

## **1. Objective / Scope of Project**

TaxiApp Solution (Android & iOS) for Taxi business automation & Tracking all the taxi's running status and details with Order.

- Android app for Passenger
- Android app for Driver
- iOS app for Passenger
- iOS app for Driver
- Backoffice Dashboard to manage services, pricing, orders and data in the apps.

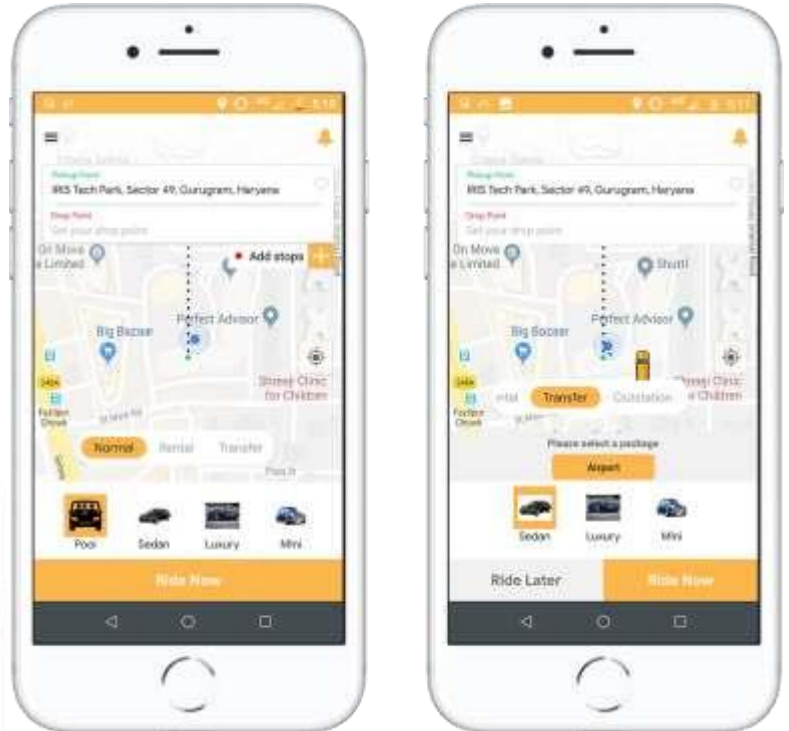
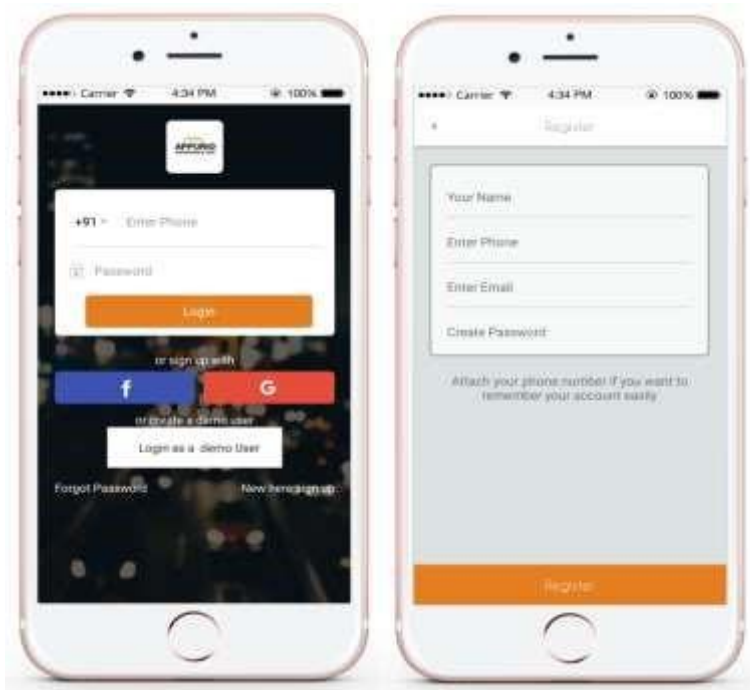
## **2. Project Description**

### **2.1 Scope**

complete Solution consists of a Passenger App, Driver App& Admin Dashboard. Admin Dashboard is a web based panel where you can manage and monitor the complete activity of app Users.

- Android app for Passenger
- Android app for Driver
- iOS app for Passenger
- iOS app for Driver
- Backoffice Dashboard to manage services, pricing, orders and data in the customer app.

