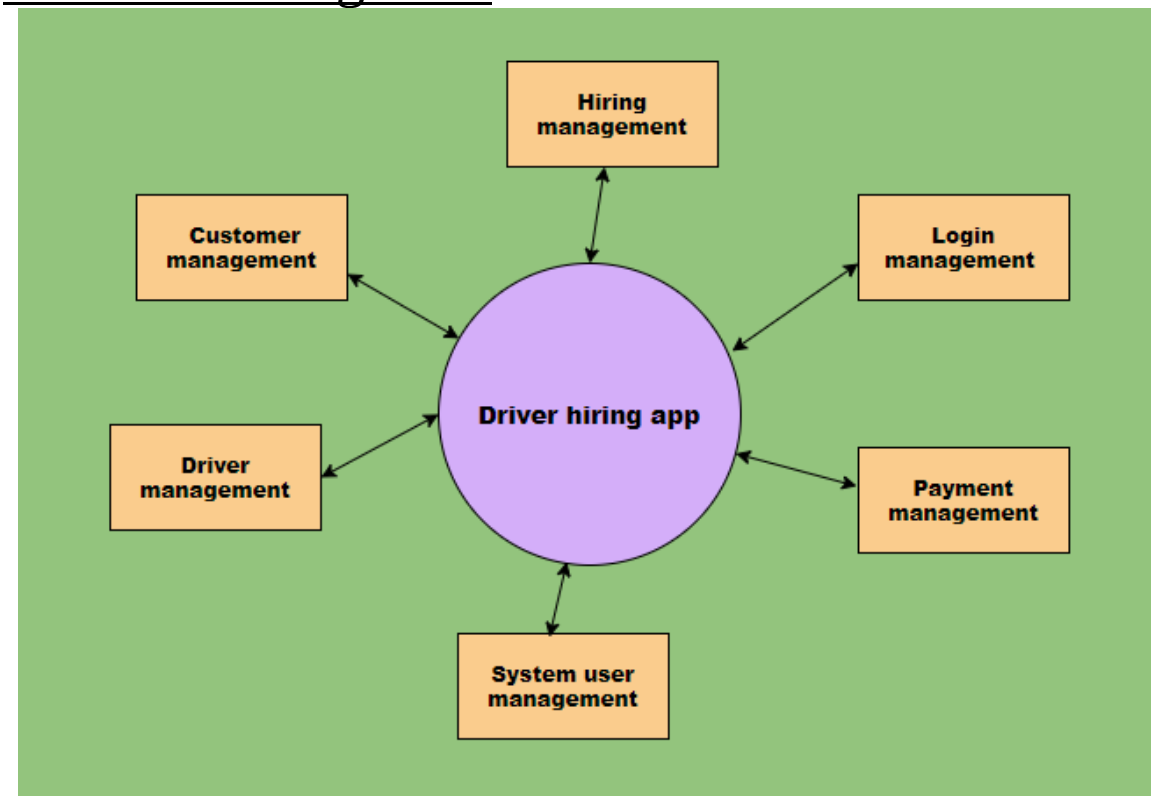


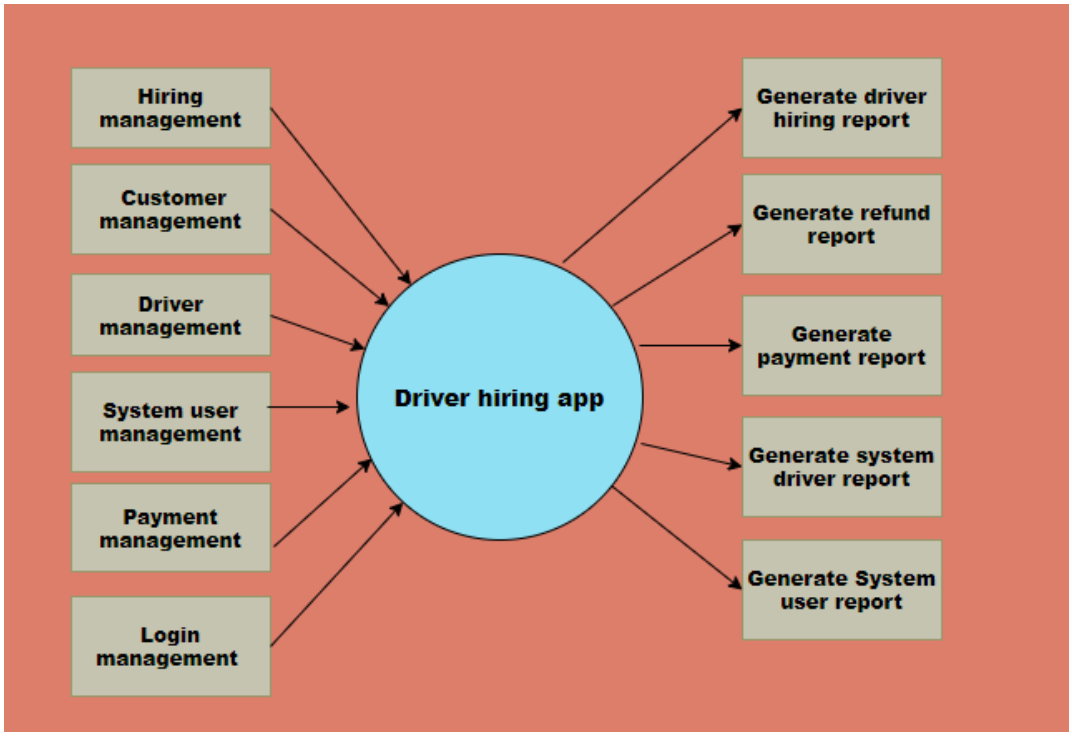
Activate Windows
Go to Settings to activate Windo

