Car Pooling SRS
Group-3

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Introduction:

Aim of this software specification requirements document is to provide a complete description of all of the features that are planned to implement to system and define the expectations from the Carpool project. It also describes how the system operates and how users interact with the application. Besides external systems and interfaces which the application depends, are specified in this SRS document The potential audiences for this document are design and development team of the Carpool Project in order to specify software designs. Test team utilizes this software specification requirements document to define test scenarios according to the mentioned requirements. Besides project manager, quality manager and acquirer use this SRS document for reviewing purposes.

Scope:

The Carpool Project is an MVC (Model-View-Controller) web based application which includes user interaction. Our project is going to be a app portal. It is going to provide communication environment for users (drivers and passengers). Every user has their own profiles and they can have access with given password to the system

Overview:

The rest of the document contains overall description of the system which includes interface properties, product functions and dependencies. In addition, it contains system specific requirements which composed of functional and non functional requirements. Moreover, there will be data and description models of the system and these models are specified with diagrams such as use cases. And finally at the end of the document, there is conclusion part which explains the overall description about the system.

Description:

The drivers can draw their routes from map in our App. And passengers can communicate with the driver via the messaging system and pick their path. After mutual agreement with each other, they record the transportation information to the system. At the end, users can access each other via feedback system

Carpooling, also known as ride-sharing, is a transportation model where individuals share a vehicle for their commute or travel. In carpooling, a driver with a private vehicle picks up passengers who are heading in the same direction or to the same destination and shares the ride with them. Carpooling can be organized through various means, such as social media, websites, mobile apps, or even bulletin boards. The main goal of carpooling is to reduce the number of single-occupancy vehicles on the road, which helps to reduce traffic congestion, decrease carbon emissions, and save fuel costs. Carpooling can also provide a more social and cost-effective mode of transportation for individuals who may not have access to public transportation or prefer not to drive alone

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Carpooling can be structured in various ways, such as formal or informal arrangements, with or without payment, and can be organized for regular or occasional travel. Carpooling can be implemented in various settings, including corporate, educational, and residential areas, and can involve carpooling with co-workers, classmates, or strangers. Overall, carpooling offers a sustainable and convenient transportation option that benefits both the environment and individuals.

Functional Requirements:

Sign Up: Users need to sign up to use the web site. The users should have a username and password. After filling their name, surname, email, age, job, phone and gender information, they register the system.

Sign In: If a user is signed up, s/he can sign in the system by filling username and password boxes.

Sign Out: A user may need to sign out the system. S/he can do it by clicking the sign out button which is placed in every page.

Add Transportation Route: Users may add transportations by specifying a route, time/time period and number of empty seats

Payment Processing: The application should have a secure payment gateway to process payments for the rides booked and calculate fare based on distance travelled, number of passengers, and other factors

Rating and Review System: The application should have a rating and review system that allows users to rate their ride experience, provide feedback on the driver or passenger, and help improve the overall quality of the service.

Real-time Tracking: The application should have a real-time tracking system that allows users to track the location of their ride and estimate the time of arrival.

Non-Functional Requirements:

Performance: Carpooling platforms must have fast response times and provide reliable service to handle the high volume of requests and provide a smooth user experience.

Security and Privacy: Carpooling platforms should ensure that users' personal data and payment information are protected from unauthorized access and misuse. They should also ensure the safety of passengers and drivers by implementing safety features and conducting background checks.

Availability and Scalability: Carpooling platforms should be available 24/7 and be able to handle a large number of users, especially during peak hours. The platform should be scalable to accommodate the growing user base and changing demands.

Usability: Carpooling platforms should be user-friendly and easy to use for both drivers and passengers. The platform should provide clear instructions on how to book a ride, manage bookings, and communicate with other users.

Compatibility: Carpooling platforms should be compatible with various devices and operating systems to allow users to access the platform using their preferred devices.

