**Software Requirements specification** For CAB Service Booking App "**myCAB**"

1. INTRODUCTION

1.1 PURPOSE

The purpose of this **Software Requirements specification document** is to outline all the functional requirements demanded by the client(myCab cab service ltd.) for their cab management system along with the other software, hardware and other resource requirements

1.2 INTENDED AUDIENCE

This SRS document is intended to be used by the product owner, developers, testers, managers and other technical staffs included in the development team of this particular product(myCab application) as reference for understanding the functional and resource requirements of myCab cab booking management system.

1.3 INTENDED USE

This software requirement specification document for myCab cab booking management system is intended to be used as a reference document to understand functional, software, hardware and other requirements needed to develop the project product. It can it contains all the requirements upon which client agreed.

1.4 SCOPE

This digitalisation project have a wide scope. When it is implemented nation-wide, anyone who needs a cab ride in India can use myCab to book their ride and can have a great travel experience. It doesn’t exclude anyone. Through myCab app , passengers can book cabs and travel anywhere easily and Drivers who wants to be a part of myCab can also register.

This SRS document have scope beyond present use. It can be used in future as a reference document by business analysts,

2. OVERALL DESCRIPTION

2.1 USER NEEDS

Through myCab , users can register and then login to the app. There they can view or edit their profiles. They can search for desired cab and can book a ride anytime. Also if Wanted , they can cancel the ride and refunded. Passengers can view and download booking details and invoice. A driver who wants to join this venture can register and take passengers. Drivers would be able to see limited details of passengers and the route they want to take as well as their destination . Admin can see all these details of both drivers and passengers. If needed admin can disqualify drivers from registered list if any troubles found.

3. SYSTEM FEATURES AND REQUIREMENTS

3.1 FUNCTIONAL REQUIREMENTS(PASSENGER MODULE)

3.1.1 LOGIN PAGE:

The first page of " myCab " CMS will have log-in or sign up page. In the page centre, there will be 2 text boxes labelled Username(email or phone number. Refer 3.1.2) and Password(Refer 3.1.2). The place-holders for the text fields will be Mail/phone and password respectively. There will be a Word Captcha and an image verification(Grid images to select). To enter the captcha, there should be another text box next to the word captcha. An existing registered customer can be authenticated by entering his/her email/phone number and password , and entering correct captcha and selecting correct images. By clicking on Login button the user will be redirect to the home page.

If he/she is not an existing customer, he/she can be redirect to new user registration page by clicking sign-up/register option presented below the login button.

There should be a forgot password option below the user log-in area which will redirect the user to forgot password page.

3.1.2. USER REGISTRATION PAGE:

The non-existing users will be redirected to this page. There should be a greeting to the customer like "welcome to myCab". There should be a form with fields :-

* First name (Required, [max. length 30])
* Last name (Required, [max. length 30])
* Phone (Required, Unique, [country code + 10 numbers])
* E-mail (Required, Unique, email format, validation needed: [a-z A-Z 0-9 . ! # $ % & ' \* + / = ? ^ \_ ` { | } ~ - ] + @ [a-zA-Z0-9-]+(?:\.[a-zA-Z0-9-] )
* Residential address (Required)
* Date of birth (Required)
* Gender
* Aadhar number (optional,12 digits)
* Emergency contact (Required, [country code + 10 numbers])
* Relation to emergency contact
* Debit/Credit Card Info {Card Number, Expiration date, CVV, Name on card} [an option to save the user's card information under the RIB's new policy [Tokenisation] for future payments ][ optional]
* Password ([8 digits minimum, combination of numbers ,Uppercase letters, Lowercase letters and special characters ie symbols])
* Conform Password

There should be an verify option at the bottom of the registration page because once all these registration information is filled by the user, he/she may need to check it. The verify button is clicked, it will redirect the user to opt page.

3.1.3. OTP PAGE:

When a user enters this page, there must be an one time password generated and sent to the number that the user previously enter in the user registration page. There must be an text box where the user have to enter the otp that he/she received. The otp must be of length 6 digits and a combination of numbers and both upper and lower case letters. If the user faces any difficulties in receiving otp, there will a [resend otp] option in the page. When the resend otp option is selected, a new otp has to be created and send to the user's phone number. And once the user is verified, he/she will be redirected to Login page.

3.1.4. FORGOT PASSWORD PAGE:

The forgot password page will containing the text box where the user can either enter his/her phone number or email id. There will be an one time password created and sent to the phone number and email id. If the user faces any issues with receiving opt, there will be an resend option below the text box in which the otp has to be entered. Once the otp is entered correctly and the user is authenticated, he/she will be redirected to password creation page.