### Taxi App Reference Links:



- Estimated Time Arrivals, Ride Estimates and Live Tracking
- Referral Codes and discount coupons
- Structured and commented codebase.
- Easy design Customization

- Multi Location & Multi Currency Compatibility □  
City wise Fleet and Fares Chart.
- No third Party dependency and no recurring cost like Pubnub, twilio etc.
- No Hidden Cost
- Zero Maintenance Cost
- Optimized Server APIs calls
- Optimized Google API calls
- Save Credit Card and Automatic Payment

## LIST OF FEATURES &MODULES

⋮

### **CUSTOMER APP:**

1. **Sign Up/Login Module:** ☐ Manual Sign Up
  - Google+ Sign Up
  - Facebook Sign Up
  - OTP verification
  - Email verification ☐ Forget Password
  - Reset Password
2. **Map Module:**
  - Auto Detection of City
  - Fleet according to the user current city
  - Fares according to the user current city
  - Enter Pick Up and Drop Location
3. **Ride Book Module:**
  - Estimated Time Arrival for each cab category
  - Fare Estimate
  - Select Payment Method
  - Ride Job Allocation to nearest available driver
4. **Ride Later Module:**
  - Schedule Ride for Later date & time
  - Ride Job Allocation to nearest driver to Pick Up location
5. **App Promotions Module**
  - Unique Referral Code of every User
  - Free Rides Mechanism



- Discount Coupons functionality
- Share via social media

## 6. Fare Calculation Module

- Fare Calculation according to distance and time of travel
- Waiting time Charges

## 7. Payment Module

- Save Credit Card
- Automatic Payment
- Paypal Integration
- Custom Payment Gateway Integration
- Cash Payment
- Email Trip Invoice

## 8. Rating and Review Module

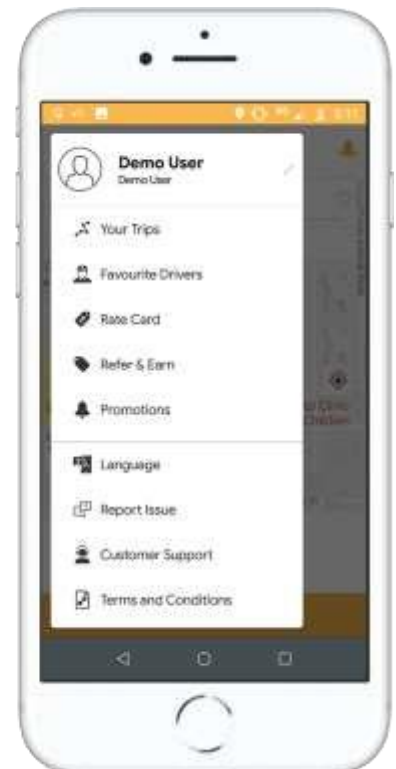
- Rate the Ride
- Submit Comments

## 9. Live Tracking Module

- Driver tracking before Pick Up
- Live Ride Tracking

## 10. Add Favourite Driver

- Passenger can save the favourite driver
- Passenger can book the favourite driver on priority if available in radius



## DRIVER APP:

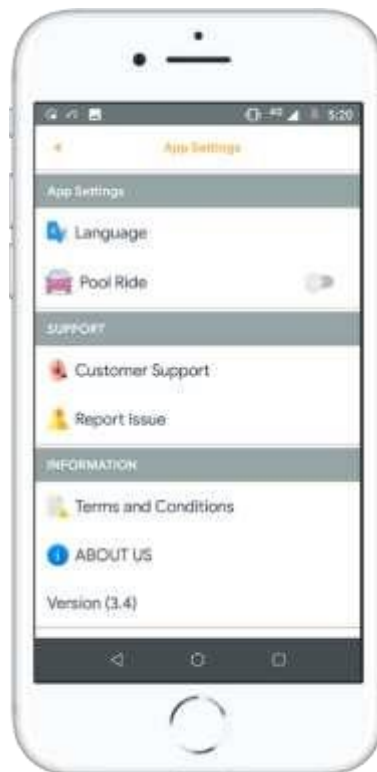
### 1. Sign Up/Login

- Manual Sign Up

- Upload Verification Documents
  - OTP verification
  - Email verification
2. Driver Sign Up verification from Admin Panel
  3. Go Online & Offline from the system.