Accessibility: Carpooling platforms should be accessible to all users, including those with disabilities. The platform should be designed to comply with accessibility guidelines, such as providing text alternatives for images and videos.

Reliability: Carpooling platforms should provide reliable service and minimize downtime, ensuring that users can book rides without interruptions.

Overall, non-functional requirements of carpooling are essential to provide a seamless user experience, protect user data, ensure safety, and maintain the platform's availability and reliability

User Interface Design:

Login/Registration Screen: The application should have a login screen that allows users to log in using their email address or social media creden tials. The registration screen should allow new users to create an account and provide their personal details.

Home Screen: The home screen should display the user's profile, previ ous ride history, and options to book a new ride or view available rides.

Ride Booking Screen: The ride booking screen should allow users to search for available rides based on their origin and destination, view ride details, and select a ride based on their preferences.

Driver and Passenger Profile Screen: The driver and passenger pro file screen should allow users to view and edit their personal details, vehicle information, availability, and other relevant information.

Ride Sharing Options Screen: The ride sharing options screen should allow users to choose the number of passengers they are willing to share their ride with, set fare splitting options, and select preferred passengers or drivers.

Payment Processing Screen: The payment processing screen should display the fare amount, allow users to add payment methods, and process payments securely.

Rating and Review Screen: The rating and review screen should al low users to rate their ride experience, provide feedback on the driver or passenger, and view ratings and reviews of other users.

Appendix:

Sample forms: Ride request form for passengers to submit their details and request a ride. Driver and passenger agreement form outlining the terms and conditions of the car-pooling arrangement. Liability waiver form to protect the driver and passengers from any potential accidents or incidents.

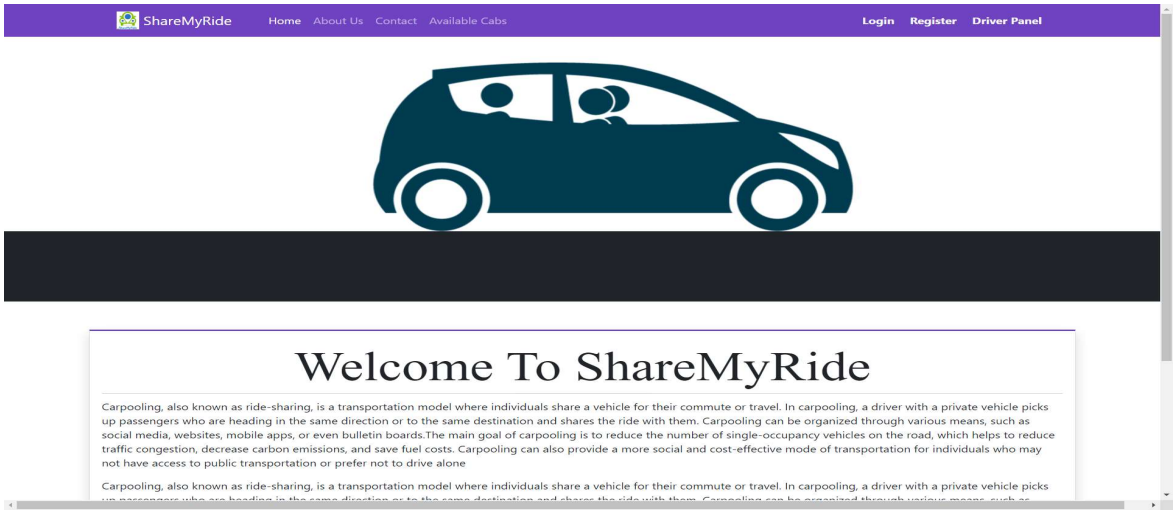
Maps: Map of the local area with carpooling hubs and pickup/drop-off locations highlighted. Route map for commonly travelled routes to help users plan their trips.

Safety guidelines: Safety tips for drivers and passengers, including recommendations for seat belt usage, avoiding distractions while driving, and adhering to traffic laws. Emergency procedures, such as what to do in case of an accident or breakdown.

