



DEPARTMENT OF COMPUTER ENGINEERING
SANDIP POLYTECHNIC,
NASHIK (2019-20)

ADAPTIVE HORN FOR SMART CITY TO REDUCE NOISE POLLUTION

SUBMITTED BY

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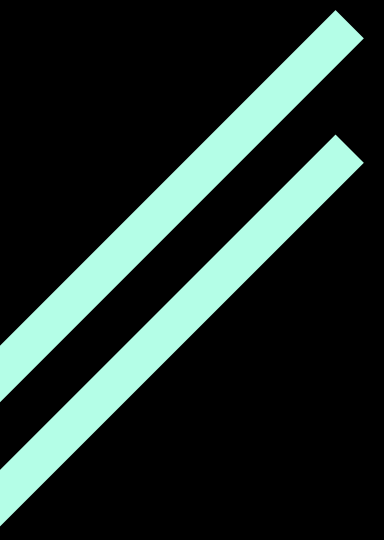

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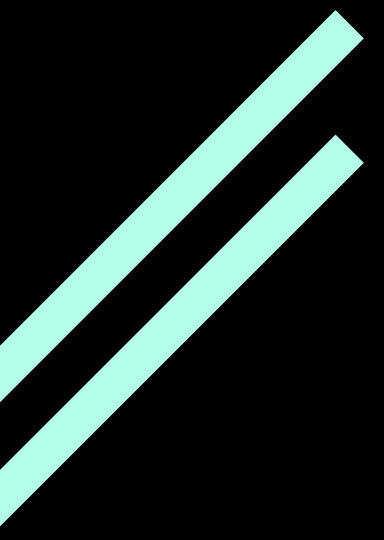
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INTRODUCTION

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. Most of the manufactures have developed a laser based control system but it is very costly & doesn't work properly. we tried to develop a system to control these things. The current speed will be monitored by the separate modul or by the use of ultrasonic sensor that also sends information to controller. in central cities, near hospital, near school etc, honking is prohibited by law or regulation. 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.


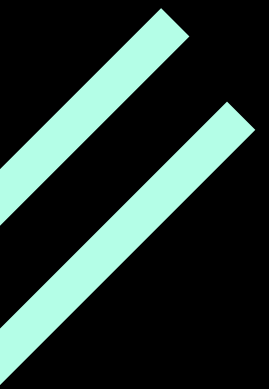




PROBLEM STATEMENT

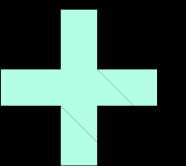


The objective of this system is to present a viable alternative to these problems which also leads to an ecofriendly society. The module also includes the provision of avoidance of accidents occurring because of high speed of vehicle. The smart honking system aims to develop the disincentive measure for unwanted honking. The source car, bikes built up accelerator in vehicle body which is get the speed of that vehicle if the speed is goes on 40km\h average then the buzzer will be buzz and alert the driver to maintain the speed limit of vehicle in honking zone. It will create a lot of noise pollution occurs that causes irritation to the public nearby and people living in residential areas, schools and hospitals, old age homes and government offices. This project is developed for decreasing the high volume of horn.



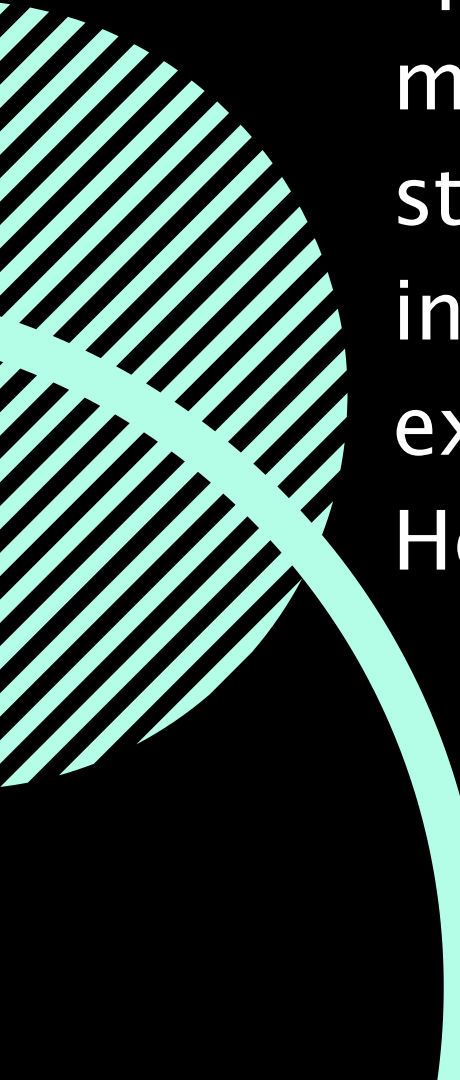
EXISTING SYSTEM

When the vehicle enters in the normal area its speed does not decrease and no action is performed. Whenever it enters the transmitter module just send an information that contains how much speed a vehicle can go inside the speed limited region. Then the signal or information is received by the receiver and the signal acquired from the speed meter is also given to the controller. The signal is basically analog in nature that will be converted into digital & it is processed by micro controller. The signal from the transmitter and the Accelerometer is compared by the controller.



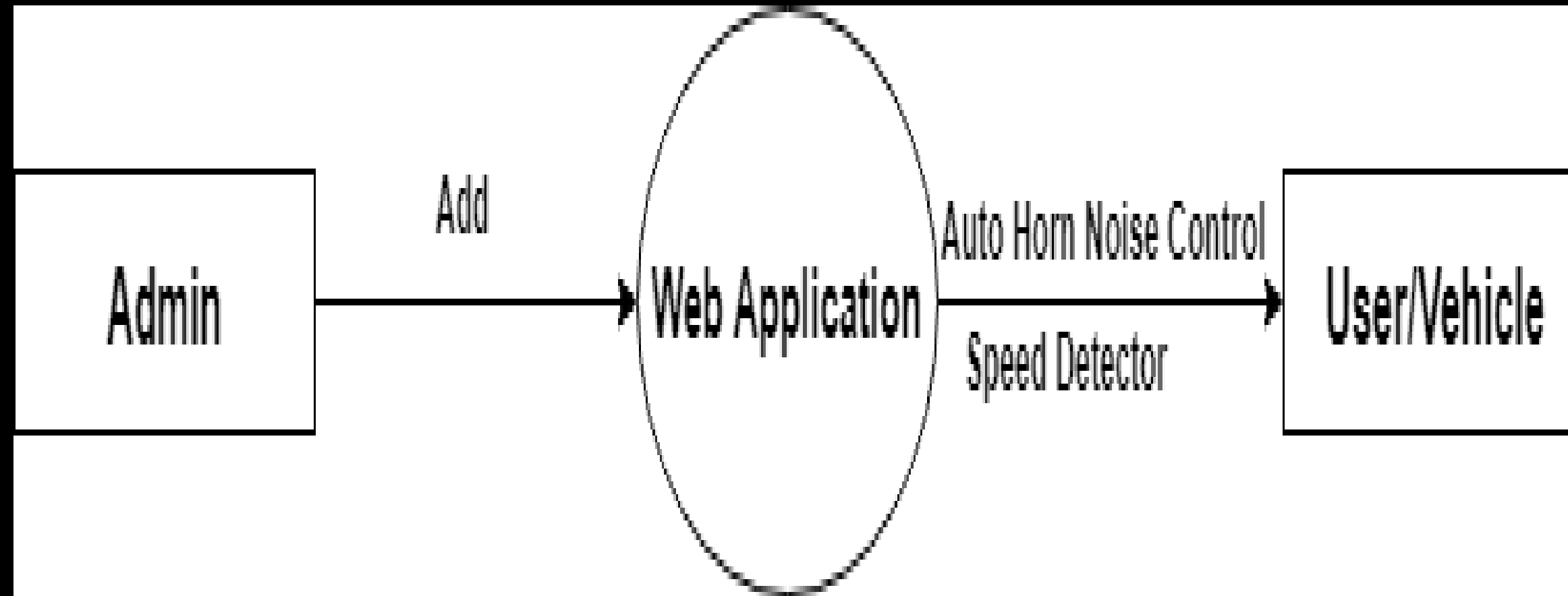


LITERATURE SURVEY

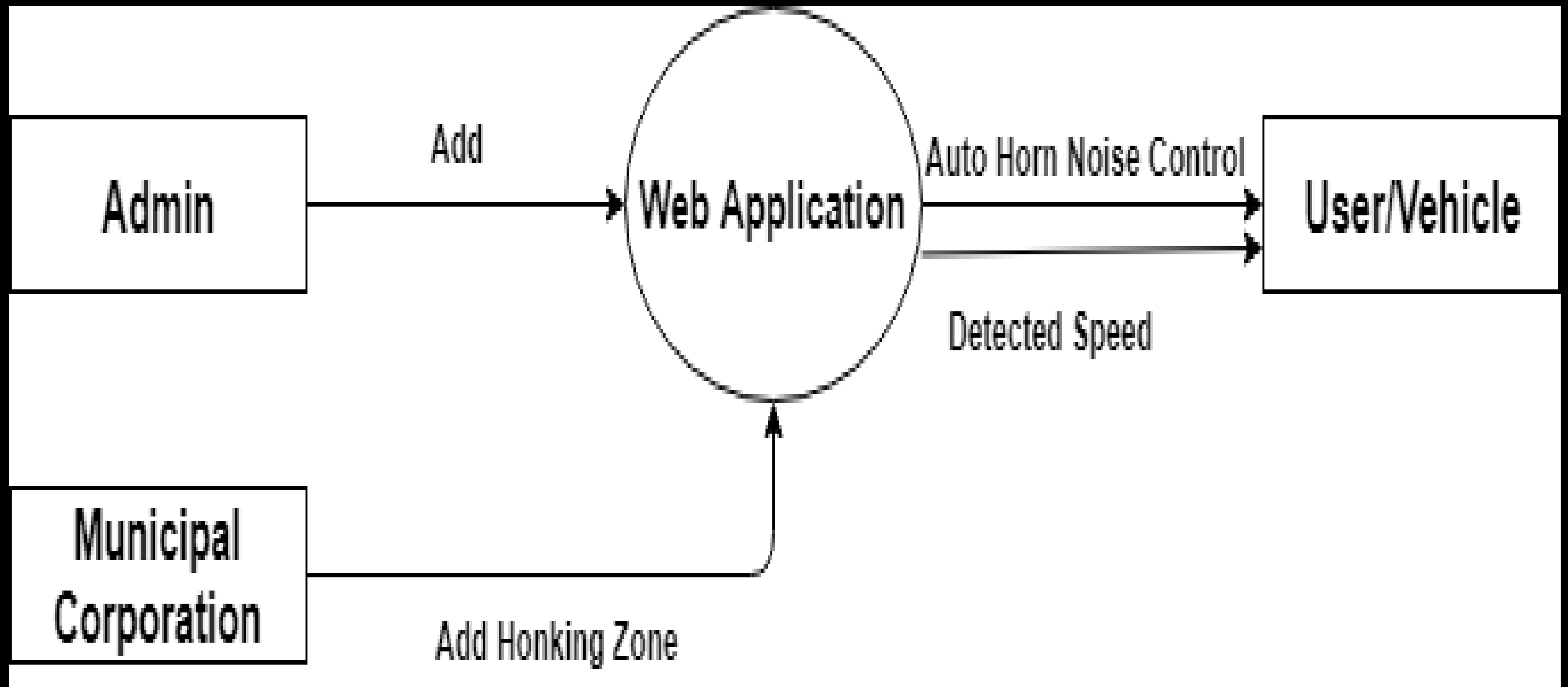


Currently Indian cities are ranked thrice in Top 10 noisiest city in the world according to City. The cities that rank are Kolkata , Delhi ,Mumbai, Bangalore Chennai, etc. The effects of Noise pollution which is generated from the high speed vehicle it is mainly affected on honking zone area which is declare by municipal are being taught from 4th Grade of schools & still we don't have any strong system. The Rules and Regulations are not exercised as per papers stated in legal documents. The people are susceptible for early seeing loss than the expected average age, Institutional disturbance, Patients in the hospital suffer. Horn Zones & speed limit is compulsory & it should be strictly or hardly followed.

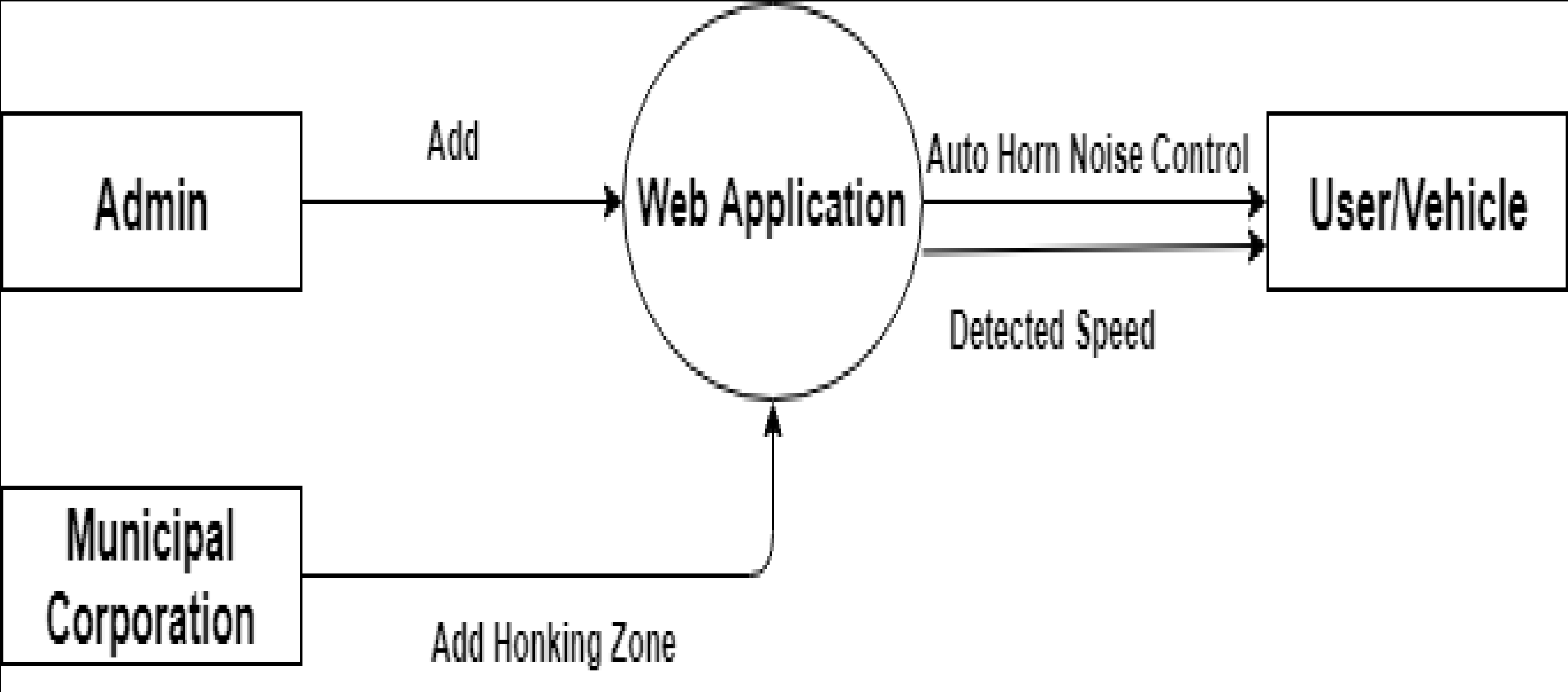
DFD Diagram Level 0



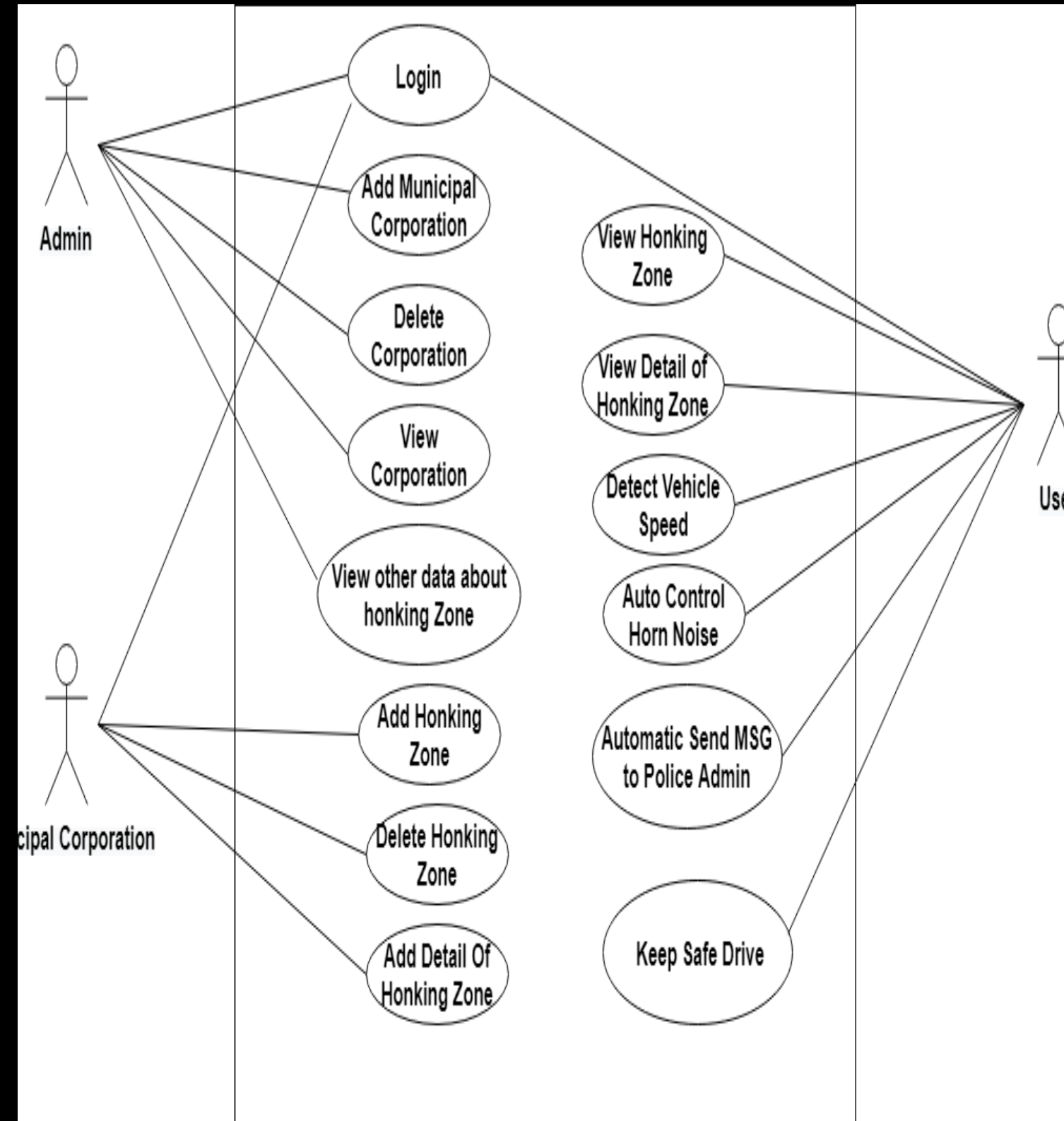
DFD Diagram Level 1



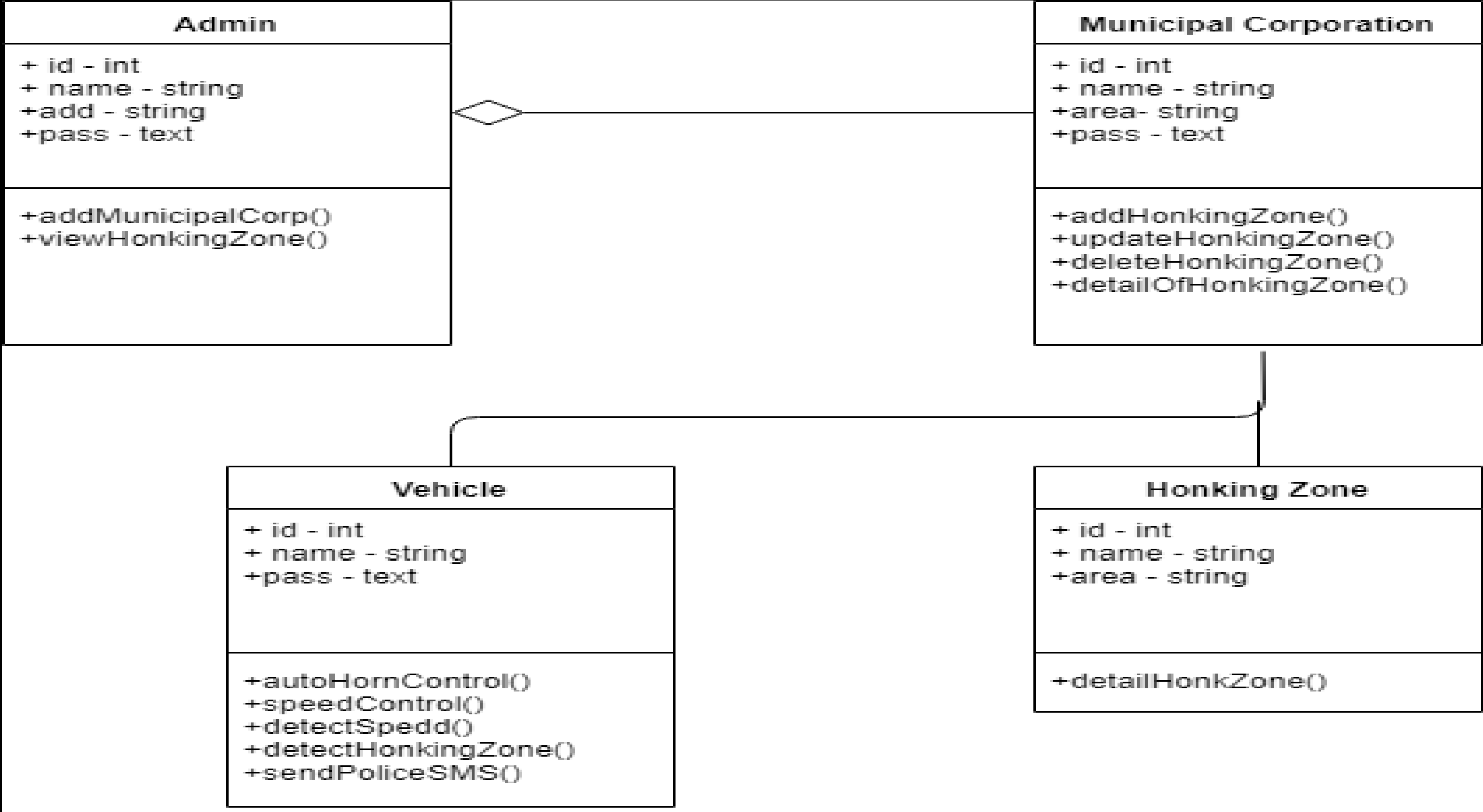
DFD Diagram Level 2



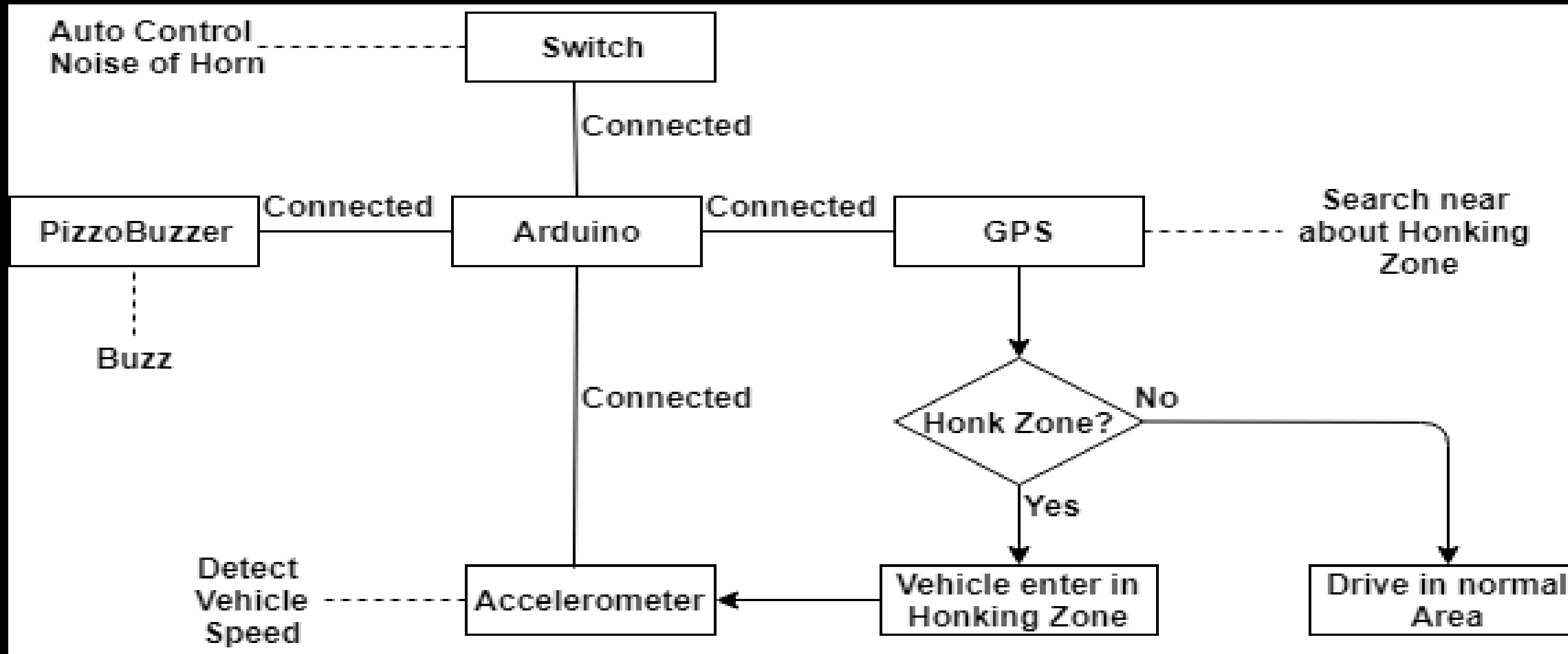
Use-case Diagram



Class Diagram



Project Flow Diagram



REQUIREMENT

Hardware

RAM: - 4GB

Hard Disk: - 500GB

CPU Speed: - 2 GHz

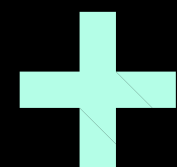
Arduino

Switch

Pizzobuzzer

GPS

Accelerometer



Software

Operating System: Windows /
Linux.

Programming Language: -

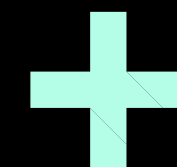
HTML,

CSS,

Bootstrap,

Java,

Mysql



Future Scope

If over speed is detected it sends alert message to driver. Wireless transmission is achieved with the help of accelerometer, which provides low cost transmission of data. The Drivers are made aware of their driving behavior. The noise levels in city mainly in honking zone shall not exceed the ambient air quality standards in respect of noise as specified in the Schedule. The authority shall be responsible for the enforcement of noise pollution control measures and the due compliance of the ambient air quality standards in respect of noise.

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 project we developed a new design to control the speed of the vehicle. we are going to use GPS location for restricted areas. Honking of unnecessarily is reduced or decreases & it will peaceful environment, less stress for travelers

Admin Login Tab

Admin Login

admin@gmail.com

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Login

User Registration Tab

Add Muncipal corporations

Name

Government office

Location

Nashik

Email

245@gmail.com

Contact

5555555555

Password

...

SUBMIT

Database of Municipal Corporation

Municipal Corporation

ID	NAME	LOCATION	EMAIL	CONTACT	PASSWORD	ACTION
1	Sandip polytechnic	Mahiravani	123@gmail.com	6666666666	123	Delete
2	Government office	Nashik	245@gmail.com	5555555555	245	Delete
3	Janata Vidyalaya	sidko	456@gmail.com	7777777777	456	Delete
4	old age home	Gangapur	789@gmail.com	3333333333	789	Delete



Thankyou!

~~regards~~

Aditya K. &
team