4. **Manage Rides**

- Accept/Reject a Ride request
- View Customer Map Location
- Navigate to Customer Location
- Navigate to Destination Location
- End Trip – View Ride Details
- View Ride History



5. **Earning Statistics**

- Daily Earning
- Weekly Earning
- Monthly Earning
- Total Earnings

6. **Email / SMS notifications**

7. **Driver e-wallet**

- Driver can manage and monitor his wallet
- Wallet recharge via credit ,debit cards, net banking or payment gateways.

8. **Trip Reports**

- On Going
- Schedlued / Up coming
- Past trips

9. **SOS (Emergency Button)**

## **ADMIN PANEL:**

- City wise Rate card
- Manage Cab Type
- Manage Drivers
- Approve Driver Sign Up request
- Weekly Maintenance fee charged after first 10 trips by driver into application agreement
- Enable Disable a Driver
- Manage Customers
- Manual Taxi Dispatch
- Manage Rate Cards
- Check complete Trip Feed
- Sort Trips
- Language Management
- Rental Management
- Vendor (Taxi Companies) Management
- Heat Map
- Promo-codes Management
- CMS Pages Management
- Accounts

**A. Email/mobile number:** Ability to sign up via email/mobile number where customer will enter his/her valid email address or mobile number in proper format. Customer will have to select password for sign up.



**B. Facebook:** Ability to sign up via Facebook account. First name, last name, email address, phone number and profile picture will be fetched from Facebook once customer successfully signs up with Facebook.

**C. Google+:** Ability to sign up via Google+ account. First Name, last name, email address, phone number and profile picture will be fetched from Google+ Account once the customer successfully signs up with Google+.

**D. Account Verification:**

1) **Email:** If the customer signs up using an email, he'll receive a confirmation e-mail in the registered e-mail account.

2) **Mobile No.** If the customer signs up using a mobile no., he'll receive an OTP (one time password) to verify his account. If the customer does not receive an OTP due to some network or any other issue, he/she may use the Resend OTP option.

3) **Facebook or Google+:** If the customer signs up using Facebook or Google+, his account will be automatically synced and verified.



**E. Account Activation:**

1) **Email:** After receiving a confirmation mail as soon as the user clicks on the link provided, his/her account is verified and activated.

2) **Mobile No.** After receiving an OTP as soon as the user confirms the OTP in the App Module, his/her account is activated.

3) **Facebook or Google+:** As soon as the synchronization of the Facebook or Google Account takes place the user's account is activated and is ready to use.

**F. Remember Me:** An ability to remember the credentials of the user to ensure that the user does not have to enter his credentials whenever he opens his App and could Log In easily.

**G. Forget Password:**



In case a user Log out from the App and forgets his password, he/she may click on the Forgot Password option and a link to your registered email ID will be sent. The user needs to follow the link in the email and in just a few steps can reset the Password and Login.

## **2. Map Module:**

- A. Location Detection:** The Google Maps integrated in the App will automatically detect the user's current location.
- B. Fleet Detection:** Once the Google Maps have automatically detected your location, the fleet available in the city will update accordingly and will be visible to user according to the city in which he is currently.
- C. Location wise Fare Detection:** Just like the fleets are updated, the Fares are also updated according to the user's current location and fares available there.
- D. Pickup and Drop Location:** The user can also set the Pickup Location according to where he needs to take the ride from. He may move his Current Location on the Map or just enter the address in the Pickup Location option. Similarly, the Drop Location can also be set up either by moving your location on the Map or just selecting the Drop Location option and type the address.

## **3. Ride Book Module:**

- A. Estimated Arrival Time:** When the User selects the Ride Now option in the App the next with Confirm or Cancel option shows up where you can see the estimated time for the cab to reach you.
- B. Estimated Fare:** Along with the estimated time it would take for the Cab to reach, the user may also see the estimated fare for the ride.
- C. Payment Options:** Along with the estimated time and amount you can set up your payment options too. The user can pay via PayPal, Credit Card or even Cash for the ride.
- D. Ride Allocation:** When the user Confirms the ride from his end, the app automatically allocates the ride to the nearest driver available and the driver will get the notification of the same.