3.1.5. PASSWORD RESET/CREATION PAGE:

This page should contain two text boxes labelled Password ([8 digits minimum, combination of numbers ,Uppercase letters, Lowercase letters and special characters ie symbols]) & Conform Password. Password should validated against the complexity mentioned and inputs in both of these text boxes should be the same. If so password can be accepted and changed.

3.1.6. HOME PAGE

Home page should contain Dash board with options SEARCH,PROFILE,BOOKINGS and by default it could show search page

*3.1.7 SEARCH FACILITY PAGE:*

The search page gets these details :-

* Departure point/Pickup point(option to choose location on google map or to enter an address)
* Destination locations (option to choose location on google map or to enter an address)
* Date (DD/MM/YY)
* time (Hr:Min:Sec)
* Type of vehicle wanted (Text)
* Type of fuel use (Text)

And shows all the relevant results to the user in list view under the search button. Once all the required fields are entered in the search page, the search option will be enabled and by clicking it he/she can find the desired ride and select accordingly. The Result will be displayed on the basis of earliest pickup possible.

There will be a sort facility and should contain two options rating and pick up time.

The results shown in list view will contain Details :-

* Vehicle type and model (Char)
* Fuel type(Text)
* Drivers name (Text)
* How far is it (Distance from here)
* How much time will it take (Time to reach) to pickup(approx.)
* Approximate Fare (variable fare will be applied based on varying fuel prices ,Demand or rating, peak time or not )
* Offers (if applied)

User can click on these list tiles to select the cab for drive. When a cab is clicked , user will be re directed to booking page.

*3.1.8 PROFILE PAGE:*

In this page, the user profile can be viewed. All the Details that the user entered while registering would show in this page. And there should be a Button "Edit" which allows the user to edit his/her profile details.

*3.1.9 PREVIOUS BOOKINGS PAGE*

This page should view all the previous bookings in a listed format. Each tile contain Details :- Date of travel, Time of pick-up , Fare, Name of Driver ,Type, Model & Reg. No. of the cab, Booking time. And a cancel button should be active on the tile until 30 minutes before the pick-up time. There should be a ""contact for Help" button at the bottom of the previous bookings page and it should not move along with previous bookings list.

3.1.10 RIDE BOOKING PAGE :

In this page user should enter travel details.

* Departure point/Pickup point(option to choose location on google map or to enter an address)
* Destination locations (option to choose location on google map or to enter an address)
* Date
* time
* Number of passengers
* Have luggage (more than 30 kg or so) or not

After entering these details user can click on the Book button and it will redirect the user to the preview page.

3.1.11 RIDE PREVIEW PAGE:

Once the user enters this page, the details such as ;

* Departure point/Pickup point address
* [Destination location/address
* Date [dd/mm/yy]
* Time [hr: min]
* Route of the ride
* Assigned driver info(Name, license No., Address )
* [Type and model and Reg. number of the car for the ride]
* [Photos of the car]
* final fare

will be displayed in the page. At the bottom there will be a pay and confirm ride option available, by clicking which the user will be directed to the payment page. There will be another option conform and pay later which will redirect to the invoice generation page on clicking.

3.1.12 PAYMENT PAGE:

Payment page should present with options to payment such as Debit or Credit card, UPI , Net banking.

If card is selected the payment page will collect payment details :-{Card Number (min. 8 and Max.19 digits),Expiration date [date format],CVV (3-4 digits) ,Name on card ([30 letters]).

If UPI is selected then options to chose a UPI app should be presented. When user chooses a UPI app, then a text field to enter UPI id (of length 50 letters , unique , validation by format [a-z 0-9]@bankupiname) should be viewed and then a request to pay the amount should passed to that UPI app.

If net banking is selected , then a list of net-banking facilities should listed as per the tie-ups already made(This listing should be manifested using Radio buttons).User should be able to chose their net banking facility from the given list. Upon that selection user must be redirected to bank page to enter credentials. Then bank will send OTP to users number to facilitate the payment.

And once the payment is done the user is redirected to the ride conformation page.

3.1.13 RIDE CONFORMATION:

This page show the conformation of the ride booked by the user and allows the user to download a pdf of the ride details and a pdf of the invoice for the ride. After the user downloaded the pdfs, the user is redirected to the Bookings page.

