Recursion

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Theme Domain- Transportation

Problem Statement

- Public transit system and carpooling to prevent ecological damage and build better economy through reducing costs and import of fuel.
- We have a public transport system mainly comprised of trains and large network of roads.Buses have designated routes however the system is outdated and in need of modernization.
- The current forms of transport are inefficient and not target specific. The commuters have to wait due to late arrival and buses are overcrowded. This needs to be checked.
- In India 22 of a thousand people own cars which might not seem a lot unless we take a look at the total population.And half of these cars travel with only 1 person on board. Carpooling services must be started in order to curb this .

Solutions

The solution would be to use the bus and autorickshaw routes from the city or towns database and use the coordinates in Google Maps Api to draw polylines.

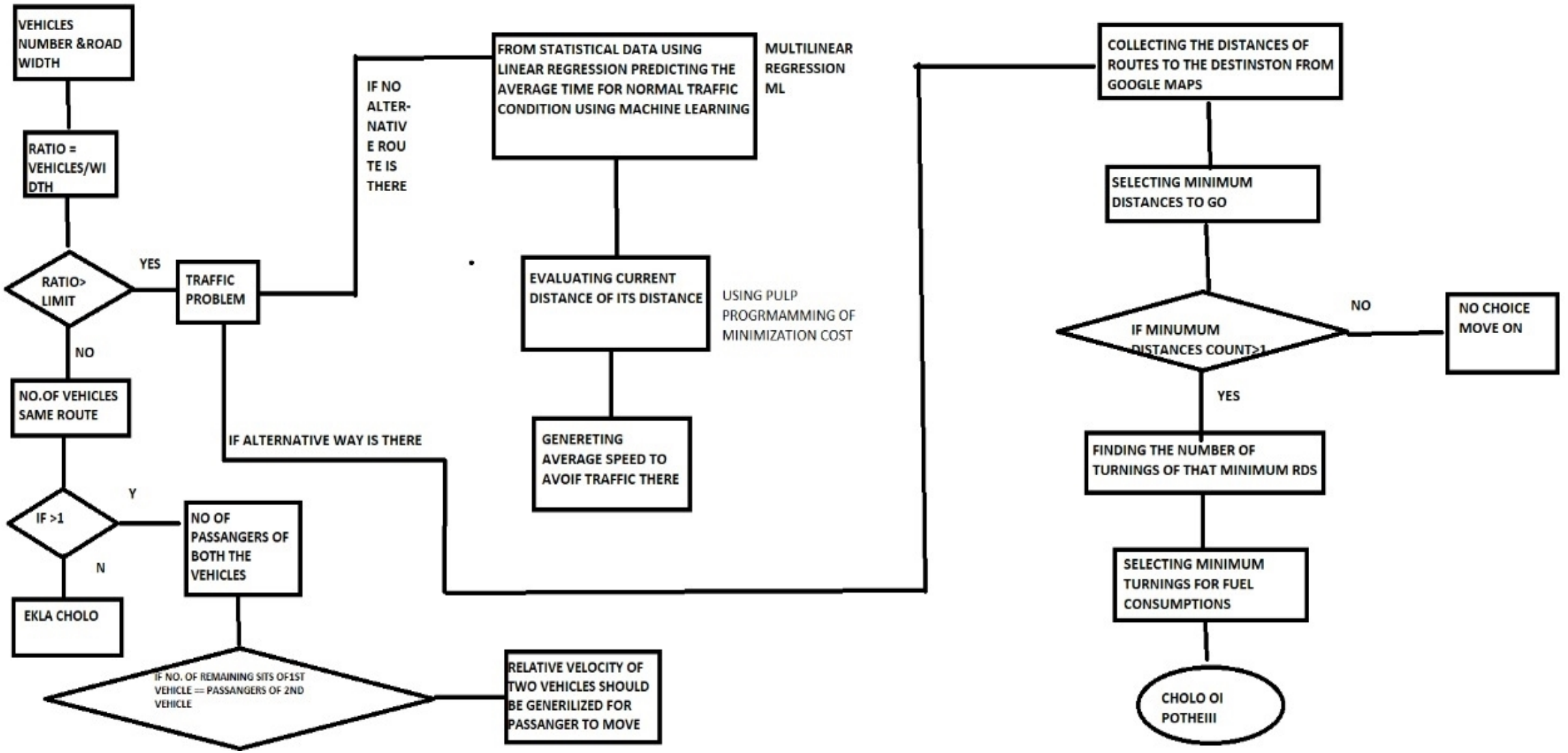
The buses will be tracked in real time using geolocation of a user on the bus.Our processes.py program will check the traffic in the next stop using satellite images so the exact ETA will be calculated. Hence it will precisely track and give the ETA of the bus to the user at the next bus stop.According to the traffic on the next stop the program will search for a better route.

There will be an option to search for carpools.

This would give the people who are travelling in the same route. When a user 1 is driving, the app will ask for the seats available. If a seat is available it would notify user 2 who is waiting for a ride if they are traveling in the same direction.This would be a more feasible form of carpooling rather than pre-arranged network of carpools.

Our program will also choose the route which takes less fuel.

Flow chart for process.py



Target Audience

- Our target audience will comprise of residents of tier 1 and tier2 cities, who are interested in professional, valued and safe transport services.
- Our services will also be able to meet the needs of residents in small cities who prefer to travel in cheap autos as our model significantly reduces the cost of cab services due to carpooling and fuel efficient forms of navigation

Competition

- Our present market competitors are the two major cab services of our country, i.e. Ola and uber.
- Our service is pocket friendly and gives way to a more collaborative community
- Our public transport location service will have an edge over the cab services due to being cheap and accessible.

Business Model

- Our bus navigation system will be a boost to local bus and auto-rickshaw services.
- Our business model relies on the principle of cost saving and faster navigation
- It would also be fuel efficient and enviroment friendly compared to private transport and cab services

Mockup for app