Cab Management System

SRS

1. INTRODUCTION
   1. PURPOSE

The purpose of this document is to build an online system to manage passengers and cabs to ease the cab management

* 1. INTENDED AUDIENCE AND READING SUGGESTIONS

This project is a prototype for the cab management system. It is very useful for cab management for drivers and as well to the passengers also. It provides easy cab booking and cancellation

* 1. PROJECT SCOPE

The purpose of the online cab management system is to ease cab management and to create a convenient and easy-to-use application for passengers, trying to book cabs. The system is based on its reservation functions. We hope to provide a comfortable user experience along with the best pricing available.

1. OVERALL DESCRIPTION
   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 arear in which the cab is working the number seats available

* + - **Customer description**

It includes the customer's first name, last name, phone number, email id. Customers can 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.

* 1. USER CLASS and CHARACTERISTICS

Users of the system should be able to retrieve cab information between two given points with the given date/time of travel. The system will support two types of user privileges, Customer and Driver. Customers will have access to customer functions, and the driver will have access to driver functions. The customer should be able to do the following functions.

* + - Make new booking
    - Cancel an existing booking
    - View and edit profile
    - Rate and review drivers

DRIVER FUNCTIONS

* + - can select their area of working like a city or a whole district (Should use their current location to determine the city or district), they can also get long distance routes
    - Driver can change the status like they are **available** or **not available**
    - The booking amount that customers pay should be credited to their bank account after taking a 10% commission.
    - Alert the driver in SMS and email if there is a booking
    - They can see their rating and reviews

ADMINISTRATIVE FUNCTIONS

* + - Can **block/unblock** the customers and drivers
    - They can view the driver's details and verify it.
    - They can view the rating and reviews of drivers
    - They should set the price per kilometer based on the type of car (the available types should be shown as drop-down list and price should not be more than the current market price)
    - They can monitor all the payments and there should be an option to generate report monthly or weekly showing the
      * Total amount
      * Total commission
      * No of journeys completed
      * Total kilometers
      * No of customers
      * No of drivers
      * No of cancellations

1. SYSTEM FEATURES
   1. DESCRIPTION and PRIORITY

The airline reservation system maintains information on flights, classes of seats, personal preferences, prices, and bookings. Of course, this project has a high priority because it is very difficult to travel across countries without prior reservations.

* 1. STIMULUS/RESPONSE SEQUENCES
* Search for near cabs between two destinations
* Displays a detailed list of available cabs and make a “Reservation” or book a particular cab
* Cancel existing reservation
  1. FUNCTIONAL REQUIREMENTS

Other system features include:

* + LOGIN

A registered customer can login to the system using his **email** or **phone no** and with the given **password** (OTP login also should be there). Include password recovery also (customer can recover the password by OTP verification send to his email or phone no).

* + CUSTOMER SIGN UP

A customer can sign up by giving his

* **first name** (should not contain number or a special character)
* **last name** (should not contain a number or a special character)
* **email Id** (Should be in proper email format and Unique)
* **Phone** **No** (Should be in proper format and unique)
* **password** (the password must be min 8 characters and should contain an uppercase letter and a special character). The email and Phone no should be verified with OTP.
  + DRIVER SIGN UP

A driver can sign up by giving his

* **first name** (should not contain number or a special character)
* **last name** (should not contain a number or a special character)
* **email Id** (Should be in proper email format and Unique)
* **Phone** **No** (Should be in proper format and unique)
* **password** (the password must be min 8 characters and should contain an uppercase letter and a special character).

After login driver should update the following details

* **License No** (Should be in proper license format)
* **Registration No** (Should be in proper Registration No format)
* **Car type** (Provide a drop-down list with all the type of cars)
* **Address details** (validate details like)
* **Adhaar No** (validate Proper Adhaar format),
* **Pan No** (validate pan number).

The driver can only use the web app after verifying all the details by the admin. After verification he should have access to his profile page so that the driver can update personal details, email id, phone number, etc. Also, they must update their bank account details like

* **Bank name** (provide search and choose option)
* **Acc number** (Should check the format is in the required way)
* **IFSC code** (Branch should automatically be shown after typing the IFSC code) also there should be an option to search the bank branch.
  + SEARCH

Search for cabs by providing

* + **Date of journey** (previous date not allowed),
  + **Pickup point** (can choose their current location or search and choose from maps)
  + **Drop off point** (search and choose from maps)
  + **Time of pickup** (valid time).
  + PAYMENT

A customer can select a cab from the cabs searched and book that cab after the payment is made

* + Price should not be more than the current market price
  + Proper price should be shown
  + All methods of payments should be there
  + Payment should be fast and convenient
  + Should generate an invoice
  + RATING & REVIEW

Customers can rate and review the driver after completing the journey.

* + **Rating** (show 5 stars)
  + **Review** (max 100 words)
  + **Details about the journey**
  + **Date and time** (use system date and time)
  + REPORT GENERATION

Admin can generate a report monthly or weekly that should show the following.

* + **Total amount**
  + **Total commission**
  + **No of journeys completed**
  + **Total kilometers**
  + **No of customers**
  + **No of drivers**
  + **No of cancellations**
  + BOOKING

Booking details include:

* + **Customer details**
  + **Booking number** (unique)
  + **Cab number**
  + **Date and time of booking** (use system date and time)
  + **Date of travel** (do not include past dates)
  + **Distance** (calculate distance based on the pickup and drop off points)
  + **Pickup and drop off points** (can choose their current location or search and choose from maps)
  + **Total amount.**