

Smart Controlled Honking Zone

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ABSTRACT: This project has an aim to control the horn volume in cities and also in restricted area as such schools, parks, hospitals, old age homes, college, government offices and in speed limited areas etc. Some peoples are driving vehicles in a high speed and create noise of horn of vehicle. So the police are not able to monitor all those things. Driver does control the speed of vehicle at places. This paper provides a way for how to control the speed of vehicle and control the noise of horn without harming others. This project has an aim to control noise of horn automatically. The speed of any vehicles will be detected using accelerometer if the speed of vehicle is exceed in honking zone then the buzzer can buzz and get alert to driver about cities and also in restricted area as such schools, parks, hospitals, old age homes, college, government offices and in speed limited areas etc. Nowadays in a fast moving world all the peoples are not have self-control. controls are taken automatically by the use of electronic system. In this project we use GPS for indicating the nearby honking zone. Speed is measured by the help of accelerometer in the vehicle. The controller compares the speed. If it exceeds the limited speed the pizzobuzzer buzz and alerts the driver and controls taken automatically by driver and when vehicle is near at honking zone the switch can automatically decrease the volume of horn if it on. In this way our smart honking zone for smart cities project will be perform.

KEYWORDS: Speed control, inter-vehicular communication, honking, Arduino, switch, GPS, Pizzobuzzer, noise control.

I. INTRODUCTION

At present accidents are mostly occurs due to rash driving and over speed in road. People do not bother about human lives. The accidents rates are increasing year to year by more vehicles on to ground. The government has taken to many steps to prevent this kind of Things but it not enough. Most of the manufactures has developed a laser based control system but its cost is too high. But it is again a difficulty when human crosses the road it cannot detect properly so we tried to develop a system to control these things in a simple manner. The current speed will be monitored by the separate module or by the use of ultrasonic sensor that also sends information to controller. The controller compares both speed and the driver does not decreases the speed the control transfers automatically but the driver again operate it manually and exceeds the limited speed.

Due to increase in vehicle the amount of pollution, that is generated by these vehicles have increased significantly. This has in turn caused disturbances and therefore, in some areas such as in central cities, near hospital, near school etc, honking (operating a horn to generate to generate sound) is prohibited by law or regulation.

In general, there are many traffic signs in various areas to notice the drivers not to operate horns. Additionally, or alternatively, local governments issue permanent or temporary regulations the horn operations. However, some drivers ignore such traffic signs or International Journal of Pure and Applied Mathematics Volume 118 No. 20 2018, 695-700 ISSN: 1314-3395 (online version) url: <http://www.ijpam.eu> Special Issue ijpam.eu 695 forget or do not know of such

regulations, especially in those areas that they are not familiar with, and thus operate horns in a wrong way against the regulations. The only way by which the driver can honk is that if the driver gets close to the other cars range only then the driver will have full access to honk, if the other car is not nearer to the car of the driver, he will not be able to honk. Thus, it needs to provide a technical solution for automatically deciding the closeness of the car and preventing unnecessary honking.

There is always considerable effort to reduce speed in the honking zones and avoid annoyance amongst the residents. The annoyance level of traffic speed may be personal but the community as a whole is quite sensitive to traffic noise especially honking by vehicles. L10 is a measure of daily exposure to traffic speed and provides an indication of how much the prevailing traffic noise will affect the exposed residents. According to the International Program of (WHO 1994), an adverse effect of speed is defined as a change in the morphology and physiology, that results in impairment of functional capacity. WHO has documented seven categories of adverse health effects of noise pollution which is having only because of speedy driving on humans that includes hearing impairment, Interference with Spoken Communication, Sleep Disturbances, Cardiovascular Disturbances, Disturbances in Mental Health, Impaired Task Performance and Negative Social Behavior and Annoyance Reactions. Temporary speed exposure results in physiologic changes those are readily reversible. However, noise exposure of sufficient intensity, duration provokes changes that may not be so readily reversible. Noise pollution which having only because of speedy vehicle driven is not believed to be a cause of mental illness, but it is assumed to accelerate and intensify the development of latent mental effects on human health because of noise. How that bad effect was reduce.