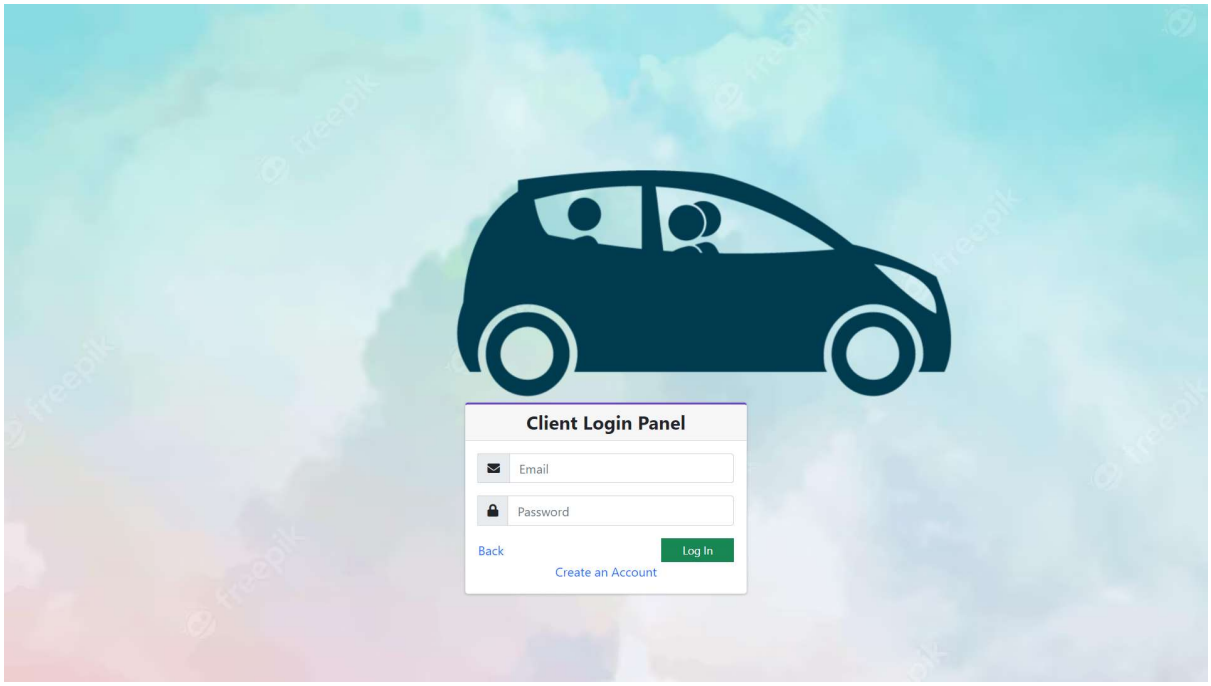
User feedback: Testimonials from satisfied carpooling users. Reviews of the carpooling platform from reputable sources or users.

Pricing information: Pricing model, including any fees or charges for using the carpooling platform. Payment options, such as credit card, PayPal, or other electronic payment methods. Incentives for carpooling users, such as discounts, rewards, or other benefits. Overall, an appendix for a carpooling document could provide users with additional information that supports the main content and helps them to better understand the carpooling process.

