

Smart public transportation system

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INTRODUCTION

Public transport is the service shared by the passengers who are the general public for transportation. Unlike transportation modes like car pooling, rickshaws and taxis here strangers share the system. Reasons for why the people go after public transportation are its role on cost, environment and accessibility. Firstly, public transport is very economical. Using buses and trains are cheaper than using private cars. If people have their own car, they have to pay a lot of money for service, repairs, and insurance. It may cost all the money people earn. Moreover, there are many discounts for some individuals, like students, old people, and children. Secondly, public transport can preserve the environment. It can reduce pollution, because there are less cars driving on the road, and there are fewer fumes and also less traffic jams. Also public transportation has good accessibility in big cities. The use of public transportation could thus save both money and time lost in traffic jams.

Now a day's our public transportation system in our country are not advanced and we are getting lots of accidents because of that Passengers cannot predict the time of arrival of busses their time got wasted .

Turning to the other side of the argument, public transportation has some draw backs. Time is one of the biggest disadvantages of using public transit. Public transport includes trains and buses which run to a scheduled timetable with the most frequent services running to headway. Sometimes, public vehicles do not go on time so that many people have to go to work or school late. Another disadvantage is that it creates confusion to the users when the bus routes increase in large numbers. Nowadays it is to be noted that many accidents are occurring due to over speed. That means proper measures is to be taken for awaking about over speed and thus road accidents.

Ease of use-

Our system can be easily used because many of the function is done by the RFID module,gps .the number of passengers can also be counted with less difficulty

Common mistakes in our project-

The common mistake we face in our project is that we do many programming mistakes and soldering of circuits are also not easy so we face some

EXISTING SYSTEM

We already have developed a tracking system but in our project we can track the transport system and we also added a few new features in our project.The previous system uses GPS but in our project we are doing it differently.By adding these new features we can feel more secure and track our transport system anywhere.

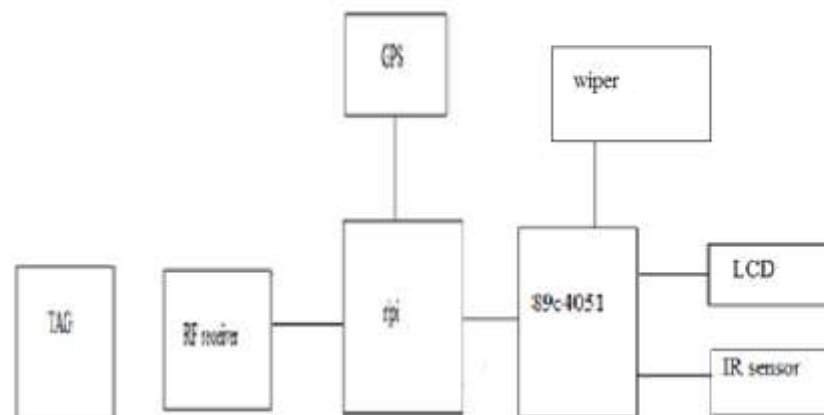
Buses are an important means of public transport in India. Due to this social significance, bus transport is predominantly owned and operated by public agencies, and most state governments operate bus services through a State Road Transport Corporation. These corporations have proven extremely useful in connecting villages and towns across the country.

3 PROBLEM STATEMENT

- In the daily operation of our transport systems mainly that of buses, the movement of vehicles is affected by different uncertain conditions as the day progresses, such as Traffic congestion, Unexpected delays, Irregular vehicle dispatching time.
- Many passengers are late for their work because they decide to wait for bus instead of other alternative options. Passengers cannot predict the time of arrival of busses their time got wasted. Number of passengers cannot be counted in a bus.
- For example in Maharashtra, Savitri bridge collapsed and upto now we don't know the exact count of people who passed away. Because of these problems we are building this project.
- Traffic is also a big problem since it's not same everyday and cannot be predicted which is both time killing and increasing your stress. It almost takes 3 hours to travel 40 kms.

6 PROPOSED SYSTEM

- The User sends a request to the GPS and the GPS sends a location to the user, and to find the exact location of the bus the user must copy and paste it to google map
- The user can also know the time delay of the bus by using RFID tag which is present at the bus stop.
- For example, when a bus arrives at the bus stop, we know the time delay by comparing the exact time arrival of the bus and the bus schedule.
- The number of passengers can be counted by putting a token in the token box which is present in the bus.
- The number of passenger getting down
- The sending of the request to GPS is mandatory from this only the GPS will send the location of the bus.
- The time delay can be known by the passenger with the RFID tag which is at every bus stop. With this we can prevent wastage of time for the passengers.
- RFID tag should present at every bus stop which is mandatory. The conductor should not allow any passenger to board on the bus without pressing the button.



Features of our project

- Location of our bus
- Arrival time of the bus
- Number of passengers in the bus
- Automatic wiper

Extra features which can be added

- Biometric through aadhar card.
- Counting the number of passengers which are both getting on and off the bus by weight sensor.
- When tyre puncture a message is sent to the controller room/police.
- When there are any unpleasant environmental condition a message is sent to the controller room.

REFERENCES

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Intelligent Transportation Systems

Smart Transport Networks