## **4. Ride Later Module:**

- A. Schedule the Ride:** The user here also has an option to schedule his ride for later. He/she may book a ride for some different Date and Time to ride later hassle free.
- B. Ride Allocation:** When the user will confirm the ride with the Date and Time he/she would like to travel, the nearest cab to the location when the user is scheduled to leave will be allocated to the user.

## **5. Promotion Module:**

- A. Referral Code:** Every user receives a different referral code which he/she may share and avails discounts upon the use by some other Customer
- B. Free Rides Mechanism:** The Admin may provide free rides to the new customers or to its loyal customers every now and then to promote his App.
- C. Discount Coupons Functionality:** Another way for Admin to promote its Cab service and his Taxi app is to provide discounts to the users. The admin panel provides the functionality to allow discounts to the target customers the admin decides.

## **6. Fare Calculation Module:**

- A. Fare Calculation:** The App automatically calculates the fare for the ride by taking the distance from Pickup Location to Drop Location into consideration and the time taken for the Ride.
- B. Waiting Time Charges Calculation:** In this functionality, the app automatically calculates the fare for the waiting time and includes it in the total amount the user must pay.

## **7. Payment Module:**

- A. Save Credit Card:** The user can save his/her credit card for the payment in the App for the ease in the payment process. The App saves the credentials of the user's card and use those credentials for the future payments.
- B. Automatic Payment:** If the user has saved his/her credit card in the App for payments, the app will automatically initiate the payment and complete the transaction.
- C. PayPal Integration:** The application is PayPal integrated which means that the users can also pay for the rides with their PayPal accounts.

**D. Custom Payment Gateway Integration:** The application can also be integrated with any other Payment Gateway beside Cash, PayPal and Credit Card according to requirements.

**E. Cash Payment:** The users can also pay just by paying cash to the driver directly.

#### **8. Rating and Review Module:**

**A. Rate Ride:** The riders are given an option to rate the ride they took. They can rate the Driver accordingly which will show on the Driver's Profile for the Admin and the users to view.

**B. Submit Comment:** The users can also comment after rating the ride to share in detail the experience of their ride. They can describe briefly about their experience.

#### **9. Live Tracking Module:**

**A. Track Driver:** Once the Driver is assigned to the user, the location of the driver is visible to the user in the Maps. The exact location of the driver is continuously shown in the Map.

**B. Track the Ride:** Even after the ride is started, the user can continuously keep a track of where the ride is going using Google Maps. The users can continuously see if the ride is going in the right direction or not.

### **B: DRIVER APP FEATURES:**

#### **1. Sign up/ Login Module:**

**A. Email & Mobile Number:** The driver will register an account by providing his E-mail and Mobile No. The driver is asked to create a Username and password for his profile login and fill in the details about his Car Type and Car No.

**B. Documentation:** Once the driver has filled in his details, he is required to upload the documents to be verified for his credentials and his car's credentials.

**C. OTP Verification:** The driver is required to verify his contact no. using the OTP (one time password) that is provided to him.

**D. E Mail Verification:** The driver verifies his identity by following the link that has been mailed to him in the Email ID he/she provides.

#### **2. Admin Verification:**

The Admin verifies all the documents and Driver's identity and then accordingly can accept his SignUp request or Reject it.

### **3. Online/Offline system:**

Once the sign-up process is complete with all the verifications the driver is all set. Now he can go Online and Offline whenever he wants. He will be allocated a ride only when he is Online.

### **4. Manage Rides:**

- A. Accept/Reject Ride Request:** The driver will receive a notification of the nearby ride when allocated. He can accept and reject the ride request.
- B. Ride Routing:** When the driver receives the notification he/she should accept the ride within 30 seconds or the ride will be allocated to the next nearest driver. This procedure will take place up to 3 rides not accepting.
- C. Customer Location:** The driver will see the current location of the customer in the map.
- D. Navigate Customer:** The driver can continuously track the location of the customer in the Google and navigate his way to the customer using it.
- E. Navigate Location:** The driver can continuously track the ride's current location and the destination to be reached and can navigate his way to reach the destination using Google Maps.
- F. End Trip:** After the driver has reached the destination he has an option to end the ride.
- G. View Details:** After the driver ends the ride, he can see the details of the fare and distance travelled etc.
- H. View Ride History:** The driver can also see the history of the rides that he taken.