3.1.14 CANCEL PAGE

When passenger clicks on the Cancel button on the bookings tile, a new Window pops up and it must contain a label like "Are you sure to cancel the ride? If yes briefly state the reason." followed by a text box of 5 lines(total 300 characters length)

3.1.15 CUSTOMER SERVICE PAGE

When passenger clicks on the help button at the bottom of bookings page, they will be directed to the service page. There will be a text box(minimum 300 char length) for stating the problem faced by customer. It's label would be "Please describe the problem" along with a submit button. Also customer care number and email should be displayed at the bottom of this page. There should be a place for giving star ratings to the driver as well as the application in this page.

3.2 FUNCTIONAL REQUIREMENTS(DRIVER MODULE)

3.2.1 LOGIN PAGE:

The first page of " myCab " CMS for drivers will have log-in or sign up page. In the page centre, there will be 2 text boxes labelled Username(email or phone number) and Password. The place-holders for the text fields will be Mail/phone and password respectively. There will be a Word Captcha and an image verification(Grid images to select). To enter the captcha, there should be another text box next to the word captcha. An existing registered driver can be authenticated by entering his/her email/phone number and password , and entering correct captcha and selecting correct images. By clicking on Login button this user(driver) will be redirect to the home page.

If he/she is not an existing driver, he/she can be redirect to new user(driver) registration page by clicking sign-up/register option presented below the login button.

There should be a forgot password option below the user log-in area which will redirect the user(driver) to forgot password page.

3.2.2. DRIVER REGISTRATION PAGE:

The non-existing users(driver) will be redirected to this page. There should be a greeting to the customer like "welcome to myCab". There should be a form with fields :-

* First name (Required, [max. length 30])
* Last name (Required, [max. length 30])
* Phone (Required, Unique, [country code + 10 numbers])
* E-mail (Required, Unique, email format, validation needed: [a-z A-Z 0-9 . ! # $ % & ' \* + / = ? ^ \_ ` { | } ~ - ] + @ [a-zA-Z0-9-]+(?:\.[a-zA-Z0-9-] )
* Residential address (Required)
* Date of birth (Required)
* Gender
* Aadhar number (optional,12 digits)
* Drivers license no.(Unique and valid DL required, validation by date and format : *The first two characters should be upper-case alphabets that represent the state code. The next two characters should be digits that represent the RTO code. The next four characters should be digits that represent the license issued in a year. The next seven characters should be any digits from 0-9)*
* Vehicle type
* Model
* Fuel type(Drop down list, Options : Petrol, Diesel, CNG)
* Vehicle Reg. No.(Validate format according to the state registration formats)
* Experience in years(number including decimals)
* Emergency contact(phone number)
* Relation to emergency contact(text)
* Bank details (where the payment to be sent):{Bank(text), Account number(number), IFSC Code(ifsc format), Branch(text) }
* Password ([8 digits minimum, combination of numbers ,Uppercase letters, Lowercase letters and special characters ie., symbols])
* Conform Password

There should be an verify option at the bottom of the registration page because once all these registration information is filled by the user, he/she may need to check it. The verify option will redirect the user to opt page.

3.2.3. OTP PAGE:

When a user(driver) enters this page, there must be an one time password generated and sent to the number that the user previously enter in the user registration page. There must be an text box where the user have to enter the opt that he/she received. The otp must be of length 6 digits and a combination of numbers and both upper and lower case letters. If the user faces any difficulties in receiving otp, there will a [resend otp] option in the page. When the resend otp option is selected, a new otp has to be created and send to the user's phone number. And once the user is verified, he/she will be redirected to Login page.

3.2.4. FORGOT PASSWORD PAGE:

The forget password page will containing the text box where the user can either enter his/her phone number or email id. There will be an one time password created and sent to the phone number and email id. If the user faces any issues with receiving otp, there will be an resend option below the text box in which the otp has to be entered. Once the otp is entered correctly and the user is authenticated, he/she will be redirected to password creation page.

3.2.5. PASSWORD RESET/CREATION PAGE:

This page should contain two text boxes labelled Password ([8 digits minimum, combination of numbers ,Uppercase letters, Lowercase letters and special characters ie., symbols]) & Conform Password. Password should validated against the complexity mentioned and inputs in both of these text boxes should be the same. If so password can be accepted and changed.

3.2.6. HOME PAGE

All the bookings shall be shown in the home page of driver as listed tiles. The tile must contain Details:  
 - Booking number , distance , pickup point, Destination, pick-up time\, fare, name and phone number of the passenger along with their emergency contact details. Also there should be number of passengers and luggage details visible as well.

