

Ride My Way - Carpool Application

- This is a ride sharing application, where multiple people travelling in the same direction can use one vehicle. This would save up on cost and reduce road traffic.
- Every person using the application has to register as a user. Then register as an admin(Will be inserted directly with an admin flag set to true), driver, passenger or both.
- For every user, the app needs to know their first name, last name, phone number, email, user type(Driver, Passenger or both) for authorization and password for authentication. To add on that, every user will have to verify their phone number and email before they use the platform.
- A driver first needs to have a verified user account and then add their license and NTSA number(Kenya National Transport and Safe Authority).
- A passenger needs to have a verified user account, then add their national identification card number and their place of residence for the purpose of filtering rides near them.
- At register, a user can only either choose to be a passenger or a driver but after that, they will have the ability to choose the foregone option.
- Every user will then have a profile associated with their account where they can add more information. The profile additional fields are profile picture, username, middle name, address and gender. All these fields are optional.
- Drivers can add cars to be used to schedule a ride. The information needed for the car is it's make, model, capacity and registration number. Every car is associated with the specific driver who added it to the platform.
- A driver can schedule a ride by adding the origin, destination, departure time and the car to be used in this ride.
- A passenger can make a ride request which will include the scheduled ride, and an optional compensation to the driver.

Classes with their attributes

User

- firstName: String
- lastName: String
- email: String
- phoneNumber: String
- userType: Array[Integers](1 - Driver, 2 - Passenger)
- Password: String (Hashed)
- isAdmin: Boolean
- isPhoneVerified(): Boolean
- isEmailVerified(): Boolean

Driver

- licenseNumber: String
- ntsaNumber: String
- userId: Uuid

Passenger

- nationalIdNo: String
- placeOfResidence: String
- userId: Uuid

Profile

- profilePicture: String
- userName: String
- middleName: String
- address: String
- gender: String
- country: String
- userId: Uuid

Car

- make: String
- Model: String
- registrationNumber: String
- capacity: String
- driver: Uuid

Ride

- origin: String
- destination: String
- departureTime: String
- driver: Uuid
- car: Uuid

RideRequest

- Compensation: Float
- passenger: Uuid
- ride: Uuid