Vision and Scope Document

for

Carpooling System

Version 1.0 approved

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1. Business Requirements

The Carpooling System must address the growing need for affordable, convenient transportation while reducing environmental impact. It must ensure seamless user experience, security, and trust to gain wide adoption among urban commuters.

1.1. Background

The Carpooling System is designed to help individuals share rides efficiently, reducing transportation costs and the environmental impact of single-occupancy vehicles. This project aims to create a digital platform that connects drivers and passengers for shared trips, providing convenience and cost savings.

1.2. Business Opportunity

The rise in fuel prices and increased environmental awareness present a prime opportunity for carpooling services. There is a growing need for solutions that provide users with more affordable and environmentally friendly commuting options. This project targets urban commuters, students, and frequent travelers who are open to ride-sharing to save costs and minimize their carbon footprint.

1.3. Business Objectives and Success Criteria

The Carpooling System seeks to:

- *Facilitate connections between drivers and passengers for shared rides.*
- *Ensure safety and trust between users through a verification system.*
- *Provide an intuitive, easy-to-use interface for scheduling and booking rides.*

Success will be measured by user adoption rates, ride-sharing match success (percentage of rides fulfilled), and user feedback ratings. A user base of 10,000 within the first year would be a significant marker of success.

1.4. Customer or Market Needs

Users require:

- *A reliable and easy way to find or offer rides.*
- *Features such as ride scheduling, real-time tracking, and transparent payment options.*
- *Safety measures like user verification and ratings to ensure trust in the platform.*

1.5. Business Risks

Potential risks include:

- *Competition from existing ride-hailing services.*
- *Low user adoption if the platform doesn't meet safety and convenience standards.*
- *Technological risks related to system scalability as the user base grows.*

2. Vision of the Solution

The platform aims to make commuting easier by connecting passengers and drivers for shared rides, fostering a cost-effective and eco-friendly travel experience. It will offer real-time ride matching, in-app payments, and user safety features to build a reliable community.

2.1. Vision Statement

The Carpooling System will revolutionize daily commuting by providing a platform for users to share rides effortlessly. This system will match passengers with drivers traveling to similar destinations, ensuring convenience, affordability, and a reduced environmental footprint.

2.2. Major Features

- User Registration and Verification: Ensures safety by requiring users to verify their identities.
- Ride Matching: Matches passengers with drivers based on route and availability.
- Payment Integration: Facilitates in-app payments between drivers and passengers.
- Rating System: Allows users to rate each other to build trust within the community.
- Real-Time Tracking: Enables passengers and drivers to track their rides in real-time.

2.3. Assumptions and Dependencies

- Assumes users will have smartphones with internet access.
- Relies on third-party payment gateways and mapping APIs for core functionality.
- Dependent on user trust and adoption for success.

3. Scope and Limitations

The initial release will focus on providing core ride-matching functionality and secure payments. However, the system will not handle legalities such as insurance for rides or provide vehicles and drivers, acting solely as a facilitator.

3.1. Scope of Initial Release

The initial release will include:

- *Basic ride-matching functionality.*
- *User registration and verification system.*
- *Payment integration.*
- *A simple user interface for booking and offering rides.*

3.2. Scope of Subsequent Releases

Future releases may include:

- Advanced features like route optimization and ride-sharing for long-distance travel.
- Carpooling for corporate employees with dedicated features like group bookings.
- Integration with public transport systems to offer hybrid travel solutions.

3.3. Limitations and Exclusions

• The system will not provide vehicles or drivers; it will only act as a platform for connecting users.
• Legal aspects such as insurance for shared rides are outside the system's scope and must be handled by users independently.

4. Business Context

The project targets urban commuters seeking flexible transportation options and drivers looking to share fuel costs. It must cater to a growing user base while maintaining a secure, reliable platform in competitive ride-sharing markets.

4.1. Stakeholder Profiles

Stakeholder	*Major Value*	*Major Interests*
Commuters	*Cost-effective and convenient transport*	*Easy booking, safety, and transparency*
Drivers	*Increased income and shared fuel costs*	*Flexible ride offers, trusted passengers*
App Owners	*Revenue through fees*	*High user adoption and engagement*

4.2. Project Priorities

• **User Safety and Trust**: The platform must ensure user verification and a safe ride experience.
• **Scalability**: The system must support a growing number of users without performance issues.
• **Time to Market**: An MVP (Minimum Viable Product) should be available within six months.

4.3. Operating Environment

The system will primarily operate on Android and iOS devices, with a web version for booking. It will depend on cloud-based hosting for scalability and availability.