II. RESEARCH BACKGROUND

System consists of Admin panel, municipal corporation and hardware module which include of buzzer, GPS, arduino board and an accelerometer sensor.

1. Admin:

Admin can add the municipal corporation and view the honking zones which are included by the municipal corporation on GPS. He also view and delete the of municipal corporation and also

view all details and data of others which is included by the municipal corporation.

2. Municipal Corporation:

In our system the municipal corporation can add the honking zones like hospital, school, college, old age home and government offices in cities as a honking zone with their longitude, latitude, Name, Type, and other description and decide the speed level of the vehicle which is travel from near the honking zone.

3. System:

In this web application when any car or vehicle goes from any honking zone the accelerometer can track the current speed limit of that vehicle. This accelerometer can built-in the vehicle which is note the speed of vehicle during honking zone which is declare and saved on GPS by municipal corporation, if the detected speed of vehicle is greater than the speed which is allowed in honking area then the pizzobuzzer will buzz and get alert to driver to drive slowly in honking zone area. It also check the horn of vehicle if it on then the in-built switch press action will automatically decrease the noise level of the horn and keep safe and noise pollution free drive.

III. LITERATURE SURVEY

Currently Indian cities are ranked thrice in Top 10 noisest city in the world according to Citi quite. The cities that rank in these are Kolkata, Delhi and Mumbai. The effects of Noise pollution which is generated from the high speed vehicle it is mainly affected on honking zone area which is declare by municipal are being taught from 4th Grade of schools, but we still don't have any strong system to control it. The Rules and Regulations are not exercised as per papers, legal document PDFs and Government websites describe. The speed Barriers and smart Honking Zones are created but are hardly followed. The decibel levels of Sound are constrained in regulations but there is no tool to measure and control in real time. The people are susceptible for early seeing loss than the expected average age, Institutional disturbance, Patients in the hospital suffer. Coming to present and existing solutions, there are speed barriers, smart honking zones which are hardly paid any attention to, and people continue honking irrespective of which zone they are in.

Author- R. K. Mishra Paper- Evaluation and analysis of traffic volume noise along has rapid transit system corridor. In this research paper The R. K. Mishra analysis on traffic volume noise. He

tries to reduce noise pollution which created by the extra volume from vehicles.

Author- T. Vaidya Sagar Paper- Noise Pollution Levels in Visakhapatnam City (India). In this research paper the ambient air quality noise levels (AAQNL) at traffic junctions were 5 DBA or more than those prescribed by AAQNS for commercial zone and most of the values were found in the range of 80 +/- 10 DBA, among which 75 Author- Prof. S.M. Patil Paper- Law on Environment Some Reflections. In this research paper this author describe about the law of environment. He searches the what was the reaction of low on environment.

Author - Ising H., Kruppa B. Paper- Health effects caused by noise. In this research paper the author shows what was the effects on human health because of noise. How that bad effect was reduce.

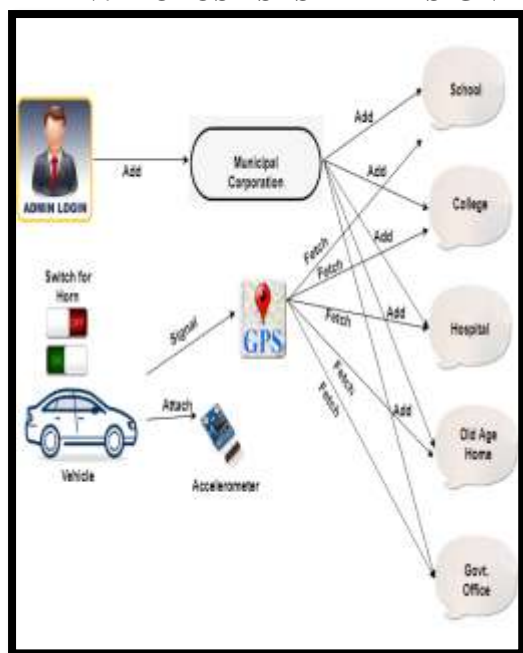
transmission is achieved with the help of accelerometer, which provides low cost transmission of data. The Drivers are made aware of their driving behaviour and violations made so that careful and conscious driving can be achieved. Repeated violations results to which will help in reduction of violations by the vehicle user.