### **5. Earning Statistics:**

- A. Daily Earning:** The statistics show the daily income of the driver on an average.
- B. Weekly Earning:** The driver will see his weekly earnings from all his rides on an average.
- C. Monthly Earnings:** The driver can see his monthly income from his rides on an average.

**D. Total Earnings:** The driver can see his total money he earned from all of his rides till now.

**5. Email/ SMS Notification:**

The driver receives notifications both via Email and via text sent on the registered email address and mobile number.

**C:ADMIN PANEL FEATURES:**

**1. City Rate Cards:**

The Admin can manage the rate cards of the Taxi manually according to the cities he operates in. He can select different rate cards for different cities.

**2. Manage Cab Types:**

The Admin can manage the types of cars according to the taxi car types available in city he is currently operating.

**3. Manage Drivers:**

The Admin can manage the drivers and remove them from the system. This is in cases like a driver gets bad reviews or there are lot complaints against him and the admin does not want him to jeopardize their relationship with the customer. So, he can delist the driver from taking rides.

**4. Approve Driver Sign Up:**

The Admin checks the account of the driver and verifies the document. The admin can approve or reject the Sign-Up request of the Driver.

**5. Enable/Disable A Driver:**

The Admin can enable / disable driver whenever he wants. Disabled driver will not get ride request, he will be informed that he is disabled from the apps.

**6. Manage Customers:**

The Admin can add customers, update his profile as well as admin can disable the customer.

**7. Manage Rate Cards:**

The admin can also manage the rate cards he feels like he wants to change the charged rates from the customers.

#### **8. Check Trip Feed:**

The Admin can see the complete list of all the rides that have taken that have taken place.

#### **9. Sort Trips:**

The Admin can sort out the trips.

#### **10. Update T&C and Privacy Policy Type Pages:**

The Admin can manage the pages mentioning the Terms & Conditions and Privacy Policy and other Pages and update them according to the policies and T&C in the business currently.

### **Feature List:**

- 1. Native Android Driver App** – The Android Driver App is developed in Native Java (Version 7 / 8) Language using Android Studio (Version 3.3) IDE.
- 2. Native Android Rider App** – The Android Customer App is developed in Native Java (Version 7 / 8) Language using Android Studio (Version 3.3) IDE.
- 3. Apps Marketing Website (with links for apps download)** – We will provide you a landing page from where customer and driver will be able to download the both apps.
- 4. Administrator Panel** – With the help of the admin panel you can manage whole application as well as you can create and manage content, add functionality in the form of plugins, change styling in the form of themes and lots more.
- 5. Billing / Accounts Panel** – The Billing & Account section of your panel allows you to maintain and monitor almost every aspect of your account. In this section you can make payments, view invoices and view usage.
- 6. Book Ride Now** - The passenger needs to feed their location and check which cabs are available nearby along with the vehicle. Choose the most preferred one and book the taxi.
- 7. Schedule Ride for Later** - If the passenger wants to book the taxi for a later date and time, integration of this feature will allow them to choose the vehicle for a later date at their desired time.

8. **Fare Estimate** - After feeding the location and before booking the ride, an estimated fare is showed to the passenger. He can book the ride if he finds the fare affordable.
9. **Estimated Time Arrival of the Driver** - When the User selects the Ride Now option in the App the next with Confirm or Cancel option shows up where you can see the estimated time for the cab to reach you.
10. **Rate the Ride / Driver** - At the end of the ride, the passenger should be given an option to rate the driver and ride. The passenger can also share his review about the ride and the driver with this.
11. **Ride History** - The user can keep a track on how many rides he/she has done with the amount of fare and time. This way the app can avail some special discount and offers to its regular.
12. **Area wise Rate card management** – Admin can manage the rate cards of the Taxi manually according to the areas he operates in. He can select different rate cards for different areas.
13. **Area wise Fleets Management** - The Admin can manage the types of cars according to the taxi car types available in city he is currently operating.
14. **Area wise documents Management** - The admin can also manage the documents that are required from the driver end during the signup process.
15. **Area wise pricing for each cab category** – Admin can manage the pricing for each cab category area wise accordingly he wants to charge from the customers of those area.
16. **Automatic fare calculation** - The price of a taxi depends on several factors. These are the route to be travelled, the journey time and the base fare valid in that area and, if applicable, the time. From these components the taxi price can be calculated. Simply enter the start and destination address of the desired taxi ride in the customer app main screen and it will show you the fare for that route.
17. **Local currencies configuration** - We will configure your local currencies in the application.
18. **Notification to passengers** - The admin can notify all the customers or customers available in an Area about any changes or any new launch or offers or any such thing.
19. **Email alerts** - Your customers will be notified via email or SMS for all the important events that happen through the trip, for, e.g. at the end of the trip as an invoice is generated an email notification is sent across bearing the invoice.