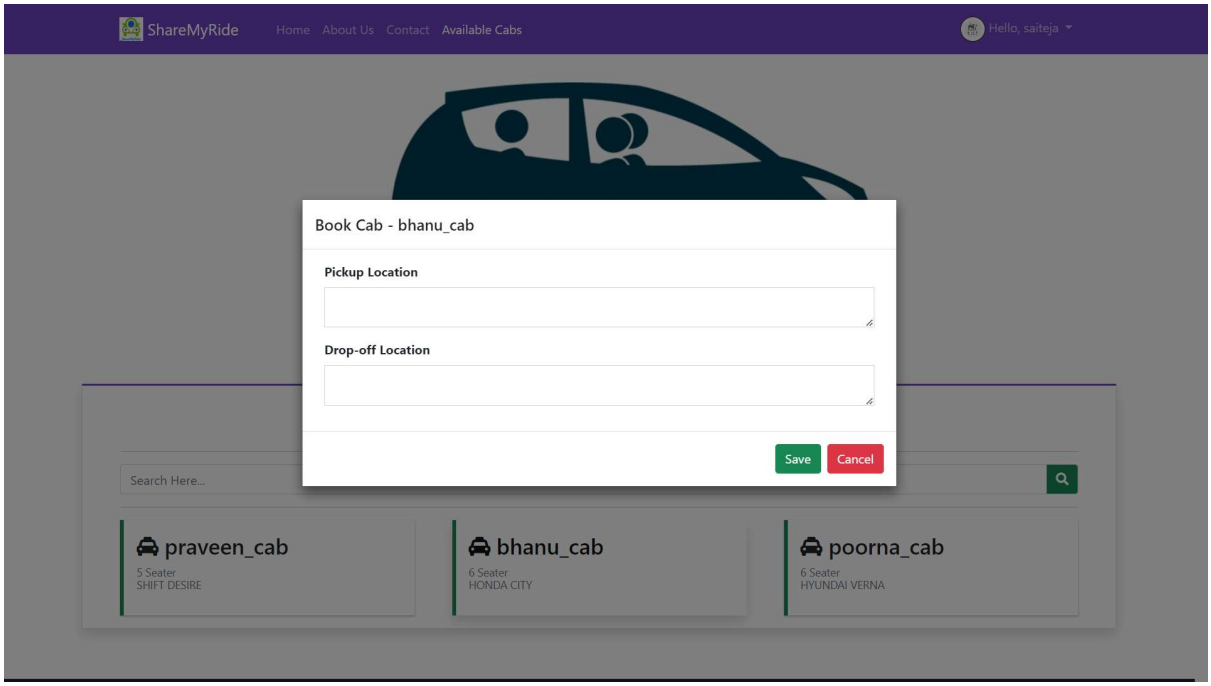
Home Screen



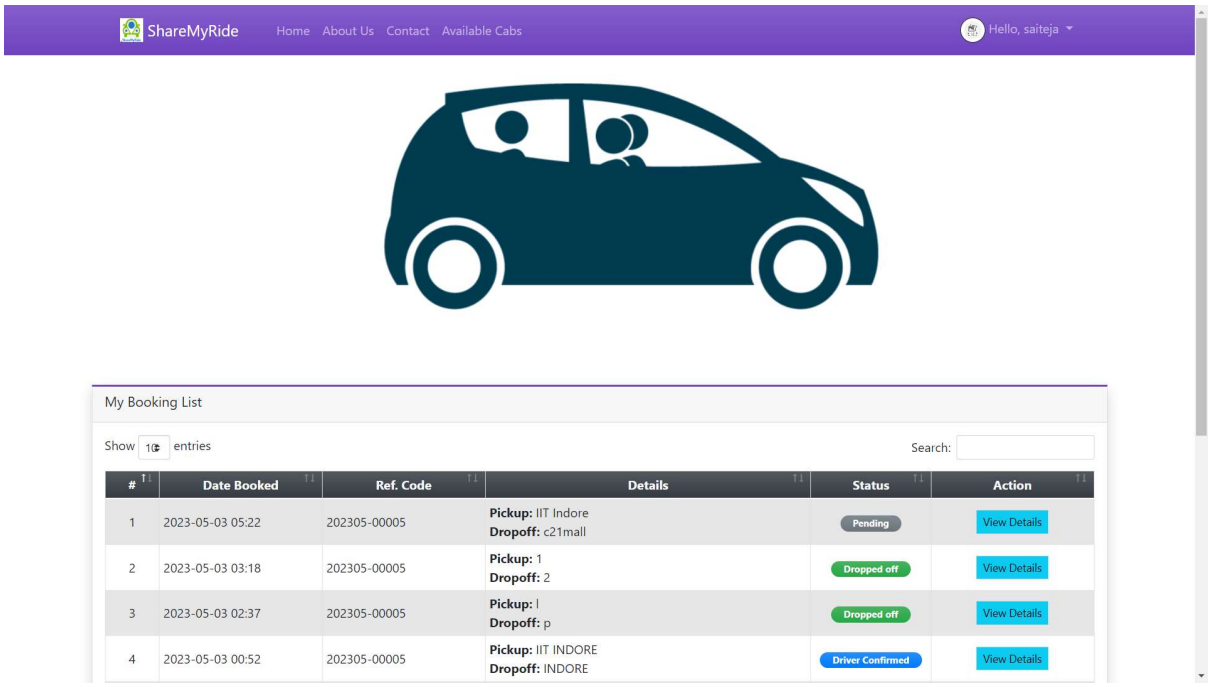
Client Login:



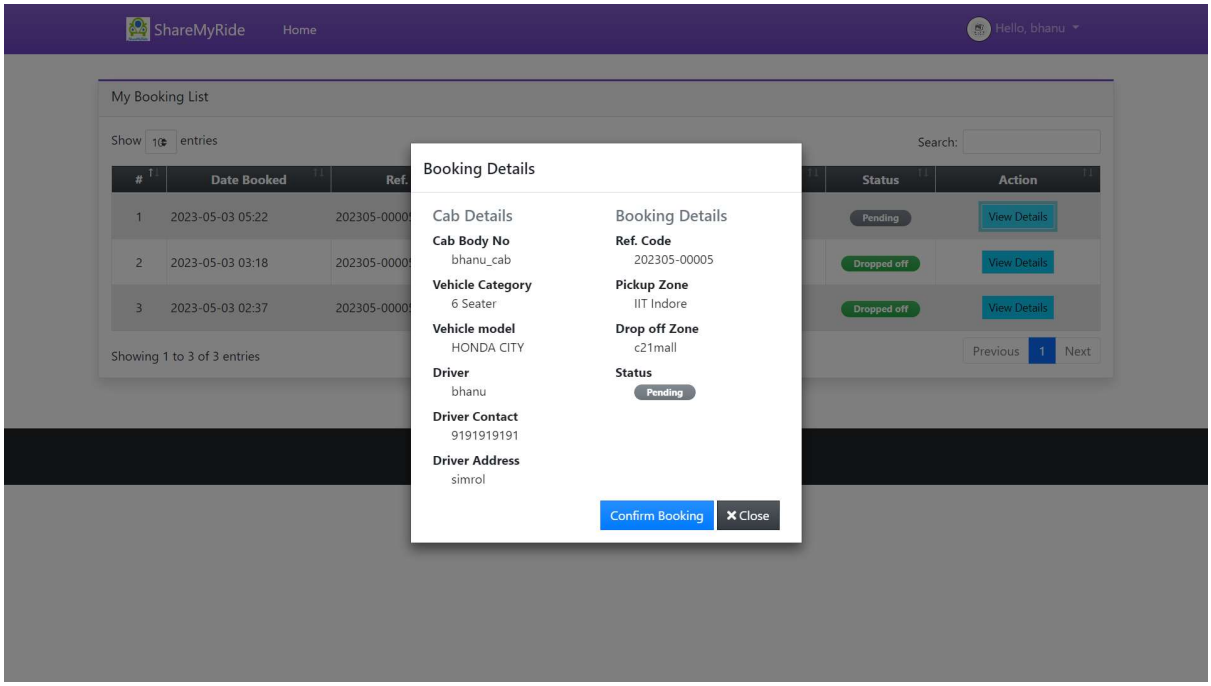
Booking Screen:



My Booking List:



Driver Booking Accepting Ride:



Admin Adding Drivers: