

Project Report: Ride Sharing and CO2 Emissions

Executive Summary

Project Name: Ride Sharing and CO2 Emissions

Project Duration: 30 days

Project Team: YP

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Project Sponsor: IBM Smart Bridge

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Ride Sharing and CO2 Emissions

1. Introduction

1.1 Purpose

The purpose of this document is to define the software requirements for the development of a Ride Sharing and CO2 Emissions application. The application aims to promote sustainable transportation by facilitating ride pooling, reducing CO2 emissions, and providing users with insights into the environmental impact of their rides.

1.2 Scope

The software will allow users to register, log in, book rides, and check the CO2 emissions associated with various vehicle types and fuel options.

1.3 Overview

The application will provide a platform for users to connect and share rides, promoting eco-friendly transportation practices. Additionally, users can monitor and assess the CO2 emissions of their rides based on vehicle types and fuel choices.

2. Functional Requirements

2.1 User Registration

2.1.1 Description

Users must register for an account to access the application's features.

2.1.2 Requirements

Users shall provide a valid email address, username, and password for registration.

The system shall verify the uniqueness of the email address and username.

Users must confirm their registration via email verification.

2.2 User Login

2.2.1 Description

Registered users shall be able to log in to their accounts securely.

2.2.2 Requirements

Users shall enter their registered email and password for authentication.

The system shall validate the user's credentials and grant access if they are correct.

2.3 Ride Booking

2.3.1 Description

Users shall be able to book rides through the application.

2.3.2 Requirements

Users shall have the option to enter their desired pickup and drop-off locations.

The system shall display available ride options based on user input.

Users shall be able to confirm and book a ride.

2.4 CO2 Emission Check

2.4.1 Description

Users shall have the ability to check the CO2 emissions associated with their rides.

2.4.2 Requirements

The system shall provide a CO2 emission calculator based on the selected vehicle type and fuel option.

Users shall have the option to view the environmental impact of their booked or completed rides.

3. Non-functional Requirements

3.1 Performance

3.1.1 Description

The system must perform efficiently to handle user registrations, logins, ride bookings, and CO2 emission calculations.

3.1.2 Requirements

The application shall have a response time of less than 3 seconds for user interactions.

3.2 Security

3.2.1 Description

The application must ensure the security of user data and transactions.

3.2.2 Requirements

User passwords shall be securely hashed and stored.

The system shall use encryption for data transmission.

3.3 Usability

3.3.1 Description

The application must be user-friendly and intuitive.

3.3.2 Requirements

The user interface shall be designed for easy navigation.

Help and guidance features shall be provided.

4. Constraints

4.1 Technology

The application shall be developed using [chosen technology stack].

4.2 Regulatory

The system shall comply with data protection and privacy regulations.

5. Future Enhancements

5.1 Social Integration

Implement social media integration for sharing ride details and promoting the application.

5.2 Environmental Impact Analytics

Enhance the CO2 emission tracking feature with detailed analytics and suggestions for reducing environmental impact.

6. Technology Stack

The application will be developed using the following technology stack:

Frontend: HTML CSS

Backend: Python Flask

Database: IBM DB2

Hosting: GitHub

7. Project Methodology

The project will follow an agile development methodology, with iterative releases and continuous feedback from stakeholders. Regular sprint meetings will be conducted to ensure alignment with project goals.

8. Project Implementation

The implementation phase will involve the development of user registration, login, ride booking, and CO2 emission check functionalities. Continuous integration and version control will be used to manage the development process.



Climate Changes is Serious Problem

For reducing it we came with this new idea for car sharing and Co2 Emission is calculated by our website.



WELCOME BACK !

Don't have an account, [Sign Up](#)

Username

test123

Password



Login

Or Sign in with social platforms





REGISTER HERE !

Have an account, [Sign In](#)

Username

Email

Password



Sign Up

Or Sign in with social platforms



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 Co2e_pp :



CARS CO2 EMISSION

Car co2 Emission content based on Distance And Fuel.

CAR

 Co2e :



BUS AND MINI-VAN CO2 EMISSION

Bus and Mini-van co2 Emission content based on Distance And Fuel.

BUS

VAN



BIKE CO2 EMISSION



Bike co2 Emission content based on Distance And Fuel.

BIKE

[+ Publish a Ride](#)

Your pick of rides at low prices



Name	Phone	Leaving	Going	People	Booking
 John test123	+919441730912	Ahmedabad	Pune	2	<input type="button" value="Book"/>
 Lucky test123	9441730912	Hyderabad	Kolkata	3	<input type="button" value="Book"/>



9. Testing and Quality Assurance

Comprehensive testing will be conducted, including unit testing, integration testing, and user acceptance testing. Quality assurance processes will ensure the reliability, security, and performance of the application.

10. Project Management

Project management will involve the use of project management tools to track progress, manage tasks, and communicate effectively among the development team. Regular status updates will be provided to stakeholders.

11. Conclusion

This Software Requirement Specification outlines the functional and non-functional requirements for the development of the Ride Sharing and CO2 Emissions application. It aims to provide a sustainable solution for transportation while ensuring user convenience and environmental awareness.