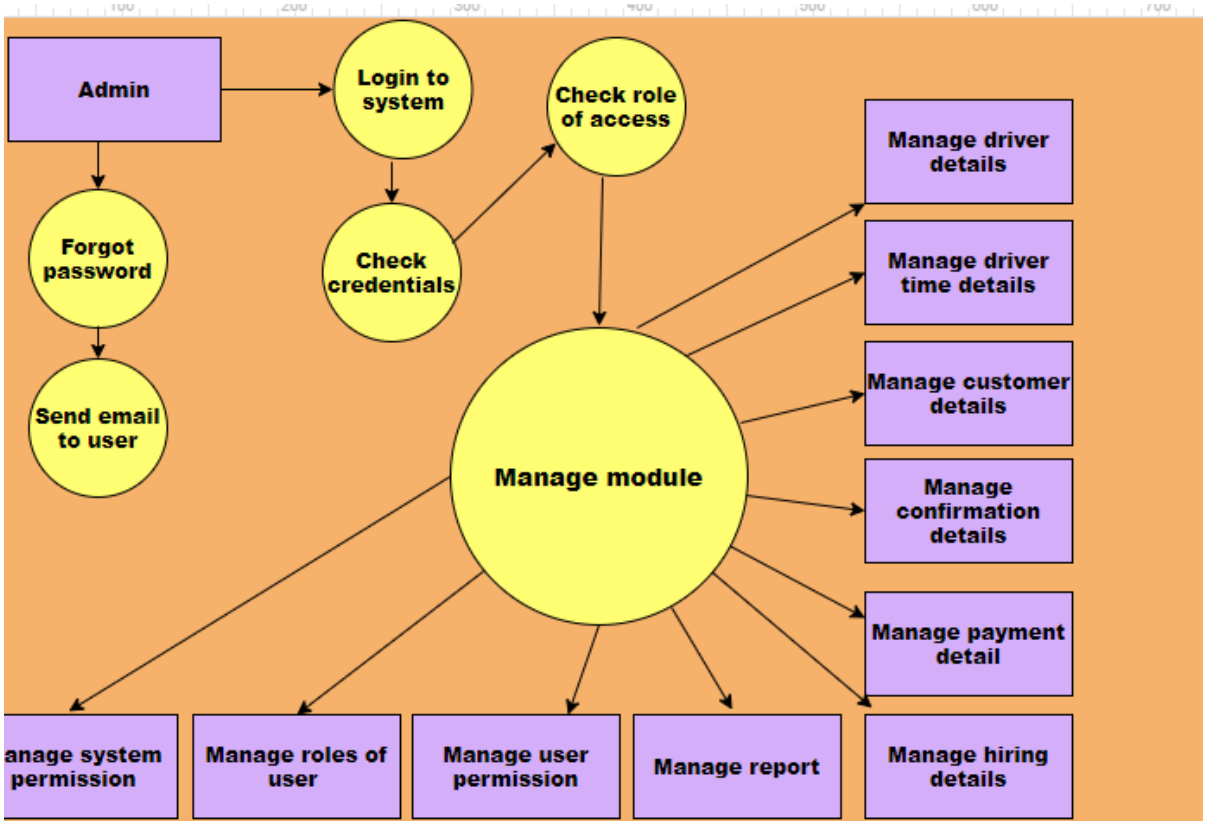

Receives notification
If not accepted booking
Customer
Hired driver
Receives confirmation
Driver
Receives cancellation
If accepted booking
Cancelled
Receives notification

