

SOCIAL AND ECONOMICAL APPROACH TOWARDS AUTOMOBILE POOLING

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Abstract :

Increase in demands of petroleum and petroleum products in world market due to increased automobiles usage and more than that the usage of fuel for automobiles had increased daily expenses of a common man. In our work, we have elaborated our idea about how real-time sharing of personal vehicles or real-time pooling of vehicles can help in decreasing the time consumption and expenses on travelling by common man due to the usage of public transports which cannot be adopted in a timely manner or the increase in petrol and diesel prices. This adoption also helps people in socializing. We have implemented our ideas through an app.

Keywords: car pooling

INTRODUCTION

In rural areas the means of transport is very less and if there are then such transports may be a public transport with some fixed timings or durations. These public transports may not match with our schedule or may not run during government and public holidays or during political strikes. Due to these reasons most of the times unnecessarily money and time are consumed or may be said as wasted.

Suppose a person A is going to travel from source place 'x' to destination place 'y' by the means of his private car having no other members with him, and a person B having no vehicle wants to travel from source place 'm' to destination place 'n' at the same time such that 'm-n' is a sub-route of route 'x-y'.

So, if B approaches to A telling his details and that he also wants to travel the same route he is going to travel, then A may accept his proposal at a reasonable rate of expenditure to be paid to A or at no cost to be paid.

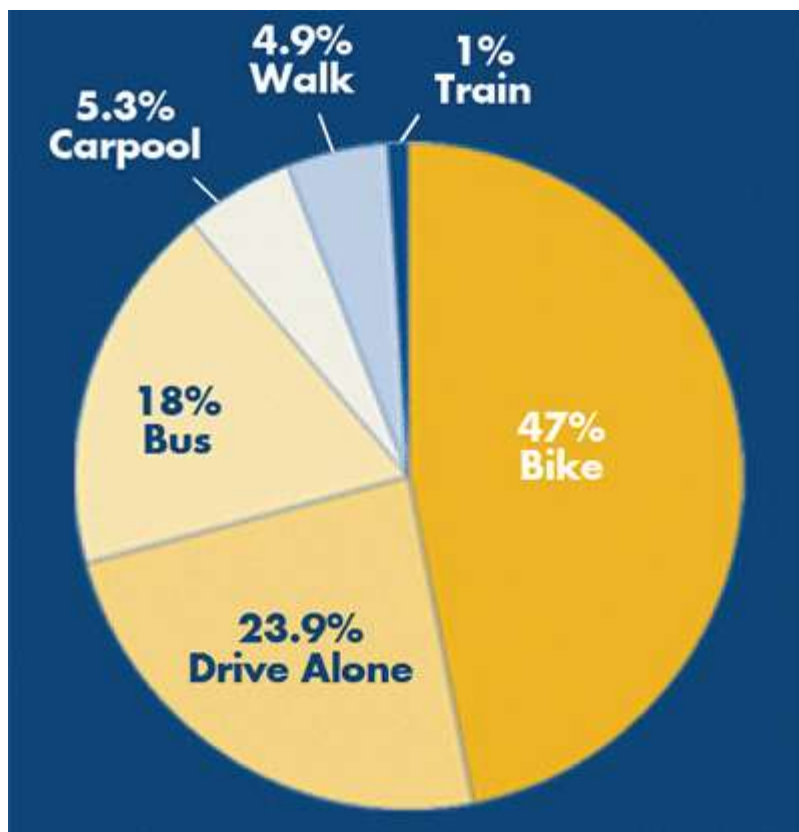


Fig: Statistical data of people travelling via different modes

According to the statistics of usage of different modes of transport, the people using bikes, cars and are travelling alone can pool their rides with pedestrians or the people taking public transports like buses or trains to reduce either their money expenditure or time consumption or both.

CAR-POOLING

Real-time ride sharing also known as instant ridesharing, dynamic ridesharing, ad-hoc ridesharing, on-demand ridesharing and dynamic pooling. Real-time car or bike pooling can be engaged for daily or occasionally travelling purposes. It's the best way to employ empty seats of the driver's vehicle and good way to use full seating capacity of vehicles. It's also environment friendly and sustainable as it helps in decrementing air pollution, carbon emissions, traffic congestions on road and need for parking spaces.

Carpooling is sometimes referred as fam-pooling as the persons which decide to pool their vehicles for ride are the family members or in a relation with each other or friends or knows each other.

PROPOSED SYSTEM

There are many companies and apps that are providing private cars for travelling purposes or used by the travellers for car-pooling purposes like ola, uber, bla-bla car, zoom car. But the sole purpose of these companies is to make money and profit.

But our main focus is on pooling of rides with the people having vehicles which travel on a regular basis or occasionally and the pedestrians or people in need of lift going to travel via the same route the driver is going to travel.

The app will enable the registered users to share their cars with the people in need of lift or pooling of their vehicles while travelling.

The users of the app can be a driver or a pedestrian (non-driver user) who wants or is in need of a lift. The users can feed their destination and source of journey they want or are going to travel in real-time. The cost of travel to be paid by the non-driver user is in the hands of the driver as if he wants to take a reasonable rate for the ride then he can specify the rate before the ride starts along with a part of the petrol or diesel price or if he wants the he can also provide a free ride to the other user that is the non-driver user.