V. TECHNOLOGY NECESSITY

This technology helps to reduce construction noise in the construction sites in the honking zone of the city by installing noise reduction equipment on the hydraulic breakers, which usually are the causes of noise in construction sites. We developed a method that can evaluate not only the physical level of noise but also the level of displeasure that people feel from the noise pollution from vehicle. In order to waive the noise of heavyweight impact on Hospital, school, college, old-age homes. This foundation developed a noise reduction technology by using noise-reducing materials which was created through a research on the characteristics of vibration through mock-up tests, measurement and interpretations. Problems related to environmental noise are not a new subject, but they became a major issue to solve because of the increasing, in complexity and intensity, of human activities due technological advances. Numerous international studies had dealt with the exposure of critical patients to noisy environment such as the Neonatal Intensive Care Units; their results show that there are difficulties in the organization in the developing brain, it can damage the delicate auditory structures and can cause biorhythm disorders, specially in preterm infants.

The existing system provide buzzer system in every vehicle. This system is useful for Hospital, Colleges, and Schools, old age home, government offices etc. The current systems are available in every vehicle; our project extends it at lower cost. The concept is under the field for smart Honking zones. The cities that rank in these are Kolkata, Delhi and Mumbai. The effects of maintain speed limit are being taught from 4th Grade of schools, but we still don't have any strong system to control it. The Rules and Regulations are not exercised as per papers, legal document PDFs and Government websites describe. The speed Barriers and smart Honking Zones are created by municipal but are hardly followed the rule of driving vehicle besides of honking zones. The decibel levels of speed are constrained in regulations but there is no tool to measure and control in real time. The people are susceptible for early seeing loss than the expected average age,

IV. PROPOSE SYSTEM DESIGN



System Architecture gives us the overall description about the how system is working . System Architecture contains both input and output and also short description about the operation . It gives basic idea about what type of functionality is performed . In this system we access the data from sensors and also require some things like arduino board, GPS, accelerometer, power supply to perform operation. All required data will be gathered and shared with MySQL database which will be accessed by expert. If over speed is detected it sends alert message to driver. Wireless

Institutional disturbance, Patients in the hospital suffer. Coming to present and existing solutions, there are speed barriers, smart honking zones which are hardly paid any attention to, and people appearance of humans or animals via dual purpose switch. Hence in this chapter literature survey is done. We are trying to improve existing system with our additional design and we have described overall idea about the existing system and our proposed system. While studying existing system, we come to know that there are various systems.

VI.CONCLUSION

The accidents that are caused due to loud music inside the vehicle, which inhibits the ability of the driver to alert mitigate by this system. In this paper we developed a new design to control the speed of the vehicle. In normal driving mode, we can expect other vehicles interfering nearby and possibly blocking or attenuating RF signals. In this aspect, we are going to use GPS location for restricted areas. Noise pollution seems to be a general problem, but when seen through global perspective it is a major issue. When honking unnecessarily is reduced it results in a peaceful environment and less stress for the daily travelers. Travelling is a part of day to day life for every human, so when noise due to unnecessary honking is eliminated humans will be able to sleep, concentrate and improvise their memory efficiently. Therefore, with this initiative overall stress is reduced and a peaceful journey will begin.

SOME OF THE ADVANAGES FROM THE ABOVE RESULTS

- a) Reduce accidents due to high speed of vehicle can be avoided.
- b) Driver will be intimated about exceeded speed and noise of horn in Honking Zone.
- c) Automatic speed and noise can be controlled and noise of horn will be reduced.
- d) GPS tracks the location of Honking Zones. All these zones send it to user so as to control the

continue honking irrespective of which zone they are in. There is provision of switching to conventional horn to deal with certain situations such as sudden speed of vehicle and help to reduce noise pollution.

- e) This system is also helped to decrease headache and maintain silence in honking zone.
- f) Enhanced safety and security provided.

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