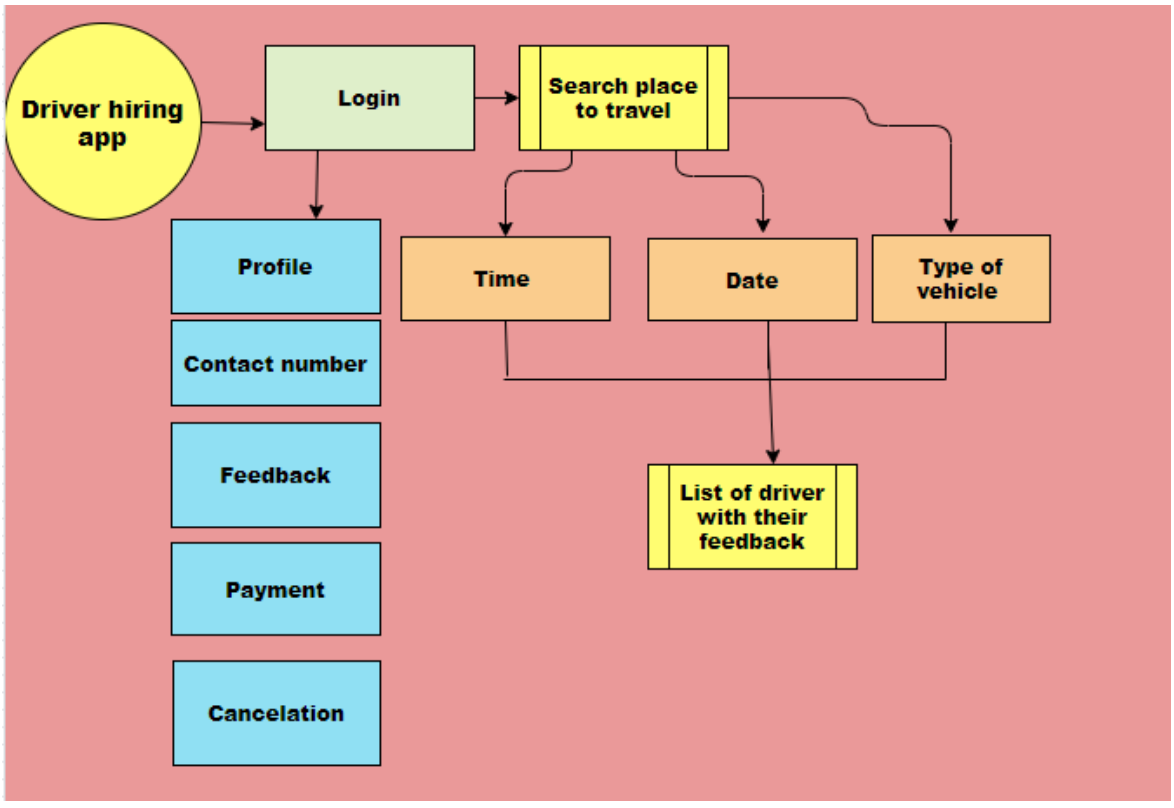

Contact number
Types of vehicle
Driver login
Picture
Destination
Customer information
Driver hiring app
Driver profile
Time
Confirmation option
Driving license
If driver available
Driver
If driver not available
Yes
No

