**MyCab**

1. **Introduction**
   1. **Purpose of this document**

The purpose of this document is to present a detailed description of the myCab (cab service management). It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This document is intended for both the stakeholders and the developers of the system.

* 1. **Scope of this document**

The major goal of this system is to meet the needs of its customers directly at their doorstep. The process of hailing a cab becomes much easier and convenient while booking a cab through this system. The driver is advised of the customer and their pickup location. When customers use open-ended services, they can read the invoice bill and booking details when they arrive at the drop-off site.

* 1. **General Description**

myCab is a growing Cab services management company. They wanted to digitalise their cab management services system. They operate cabs locally and for long distance travels. They have a variety of cab models to offer to the customers. It makes life much easier for :

I. The traveller - this is highly important and in today's internet age people should be able to book taxis online without having to pick up the phone and

II. The Cab driver - as all their bookings are now managed via an automated system

1. **Actors**

* Passenger
* Admin
* Cab driver

1. **Functionalities**

* Login and Registration
* Search cab
* Book cab
* Payment
* Invoice download
* Update profile
* Feedback
* Add cab (By driver)
* Update cab details (By driver)
* Delete profile (By user)
* Remove users (By admin)

1. **Functional Requirements**
   1. **USER**

[The passenger application](https://infinitecab.com/passenger-app/) allows users to hire cabs from anywhere, at any time. They can select their preferred cab model as well as the time of pickup. The passenger will be contacted by the driver when the taxi arrives. Passengers get to enjoy a stress-free booking process.

**Landing page**

Navigation bar which contains company logo and name at top of page with option to login if user not logged In. This navbar will be present on all the pages with a logout option after a user is logged in. At centre of page there is an option to choose ride mode (daily ride or outstation ride) and fields to input starting location, destination and time of ride and a search button. After clicking search on landing page the data should passed to cab listing page and list the available cabs in that page. While inputting location in input fields show location suggestions.

* Starting location [required min-length: 1, text]
* Destination [required min-length: 1, text]
* Date and time of travel [required, datetime] [validate date (user cannot select past date and time) ]

**Registration**

Registration page enables users to independently register and gain access to the system. The registration form contains a list of fields that a user will input data into and submit to the company. User registration is divided into two categories: passenger registration and user registration. Required details for user registration are:

Fields common for passenger and driver:

* First Name [required minlength 1, maxlength 20]
* Last Name [required minlength 1, maxlength 20]
* Mobile number [10 digits, numeric]
* Age [numeric (integer)]
* Email [unique] [validation for email]
* Gender [ dropdown (male, female, other) ][required]
* House No [required][maxlength (25)]
* Place [required] [max length (25)]
* Pin code [number] [6 digits min & max]

Fields applicable for driver:

* License number [required, numeric]
* Year of experience [required, year]
* Vehicle type
* Vehicle brand
* Vehicle model
* Vehicle number
* Fare per km

**Login**

OTP based login system is used in this application. Login page contains a field to enter mobile number of users, links to passenger registration and driver registration and a submit button.

* Phone number [maximum of 10 numbers, country code (+91)]

If account not found in the system, then redirect to user registration.

**OTP**

In OTP page, a textbox is given to enter the one-time password which is sent to the user's phone number along with a resend button and verify button to complete the operation. If a user fails to verify his/her identity by entering the wrong OTP, that user will be redirected back to the login page. If verified properly, the user is redirected to their respective dashboard page depending on their role.

**Cab listing**

On the top of cab listing page should contain option to choose ride, fields to enter starting location, destination, and time of ride. First time loading the cab selection page use the data which user entered in the landing page to list cabs. Users can change the starting location and destination in cab selection page. List all cabs available according to users need along with vehicle type, fare, time takes to arrive at user’s location. Only show available cab details. Fare of cab depends on the type of cab.

* Starting location [required min-length: 1, text]
* Destination [required min-length: 1, text]
* Date and time of travel [required, datetime] [validate date (user cannot select past date and time) ]

**Cab Booking**

Users need to be logged in to book a cab. If user is not logged in page redirect to login page. Cab booking page contains information such as cab type, pickup location, drop location, fare, option to select payment method and button to continue booking. After clicking the button, the page will redirect to payment section.

* Payment method [required, dropdown (UPI, debit card, cash)]

**Payment**

The user may choose among the available payment options including direct cash payments.

Users can do payment in different ways such as:

* UPI
* Debit card

If user choose UPI, a text field will popup asking for UPI id. After entering UPI id, check whether the UPI exists or not, and an option to continue. If user select debit card three text fields and a continue button will be shown, user need to enter card number, CVV number and the validity or card. Check whether the entered card number and CVV are numeric. Card number required 16 digits and CVV is 3 digits. Format to enter card validity is MM-YY and check if the card is expired or not, if expired show a message “enter valid card”. After pressing continue button it will check if all the information’s are correct and if yes, it will make the payment and the user will be redirected to invoice page.

**Invoice**

Users can download invoice after completing payment. Invoice page inlcudes a button to download invoice in pdf format. Information’s included in invoice are:

* User’s name
* User address and contact details
* Transaction id and time
* Booking date, time, and id

**Profile (Passenger)**

Profile includes the complete details of user such as personal details, previous ride history, option to edit profile details, delete user account.

* Update button
* Delete button
* Ride history

**Profile (Driver)**

Driver Profile includes the complete details of driver such as personal details, previous ride history, total number of rides, total earnings, vehicle details and options to update vehicle details, profile, and delete driver profile.

* Update profile button
* Update vehicle
* Delete button
* Work history

**Update** **Profile**

Update profile page allows users to edit person details. This is the page where user is redirected after clicking update profile option in profile page. Users can update all details except email id and registered phone number.

* + Form which includes user details
  + Update button

**Feedback**

Feedback form contains a subject, description, and a rating system (out of 5). The passenger can give feedback about the cab driver and ride experience after completing a ride.

* Subject [optional, text]
* Description [optional, text]
* Rating
* Submit button
  1. **ADMIN**

The admin panel acts as the control unit of the entire system. The home screen is organized in an orderly manner, with functions and indicators neatly placed to provide a better user experience and easier navigation. A statistical graph showing trips and cash flow, booked trips, canceled trips, and online users are all displayed quickly on the home page. The home screen also shows fare details for each cab type, as well as ongoing rides and feedback about drivers.

**Login**

Admin login page contains text fields for entering username and password, and a login button.

* + Username
  + Password

After verifying username and password, page will redirect to admin dashboard.

**Admin Dashboard**

This is the page where Admin will be redirected. In this page, admin can view feedback about drivers, view all bookings, view cab details, view all cancelled rides, option to remove users, view all users.

* Feedback and report button
* List users
* View booking
* View cancelled rides
* View cabs

1. **Non-Functional Requirements**

* Security
* Accessibility
* Availability