* There should be two buttons " track" and "Reject" for driver so he can track the passenger and see routes to him/her and can cancel the ride in case of emergencies so that the ride could be assigned to another driver.
* If track button is pressed a google map page locating the passenger should appear.
* If Reject button is pressed , a pop-up to conform it should appear and then if conformed a cancel ride request from driver will be raised and the ride will be assigned to the next driver with same vehicle features and higher rating.
* If not available admin must be notified via notification and should contact the passenger.
* Once the travel is finished , track and reject buttons should become inactive.

3.3 FUNCTIONAL REQUIREMENTS(ADMIN MODULE)

3.3.1 LOGIN PAGE

The first page of " myCab " CMS for Admin will have log-in or sign up page. In the page centre, there will be 2 text boxes labelled Username(email or phone number) and Password. The place-holders for the text fields will be Mail/phone and password respectively. There will be a Word Captcha and an image verification(Grid images to select). To enter the captcha, there should be another text box next to the word captcha. An admin can be authenticated by entering his/her email/phone number (pre-set) and password , and entering correct captcha and selecting correct images. By clicking on Login button this user(driver) will be redirect to the home page.

There should be a forgot password option below the log-in area which will redirect the user(admin) to forgot password page.

3.3.2. FORGOT PASSWORD PAGE:

The forgot password page will containing the text box where the user can either enter his/her phone number or email id. There will be an one time password (The otp must be of length 6 digits and a combination of numbers and both upper and lower case letters. ) created and sent to the phone number and email id. If the user faces any issues with receiving otp, there will be an resend option below the text box in which the otp has to be entered. Once the otp is entered correctly and the user is authenticated, he/she will be redirected to password creation page.

3.3.3. OTP PAGE:

When a user enters this page, there must be an one time password generated and sent to the number that the user previously enter in the user registration page. There must be an text box where the user have to enter the otp that he/she received.

3.3.4 PASSWORD RESET PAGE:

This page should contain two text boxes labelled Password ([8 digits minimum, combination of numbers ,Uppercase letters, Lowercase letters and special characters ie symbols]) & Conform Password. Password should validated against the complexity mentioned and inputs in both of these text boxes should be the same. If it is so, password can be accepted and changed.

3.3.5 VIEW PASSENGERS PAGE:

In this page, details of registered customers should be visible:

* First name ( [max. length 30])(Ref. 3.1.2)
* Last name ( [max. length 30]) (Ref. 3.1.2)
* phone ( Unique, [country code + 10 numbers]) (Ref. 3.1.2)
* E-mail ( Unique, email format, validation needed: (Ref. 3.1.2)
* Residential address (Ref. 3.1.2)
* Date of birth (Ref. 3.1.2)
* Age(calculated from DOB) (Ref. 3.1.2)
* Gender
* Aadhar number (optional,12 digits) (Ref. 3.1.2)
* Emergency contact (Required, [country code + 10 numbers]) (Ref. 3.1.2)
* Relation to emergency contact (Ref. 3.1.2)
* App rating they given

3.3.6 VIEW DRIVERS PAGE:

In this page all details of driver should be available in a table manner:

* Full name (Ref. 3.2.2)
* Phone (Ref. 3.2.2)
* E-mail (Ref. 3.2.2)
* Residential address (Ref. 3.2.2)
* Date of birth (Ref. 3.2.2)
* Age
* Gender (Ref. 3.2.2)
* Aadhar number
* Drivers license no.
* Vehicle type
* Model
* Fuel type (Drop down list, Options : Petrol, Diesel, CNG)
* Vehicle Reg. No.
* Experience in years(number including decimals)
* Emergency contact (phone number)
* Relation to emergency contact (text)
* Bank details (where the payment to be sent)
* Driver rating

Also a button "Disqualify" will be at the last column of every row(for every registered driver).If it is pressed , a text "Disqualified" should be visible. A driver with status "disqualified" should not be able to register again if he/she is registering with the same license number.

3.3.7 VIEW BOOKINGS PAGE :

In this page admin should be able to see all bookings and details:

* Booking ID
* Passenger Name (Ref. 3.1.2)
* Passenger's Phone Number
* Passenger mail
* Total number of passengers
* Luggage present or not
* Travel Distance
* Fare
* Driver"s Name (Ref. 3.2.2)
* License
* Driver's Phone Number

3.3.8 VIEW NOTIFICATION PAGE:

Notification will be sent to admin when driver can't go to a ride assigned to him/her.In this page admin should see a leave request from driver with Driver ID, Name, License, Reason for deserting the ride.