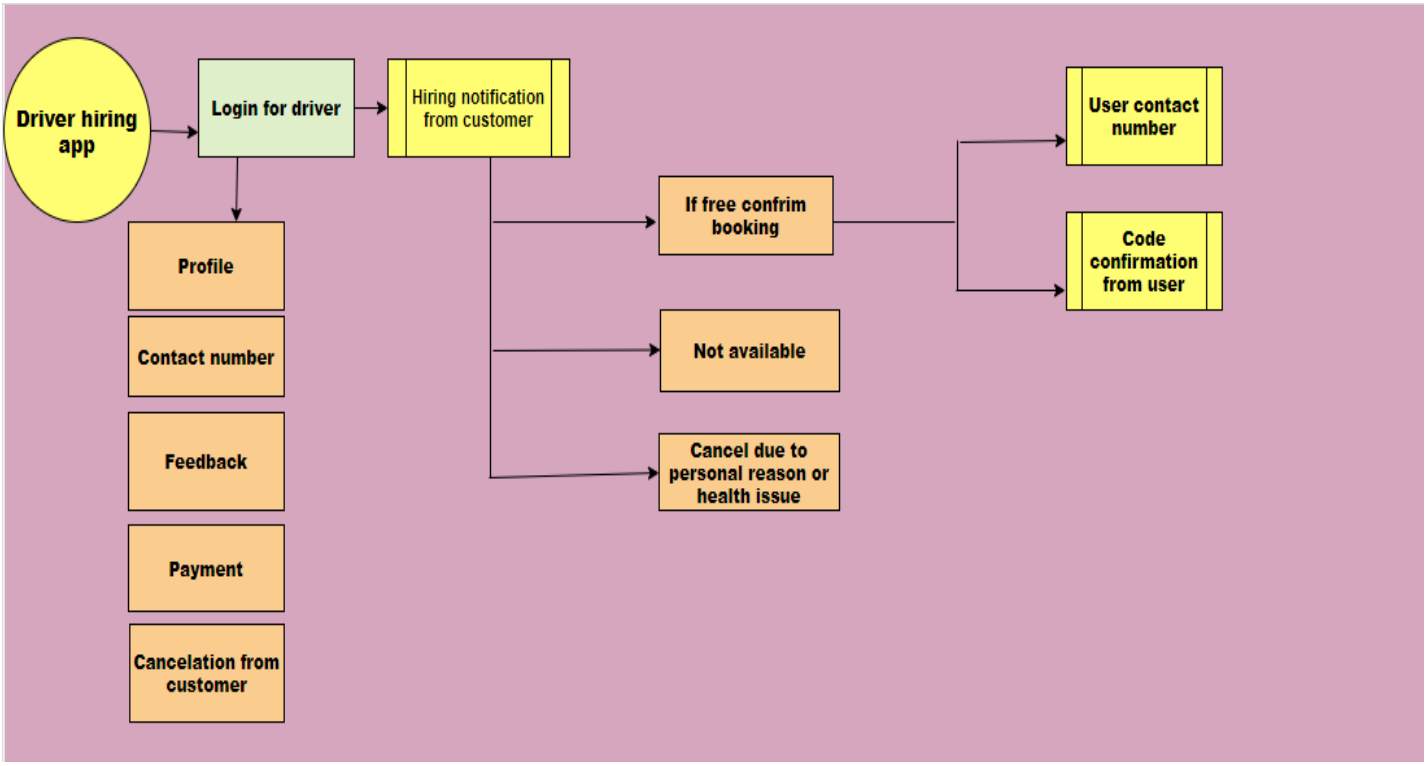
Data flow Diagram:-



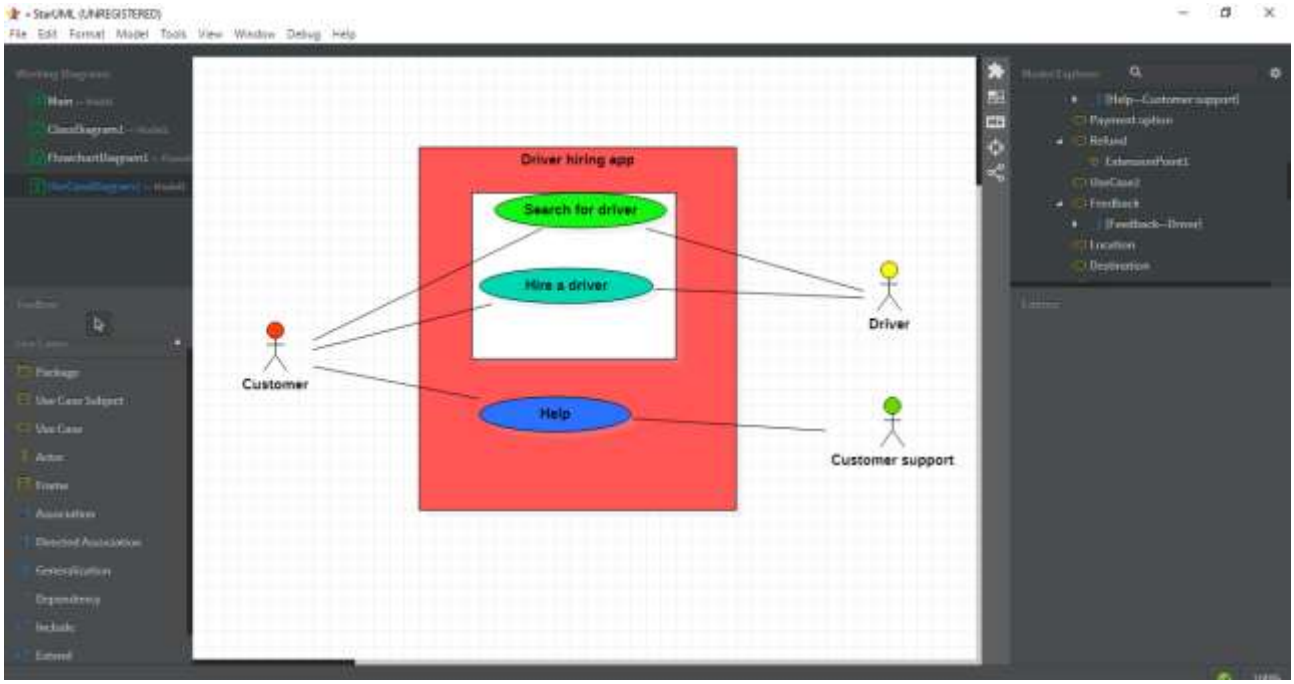


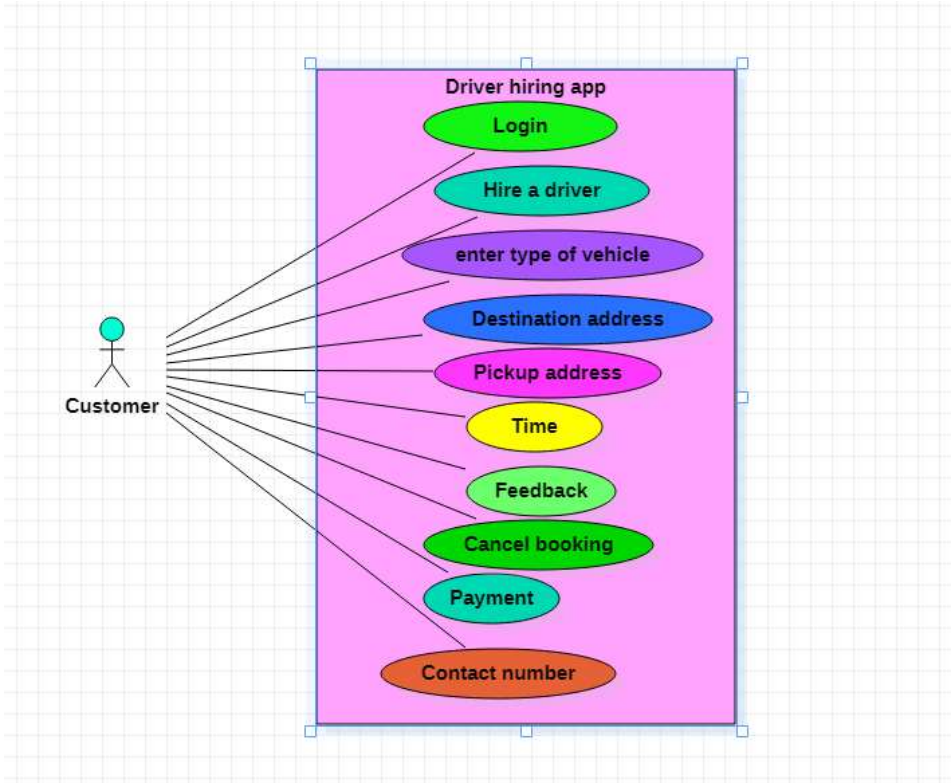

Admin
Login to system
Check role of access
Forgot password
Check credentials
Send email to user
Manage module
Manage driver details
Manage driver time details
Manage customer details
Manage confirmation details
Manage payment detail
anage system permission
Manage roles of user
Manage user permission
Manage report
Manage hiring details

