Cab Management System SRS

## 1. INTRODUCTION

1.1 PURPOSE

The purpose of this document is to build a cab management system.

1.3 INTENDED AUDIENCE AND READING SUGGESTIONS

This project is a prototype for the cab management system, and it is restricted to the city premises. This has been implemented under the guidance of IT professionals. This project is useful for the cab management team and as well as for the customers.

1.4 PROJECT SCOPE

The purpose of the cab management system is to ease cab management and to create a convenient and easy-to-use application for customers, trying to book a cab. The system is based on a relational database with its cab management. Above all, we hope to provide a comfortable user experience along with the best pricing available.

## 2. OVERALL DESCRIPTION

2.1 PRODUCT PERSPECTIVE

A cab management system stores the following information

* + - **Cab details**

It includes cab number, driver’s details, driver’s rating and review along with the mobile number and fare of the journey.

* + - **Customer description**

It includes the customer's first name, last name, phone number, email id. Customers can review the cab details and can also edit their profile whenever they want.

* + - **Booking description**

It includes customer details, booking number, cab number, date and time of booking, date of travel, distance, pickup and drop off points and total amount.

2.2. USER CLASS and CHARACTERISTICS

Users of the system should be able to receive taxi information for trips between two specified locations at the requested day and time. Two different user permission kinds, Customer and Driver, will be supported by the system. Customers will be able to use customer-specific features, and drivers will be able to use driver-specific functions. The following activities should be possible for the client.

* new booking
* Cancel a cab
* See and modify a profile
* Reviewing and rating drivers
* Payment

Driver should have the following functions:

* Registration
* Confirmation of the cab
* Accept the payment

Administrative Functions:

* Reviewing the drivers
* Adding the driver
* Accepting or rejecting driver request
* Take actions against the mistake done by drivers
* Administrate all the functions
* Maintain a standard travelling cost

## 3. SYSTEM FEATURES

* DESCRIPTION and PRIORITY

The cab reservation system maintains information on the cab, driver's details, vehicle details, prices. Of course, this project has a high priority because it is very difficult to travel across cities without reservation in the busy world.

4 .FUNCTIONAL REQUIREMENTS

4.1 Login

Users can login using username[unique], email id [unique and validate email] or phone number [10-digit mobile number] and providing password. After that process if the password is correct then there will be a captcha and a picture for authentication. If the user forgot the password, then there should be a forget password where they can change the password and create a new password by sending a message to the given mail in the application or website. Below the username and password there should be a forget password option and there needs to be a button to login option. If the user has not created an account, then it should provide a sign-up option.

4.2 Registration

In registration page there should be need to provide the users

* First name [require a minimum of length 5, maximum length 20],
* Last name [require a minimum of length 5, maximum length 20],
* Date of birth [date required], gender [dropdown male, female, others]
* House number [valid house number and maximum length 25]]
* Place [required, maximum length 25]
* Country [required, dropdown list]
* Pin code[required, number, 6 numbers].

In next page it should include

* an email id [valid email id]
* username [length minimum 8 maximum 20]
* password [letters, numbers and special characters are required]

After creating password there should be an option for confirm password [same as the new password]. After the password is confirmed, it should move to the login page where the user can login using the username, email, password.

4.3 Home Page

After entering the login page by typing username, email, or mobile number and password it will move into the homepage. In the homepage there should be a search option, it should provide a profile of the user where in profile it should provide the ride details if he/she has travelled, and it provides how much fare and travel distance in each. It should show complete details of the journey they travelled, and the cab driver's name should be there on the history. The home page also provides the number of drivers in that area that should be shown.

4.4 Search

After entering the homepage, we can see a search option. If the user clicks on search option, it should provide a pop up for requesting to provide GPS location [valid location is required]. After collecting the GPS location, it should provide details of vehicles and drivers in that area and should also provide the cab drivers numbers along with the vehicle name and details on the map.

4.5 Booking

In search option it should pop up for gathering GPS location. After providing the GPS location by the user it should provide the details of cabs in that area on a map and under the map it should provide a button for booking a cab. When the user clicks on book a cab, it should move to a new page where it asks to enter the location from where the user wants to travel and up to where the user needs to travel.

After providing these details it should provide the number of cabs in that area and it provide how much fare is needed to travel for each vehicle and it should provide the details of the driver and their ratings provided by other customers.

After the customer selects the cab, it should provide the cab details and every detail about the driver including mobile number. After getting the mobile number the customer can call the cab driver and ask whether the cab driver is available or not. After being confirmed by the driver they should reach the customer.

4.6 Payment

After the journey user can pay the amount through payment page where it should provide the different payment types such as debit card payment [payment gateway is required], credit card payment [payment gateway is required], UPI [Upi id required or moves directly to the installed apps], cash on delivery.

After payment there should be an add-up option for paying a tip for the cab driver with an option of yes or no. If yes it should move to the payment option and then move to the feedback option or if it is not it should move to the feedback option.

4.7 Feedback

In the feedback page, it should display a page where it consists of star rating by the user for the driver and it should also provide to write review. The customer can skip it or can write a review about the driver and can also make him/her a top priority driver.

4.8 User Settings

The user can update the details when they need to change such as

* Phone number [10 digits, OTP need to send to new numbers]
* Address [House number, place, country]
* Email [unique email id, a mail should be sent to new email]

Details which cannot change

* username

4.9 Driver Login

Driver needs to sign in using the

* Username [unique id, length maximum 20].
* Password [letters, numbers, special characters].

If the driver forgot the username or password a new username or password option is needed.

If the driver is new, he/she should register by following details such as

* First name [require minimum length of 5, maximum 20]
* Last name [require minimum length of 5, maximum 20
* Email id [valid email id]
* Photo [passport size photo]
* Pan card number [valid pan id]
* Aadhar card [Aadhar number should be valid]
* Bank details [should provide nationalized bank account details]
* Username [unique id, length maximum 20]
* Password [letters, numbers, special characters]
* Vehicle name [vehicle model name and company name are required]
* RC Book details [copy of RC details should be provided]
* Insurance details of vehicle [details of insurance are required]
* Pollution paper of vehicle [pollution check paper is needed]
* License of the driver [a copy of license is required]

After registration the driver can login using the username and password and can enter the home page.

In the driver's homepage it provides the details of the driver is displayed and when he/she opens the page a pop up for GPS location is needed. When he/she provides the location the customer in that area knows this driver is in the area and can book the cab. If the customer requests the cab, on the driver's homepage there should be a message showing a customer is requesting a cab.

Along with the message there should be an option below it to accept the ride or reject. In that message provided to the driver there should need a detail description of the ride such as

* From where the ride starts
* Up to where the ride will end
* The amount of the ride
* The number of people in the ride

If the driver accepts the ride, the accepted message should be sent to the customer along with the driver’s mobile number.

4.10 Admin page

Admin can login using

* admin username [unique, length minimum 6 maximum 20]
* password. [letters, numbers, special characters]

It can enter the admin page where the admin should have the complete details of drivers.

Admin needs to check whether the entered vehicle and all other details of the vehicle entered by the driver is valid and it is secure for customers to travel.

Admin is needed to review the customers review about the driver and if the driver misbehaves to the customer, then the admin should provide a complaint ticket against that driver