- 20. Approve/Reject Drivers** - The Admin verifies all the documents and Driver's identity and then accordingly can accept his Sign-Up request or Reject it.
- 21. Accept / Reject Drives** – Driver can accept and reject the upcoming rides that are requested by the customers.
- 22. Navigation to Pick-up Point** - The driver can continuously track the location of the customer in the Google and navigate his way to the customer using it.
- 23. Navigation to Destination Point** - The driver can continuously track the ride's current location and the destination to be reached and can navigate his way to reach the destination using Google Maps.
- 24. Invoice on Email** - When the ride is completed, the rider and the driver both receive an invoice with details regarding the distance and fare.
- 25. View trip routes using GPS** - User can continuously keep a track of where the ride is going using Google Maps. The users can continuously see if the ride is going in the right direction or not.
- 26. Automated e-receipts** - When the ride is completed, the rider receives an e-receipts with details regarding the payment done by the customer.
- 27. Geo-fenced Service area configuration** – Admin can manage the geographical boundaries of different areas with the help of the Geo-fenced service available in our product. Separate doable and non-doable areas as per your judgment with this feature. You can avoid crime prone areas or unsafe after dark areas by marking them with geo-fencing and avoiding pick up and drop in these areas.
- 28. Trip / Cab Tracking** - With this feature, the admin can track each driver about his location, whether he is on the trip or of the trip, active or inactive, his location can be tracked.
- 29. Manage Drivers** - The Admin can manage the drivers and remove them from the system. This is in cases like a driver gets bad reviews or there are lot complaints against him and the admin does not want him to jeopardize their relationship with the customer. So, he can delist the driver from taking rides.
- 30. Driver signup through Mobile App :-**
- A. Email & Mobile Number:** The driver will register an account by providing his E-mail and Mobile No. The driver is asked to create a Username and password for his profile login and fill in the details about his Car Type and Car No.

- B. Documentation:** Once the driver has filled in his details, he is required to upload the documents to be verified for his credentials and his car's credentials.
- C. OTP Verification:** The driver is required to verify his contact no. using the OTP (one time password) that is provided to him.
- D. E Mail Verification:** The driver verifies his identity by following the link that has been mailed to him in the Email ID he/she provides.

- 31. Rate Card Management** - The admin can also manage the rate cards he feels like he wants to change the charged rates from the customers.
- 32. Rides management** - Admin can keep track of all the rides that have been undertaken along with the date of the ride, mode of payment chosen by the rider, etc.
- 33. Manage Customers** - The Admin can add customers, update his profile as well as admin can disable the customer.
- 34. Approve Driver's Registration request** - The Admin checks the account of the driver and verifies the document. The admin can approve or reject the Sign-Up request of the Driver.
- 35. Check Complete Trips Feed** - The Admin can see the complete list of all the rides that have taken that have taken place.
- 36. Driver Accounts Management** – Admin can keep track of all the earnings done by the drivers as well as he can manage all the bills of the drivers.

### **37. Trip management :-**

- A. Accept/Reject Ride Request:** The driver will receive a notification of the nearby ride when allocated. He can accept and reject the ride request.
- B. Ride Routing:** When the driver receives the notification he/she should accept the ride within 30 seconds or the ride will be allocated to the next nearest driver. This procedure will take place up to 3 rides not accepting.
- C. Customer Location:** The driver will see the current location of the customer in the map.
- D. Navigate Customer:** The driver can continuously track the location of the customer in the Google and navigate his way to the customer using it.

- E. Navigate Location:** The driver can continuously track the ride's current location and the destination to be reached and can navigate his way to reach the destination using Google Maps.
- F. End Trip:** After the driver has reached the destination he has an option to end the ride.
- G. View Details:** After the driver ends the ride, he can see the details of the fare and distance travelled etc.
- H. View Ride History:** The driver can also the history of the rides that he taken.