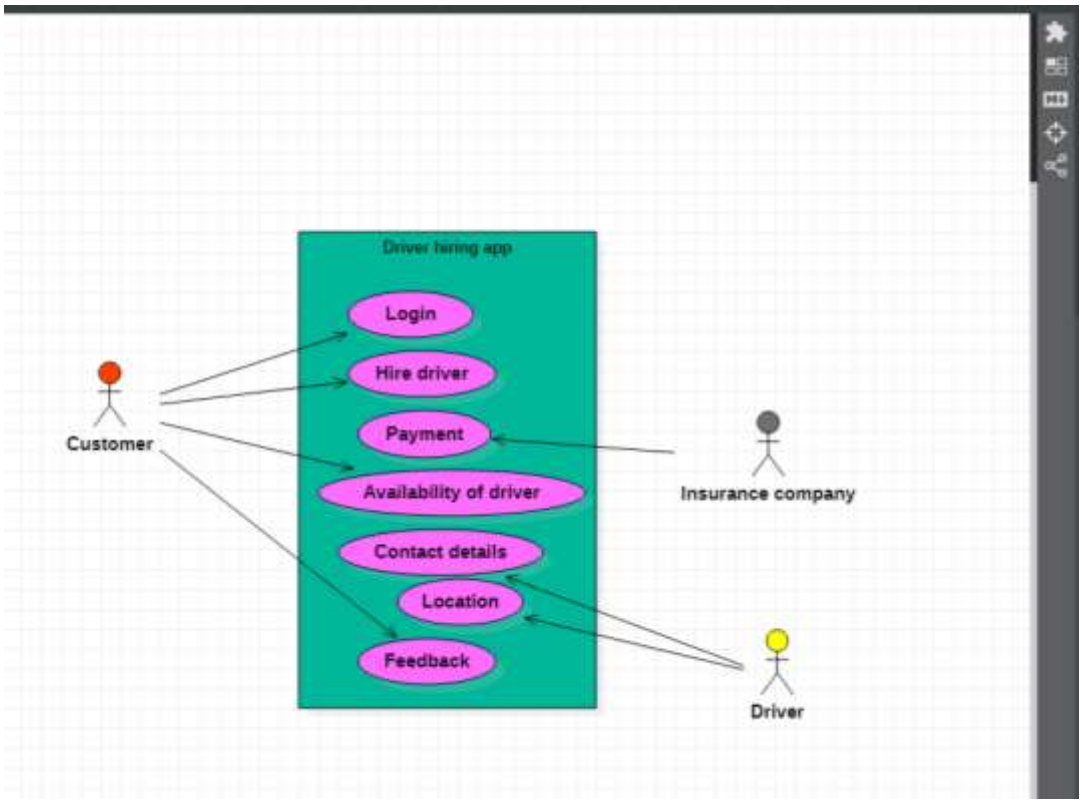

Driver hiring app
Login
Search place to travel
Profile
Contact number
Feedback
Payment
Cancelation
Time
Date
Type of vehicle
List of driver with their feedback