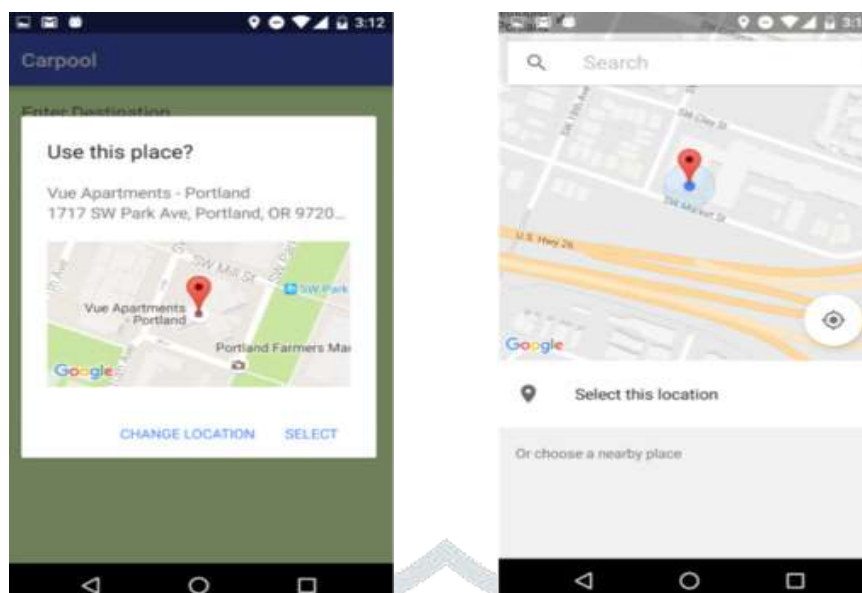


FIG: APP SCREENSHOTS

To use this app efficiently the users should have verified registered account to prevent any fraud with the other user and must feed complete, correct and sufficient required data.

APP

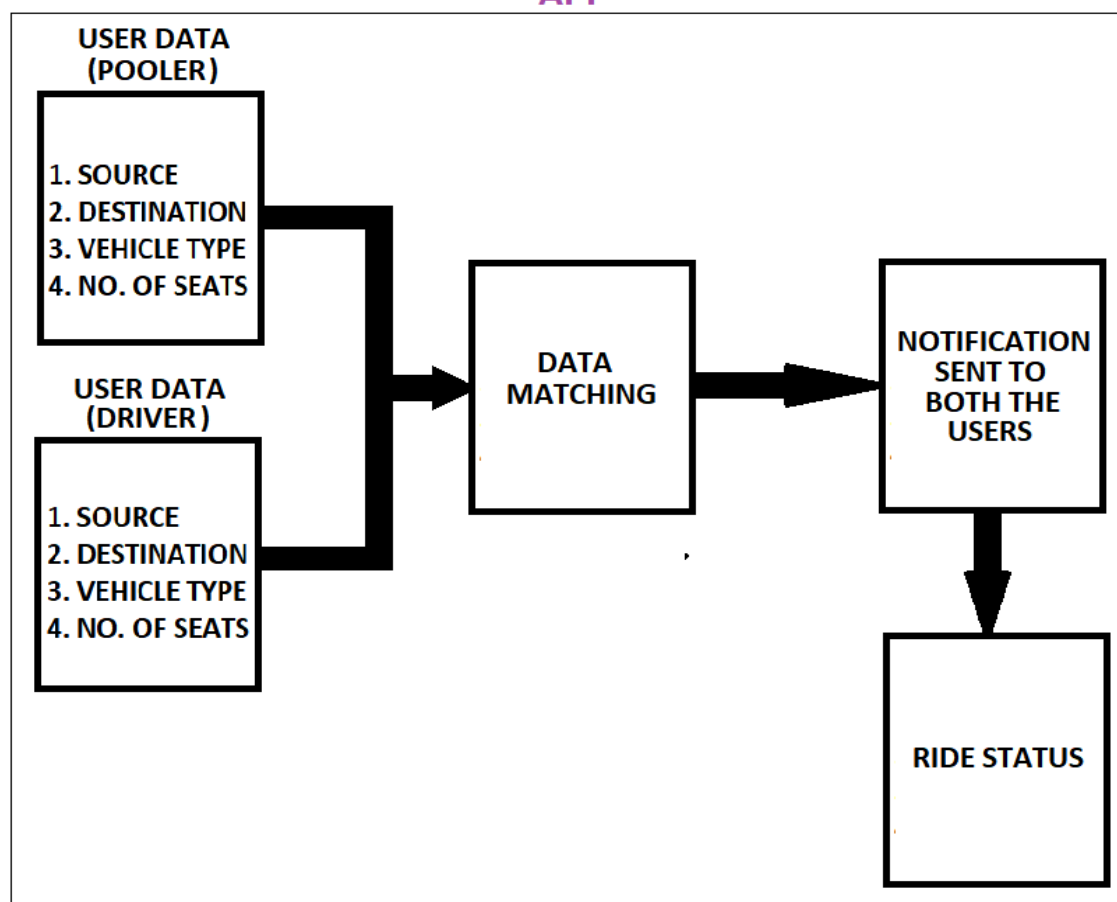


FIG: WORK FLOW DIAGRAM

Along with serving our main purpose it will help in increasing of real-time socialization and face to face interaction with new people (that is the people they will meet in every ride and journey) as due to the social sites and apps like Facebook, Instagram, WhatsApp, etc. these behaviour is day by day decreasing.

Along with it the traveller will experience a reduced loneliness, psychological travel time and to change the perception of waiting.

CONCLUSION

We have proposed an app that takes the data from the users and a convenient match is selected from various options for pooling and is suggested to the user. If the user is satisfied and has no issues then confirms the ride with the other user or rider. And this practice reduces overall fuel consumption by vehicles, reduces traffic congestion, reduces noise and air pollution, helps in full usage of empty seats of the vehicle and increases social interactions between people.

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