### **38. Revenue management :-**

- A. Daily Earning:** The statistics show the daily income of the driver on an average.
- B. Weekly Earning:** The driver will see his weekly earnings from all his rides on an average.
- C. Monthly Earnings:** The driver can see his monthly income from his rides on an average.
- D. Total Earnings:** The driver can see his total money he earned from all of his rides till now.

### **39. Review & Rating - Driver and Customer –**

- A. Rate Ride:** The riders are given an option to rate the ride they took. They can rate the Driver accordingly which will show on the Driver's Profile for the Admin and the users to view.
- B. Submit Comment:** The users can also comment after rating the ride to share in detail the experience of their ride. They can describe briefly about their experience.

**40. Reports & transactions** - The Reports & Transactions will present the admin (owner) of Uber Clone with the earnings made by them along with the areas that require special focus by them. It also presents them with an overview if they need to modify the rates of the trips that they offer to the riders so as to ensure a smooth running business for them.

**41. Native iOS Driver App** - The iOS Driver App is developed in latest Technology of Native Swift (Version 5) Language using XCode (Version 10.1) IDE which will stay latest for many years to come.

**42. Native iOS Rider App** - The iOS Customer App is developed in latest Technology of Native Swift (Version 5) Language using XCode (Version 10.1) IDE which will stay latest for many years to come.

**43. Manual Taxi Dispatcher Panel** - The Manual Taxi Dispatch System allows the admin to take ride requests from those not having the Uber Clone via telephonic calls made manually by the rider. This component will assist you in empowering your users to book cabs merely by calling you. This feature is especially useful while catering to people who do not have access to the internet or smart phones. You can now accept booking through phone calls and then manually dispatch cars to the locations desired by your users.

- 44. Rental Rides** - Quick easy hassle free car rentals are now an option with our app. This feature will allow your users to rent chauffeured cars for fixed duration and distances at pre decided prices. For example, 60 kms for 6 hours at a particular price.
- 45. Gender Matching** - Female riders will get an option of choosing female drivers while booking a ride, same goes for Male riders.
- 46. Save Multiple Addresses** – This feature will allow Riders to set favorite addresses such as home or work addresses.
- 47. Manage Sub Admin - Dispatcher admin & Billing Admin** - This feature strengthens the admin to offer limited rights to the sub-admin who may be handling a particular ride. Take for example, the billing rights for the accounts admin to name a few.
- 48. SOS Button** - Let your passenger hit an alarm in emergency through Panic Button. He can immediately contact police and his contacts and administrator will receive a message with his exact location. Same goes for drivers.
- 49. See estimated time of taxi arrival (ETA)** - The app automatically calculates the time for pick up based on the distance of the driver.
- 50. Time Charges (Peak Time and Night Time)** - You can set surcharge during peak hours every day or during festivals and earn more.
- 51. OTP On Start** – Customer will get a 4-digit code in his app that he has to provide to the driver to start the ride, this feature empowers the riders of the app to avoid paying extra if in case driver has started the ride before the rider sits in the car.
- 52. Driver Cash limit** – Admin can set the limit for cash rides for the driver.
- 53. Driver Set Radius** – admin can set the radius limit for the driver
- 54. Face recognition for registering for both drivers and riders**
- 55. Split payment after each ride via payment gateway**
- 56. Rider can indicate if he's booking for others or oneself**
- 57. In-app calls**
- 58. Option for current location**
- 59. Change of destination rider or driver should give permission**
- 60.**

### 3. Deliverables

Deliverables included:

- Functional Apps as per scope of work
- Complete Codebase
  - Free bug/fixing support for up to 4 month after completion of the project.
- Assurance of future development of future version of products

Deliverables excluded:

- Server hosting and domain name. Only for single domain License.

### **3.1 Things to be provided by Project Owner:-**

Server and admin details

3<sup>rd</sup> party extension if required

Server

1. Apple developer Account
2. Google Developer account
3. Logo

### **3.2 Technology**

- o Native Android (Android SDK) o Native iOS (SWIFT) o Core Php
- o MySQL database
- Restful Json APIs

#### **SOFTWARE USED:**

- o Android Studio
- o Xcode 7.3 o XAMPP

## **4 Re-skinning of apps with your brand name and logo.**

Complete Localization of the app to your target market including 3 language, adding 2 payment gateways and 1 sms gateway.

1. Deployment of apps to app store and server
2. Complete source code delivery

### **CONTRACT PARTIES:**

o