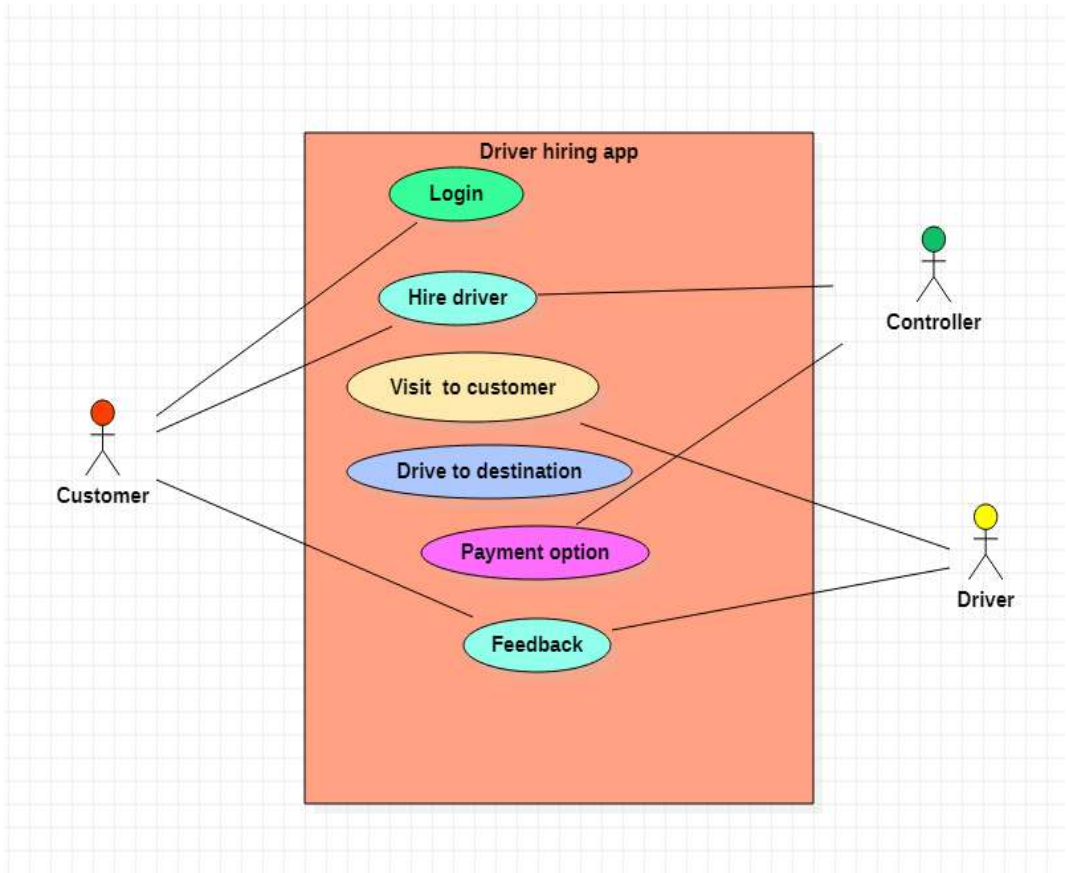

Driver hiring app
Login for driver
Hiring notification from customer
User contact number
If free confrim booking
Code confirmation from user
Profile
Contact number
Not available
Feedback
Cancel due to personal reason or health issue
Payment
Cancelation from customer

UML diagram:-


Driver hiring app
Search for driver
Hire a driver
Help
Customer
Driver
Customer support


Driver hiring app
Login
Hire a driver
enter type of vehicle
Destination address
Pickup address
Time
Feedback
Cancel booking
Payment
Contact number
Customer


Driver hiring app
Login
Hire driver
Payment
Availability of driver
Contact details
Location
Feedback
Customer
Insurance company
Driver


Driver hiring app
Login
Hire driver
Visit to customer
Drive to destination
Payment option
Feedback
Customer
Controller
Driver

GENERAL DISCRIPTION

Getting a private driver become pretty much hard sometimes so we came up with a project named online driver hiring android app from where customers in need can hire a driver for their ride. There are individuals who knows how to drive a vehicle but what if they fell ill, or what is they went to do party by driving but can't drive back home since they are drunk in this scenario they can hire a driver very easily and head back to home safely without causing any trouble. Also, there are some scenarios where they have vehicle yet due to old age they can't drive for those situation they can enlist a driver without any problem. In this app customer can even know the price to pay to the driver for and his/her driving experience. And they can get refund whey they cancel the driver they have booked.

You just simply needs to put the destination and time in the app and you will find the list of drivers who are available at that time. The plus point of this app is not only the customer can cancel the ride even the driver can cancel the ride if he is not available at that particular time.

Product Perspective:-

This project is basically an online driver hiring android app. The clients can download the application from play store and can open and sign in. In this framework, the User can recruit a driver by entering the subtleties like spot, dates, days, vehicle type etc. The system will list down the drivers based on Experience & ratings best suited for the User. It is similar like other app i.e. ola, uber etc. the main difference is that here we hire only the driver.

This application will execute the commands according to the user request. The following commands will be implemented:

- Hiring a driver
- Rating for the driver
- Cancellation from customer side
- Cancellation from driver side
- Feedback

This application is very much user-friendly anyone can hire a driver within less time and also cancel it and can get refund. And payment option depends upon the customer whether they want to pay online or cash.

System description:-

The system comprises of 2 major modules with their sub-modules as follows:

1. **User:**
    - **Register:** User can register using personal details.
    - **Login:** User can login in his personal account using id and password.
    - **Profile:** User can edit their profile.
    - **Home:**
        - **Hire a Driver**: enter the details of the ride, place, dates, days, vehicle type etc. User will get a list of drivers against the search and he can book the driver.
        - **Current Ride**: User can see the details of the current ride if any.
    - **My Rides:** List of all the rides with segregation by previous and upcoming. User can cancel the ride or rate the driver after ride completion.
    - **Transaction:** List of transaction paid or refunded.

2. **Driver:**
    - **Register:** Driver can register using personal details, driving details such as experience, upload photos & documents.
    - **Login:** Driver can login his account using id and password.
    - **Home:** He can see his current ride details if any.
    - **My Rides:** List of all the rides with segregation by previous and upcoming. He can also cancel a.
    - **Transaction:** List of transaction Received or refunded.
    -

Product function:-

Both driver and user will be the main user of online driver hiring app. The two of them can communicate with one another with the help of this Online Driver Hiring Android App.

- User and driver both can download the application yet their will certain distinction that relies on whether you are client or driver.
- User will have choice like login, profile, recruit a drive which will have further more choices like date, time, kinds of vehicle etc. current ride, transaction.
- Driver will have choices like register, login, home, my rides, transaction etc.
- Driver will get notify if they get hire by any of the user, they can even call the user and can get the pickup location.
- Driver can likewise drop the ride in case they are not accessible at that specific snapshot of time.
- User can likewise drop their ride in the event that they at this point don't need it.

