## **Description:**

The "Community Carpool Connect (C3)" platform is designed as a simple yet effective online carpooling(car sharing) service that aims to promote eco-friendly and efficient travel. With the use of MongoDB for managing data, C3 offers various features that make it easy for users to connect and share rides. The focus is on creating a user-friendly service that provides essential carpooling functionalities without being overly complex.

## **Key features:**

**User Registration (Drivers and Riders):** Signing is straightforward. <u>Riders</u> need to enter their name, contact info, and email. <u>Drivers</u> must enter additional details, including their name, contact info, and their car's information such as the license plate, make, model, and type. This ensures C3 collects all the essential info while keeping everyone's data secure. MongoDB is used to keep all this information neatly organized.

**Route and Schedule Listing (Schedule)**: Both <u>drivers</u> and <u>riders</u> will have the ability to list their commuting routes and schedules. Drivers can include details such as the start and end points of their journeys, day, time, and capacity, while riders can specify their preferred pickup and drop-off locations, number of riders, time, and day. MongoDB's flexible schema will adeptly accommodate these diverse data inputs.

**Manual Matchmaking (Bookings):** C3 will enable both <u>drivers</u> and <u>passengers</u> to manually search for compatible carpool partners based on location, time, date and capacity. This straightforward approach, powered by MongoDB's robust querying capabilities, simplifies the matchmaking process without the need for complex algorithms.

**Direct Communication:** C3 will facilitate user interaction by providing the option to share mobile numbers between users, contingent upon their consent. This method streamlines communication, allowing drivers and passengers to coordinate directly

**Secure Payment and Wallet System**: C3 will introduce a secure payment and <u>wallet system</u> for both <u>riders</u> and <u>drivers</u>, facilitating smooth financial transactions within the platform. Riders will have a wallet to pay for rides, while drivers will have a wallet to receive payments. Every transaction will involve a small commission for the platform, managed by the admin. This system ensures that payments are straightforward and secure, with MongoDB tracking all transactions.

**Admin Dashboard**: An intuitive admin dashboard will be available for managing user accounts, route listings, and wallet transactions. Basic CRUD operations on MongoDB will be implemented, ensuring smooth handling of data and facilitating efficient platform management. This includes overseeing the secure payment and wallet system, monitoring financial transactions between riders and drivers, and managing platform commissions.