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# Carpooling System

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**Abstract:** *Carpooling is a way in which more than one person or a single person can travel from one place to another according to their requirement. Due to carpooling the travelling cost of the person is reduces and as many people are using the accommodation fuel is also used once for many people. Carpooling is a system which helps in resolving many types of problems that are occurred in the urban areas, demand of energy (fuel), and reduce the pollution. It also helps in reducing traffic. Organizations also supports Carpooling, due to high price of fuels and pollutions. This will help people not to hire another cab, and go for the carpooling to make new connections with strangers. With this Carpooling application people can travel freely without worrying about security. The time required to travel will be shown in the application to the user, which will help the user to assume the time will require too reach destination.*

**Keywords:** *Pooling, GPS, Android Apps*

## I. INTRODUCTION

Transportation is main problem now a days in India. It is used means of communication in road ways. In today's world the road way is major way of traveling due to which carpooling is a better way to travel from one place to another place and reducing traffic in the specific areas or a location and it also reduces the use of fuel in environment, due to more than one peoples are using this accomodation at a single time. Majority of passenger uses the private passenger car. These car usually use a single rider. Thus increased pollution, traffic congestion as well as fuel.

Now a days there is number of applications are in use but they are working in some bounded areas. So, we have to remove the boundary through our application .We are developing the application which is working as social networking site so the security is big issue. Our app will provide facility for blind person through speech recognition. It will track the location of passenger & driver those who are involved in carpool. After all the passenger reach at their desired destination it will be disabled automatically.

All the users involved in this carpooling system are tracked through GPS.

Our application is an attempt to make a system which is user friendly and provide an opportunity to share car ride. We made a application which will take the information or data from the user to upload register and view the route they are going to travel, it is not dependent on the distance of the route. This application is made to have a safe journey for the passenger.

## II. LITERATURE SURVEY

[1]In this paper, the authors have introduced the car pooling application would enable its User a safe and secure way to use carpooling. Carpooling is car-sharing; it saves money and it is an effective way to minimize pollution.

Second paper references [2]Leveraging Route Saver based on Location Service in Carpooling system Using K-NN Algorithm In this paper, author introduced Carpooling application is providing the best service for the user to low cost, and for girls it is more safer in night time also.

Third paper references[3] Bike Pooling Android Application: This paper is the solution for problems like traffic congestion and pollution in Smart Cities. Pick up and drop service is provided for people travelling along same distances. It provides security. This paper also reduces traffic related issues and pollution problems.

Fourth paper references[5]Intelligent Carpooling System:In this paper various kind of applications implemented are discussed briefly such as Split Cars and The Buddy application is a web-based solution. We have chosen to use ASP .NET for the server-side, JavaScript, JQuery, Ajax as programming languages, HTML.

Fifth paper references[6]Pooling Supply Chain:Through the literature review that we conducted we have compiled the most important attributes that are required for a successful pooling supply chain strategy that are

1) Transparency and Trust

2) *Strategic fit:* Common interest and commitment and clear expectations

### III. PROPOSED WORK

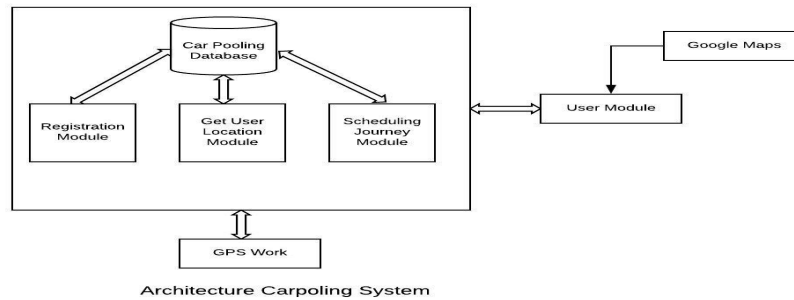


Fig. 1 Carpooling System

### IV. PROTOTYPE ARCHITECTURE

First the mandatory fields in the application should be filled by the user to register its own identity in the database. If the user clicks on the submit, the user will be verified. If the information about the user is already available in database, then the user has to submit another username which will be unique or different than the previous one. If all the fields are correctly filled then the registration will be completed. And the user will be ready to Login from the Login Page with the use of given Username and password. After Login successfully, the user will be free to use the application, and the services provided in the application.

### V. PROPOSED ALGORITHM

The user first logs in or signs up in the application where the data is stored into database. If the user doesn't have an account then he/she has to create the account. After login the user will check the mode of transportation, after the selection. The location is compulsory to be inserted before confirming the ride. Then the user will confirm the ride, the driver available close to the user will be selected first and the request will be sent to Driver. If the Driver accepts the request, then the Driver will move towards the user, else if Driver rejects the request, the message will head towards the next nearest driver. And the process will go on, till the driver accepts the request. The identity of driver and car will be sent to user for identification. Then the Driver will reach to User and Journey will start. After the end of route, the message will be sent to Driver and User, and it will contain the detail of distance, price and ratings. Then the user will pay the fees and the driver will be again able to take another ride.

### VI. RESULTS

This system is working on an Android application. This application is easily available on the Play Store, the time required to travel will be shown in the application to the user, which will help the user to assume the time required to reach the destination.

### VII. CONCLUSION

Carpooling system is a very efficient way to reduce the pollution and the traffic in the area or cities. It is a very eco-friendly way of travelling. It is also a good way to meet new people and make new connections or increase connection. Now a days many people prefer the private vehicles in carpooling to travel from one place to another place for more luxury and comfortability.

### VIII. FUTURE SCOPE

It provides a better way of security to the passenger. Bikes will be used in the future for pooling. Pooling system can be for transportation goods in a sharing manner.

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