FUNCTIONAL REQUIRMENT:-

System Requirement

I. Hardware Requirement

i. Laptop or PC

- I3 processor system or higher
- 4 GB RAM or higher
- 100 GB ROM or higher

ii. Android Phone (6.0 and above)

II. Software Requirement

iii. Laptop or PC

- Windows 7 or higher
- Android Studio

SYSTEM ARCHITECTURE:-

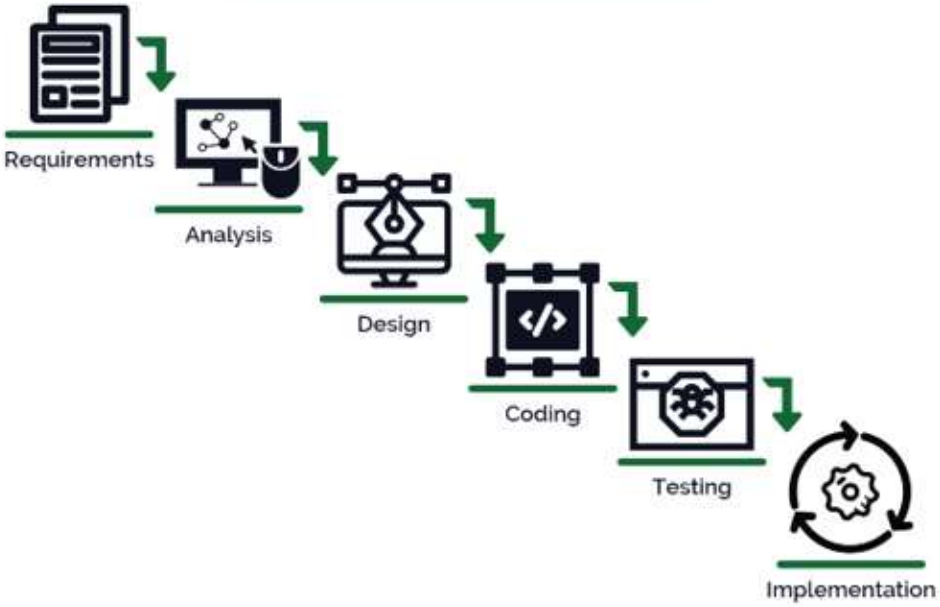
System architecture shows the overall plan or model of a system consisting of all specifications that gives the system its form and structure i.e. the structural implementation of the system analysis. This application use to find out drivers which are nearest to current geographical location of mobile device. Fig No.4.1 System Architecture There are two applications one for driver and one for customer. The mobile application will communicate with the server through web service calls using JAVA and PHP interface. After calling web service the query parameters will be send to PHP server and after processing of query on PHP server it returns back to mobile application in JSON format. Once a response is received on application side it parses the response and the operation is reflected on user interface. Both the applications are registered with the GCM in order to receive push notification.

ADVANTAGES:-

- Information of driver and the location is quickly shared with customer.
- It almost displays nearest location of driver.
- We can track the live location of driver and it can share with your family/friends.
- It greatly reduces the time needed to generate nearest location driver.
- It provides an easy to handle.
- Driver can choose drive.

Product life cycle:-

The waterfall model is a classical model used in system development life cycle to create a system with a linear and sequential approach. It is termed as waterfall because the model develops systematically from one phase to another in downward fashion. The waterfall approach does not define the process to go back to the previous phase to handle changes in requirement. The waterfall approach is the earliest approach that was used for software development



NEVON SOLUTIONS

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[1] Sandeep Gupta, Attaullah Buriro∗, Bruno Crispo, “DriverAuth: Behavioral biometric-based driver authentication mechanism for on-demand ride and ridesharing infrastructure”, DISI, University of Trento, Trento, Italy, ICT Express (2018), https://doi.org/10.1016/j.icte.2018.01.010, 24 January 2018.
[2] Umberto Fugiglando, Emanuele Massaro, Paolo Santi, Sebastiano Milardo, “Driving Behavior Analysis through CAN Bus Data in an Uncontrolled Environment”, IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, IEEE, 2018, 1524-9050.
[3] V. Hemanth Kumar and K. Sentamilselvan, “Customer Satisfaction towards Call Taxi Services A study with reference to Chennai”, International Journal of Pure and Applied Mathematics, Volume 119 No. 12 2018, 14919-14928.
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[5] Dr. P. Kishore Kumar, Dr. N. Ramesh Kumar, “A Study on Factors Influencing the Consumers in Selection of Cab Services”, International Journal of Social Science and Humanities Research ISSN 2348-3164, Vol. 4, Issue 3, Month: July - September 2016, pp: (557-561).
[6] https://www.irjet.net/archives/V5/i12/IRJET-V5I12276