International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 7 July 2022, pp: 814-823 www.ijaem.net ISSN: 2395-5252

Accident Help Notifier Framework

Ms. Shivani Jawale,
Bharati Vidyapeeth's Institute of Management & Information Technology
Navi Mumbai

Submitted: 05-07-2022 Revised: 15-07-2022 Accepted: 18-07-2022

ABSTRACT
An excessive number of people worldwide pass away from their injuries in traffic accidents every day. constructing automated crash detection systems and shortening the interval between accidents occurring and the arrival of first responders in an emergency at the scene are two effective ways to reduce traffic fatalities. Recent strategies are utilising the automated accident notice and detection system built-in of vehicles. Although these methods are effective, they are pricey, require advanced maintenance, and are completely unavailable vehicles. As opposed to that, it has only recently become possible to locate traffic accidents that involved smartphones thanks to advancements in the processing speed and sensor technology used in smartphones.The majority of accident detection systems that rely on smartphones rely on the vehicle's high speed (retrieved from the GPS receiver on a smartphone) and the gee value (extracted from a smartphone's sensor-based measurement system) to identify accidents. According to several references, ninety percent of traffic accidents involve vehicles travelling at low speeds. As a result, In addition to detecting high-speed accidents, this paper also focuses on detecting vehicle accidents at low speeds. Finding a way to tell Regardless matter whether a user is inside or outside the car, moving slowly or not, is the main challenge in low speed accidents. The intended method in this study distinguishes between the low-speed speed fluctuation and this obstacle'simpact is reducedvehicle and a person slowly running or walking. The intended system is divided into two sections: the phase of finding used to identify car accidents at low and high speeds. The notificationsection is used to convey specific information to the emergency responders for speedy recovery, such as images, video, the location of the accident, etc. The system successfully completed its testing in a simulated setting with excellent performance results.

I. INTRODUCTION

The primary goal of a vehicle chase system is to secure all or any vehicles. The primary goal of accident alert systems is to save lives in accidents. This frequently refers to upgraded vehicle security systems. The most recent technologies, like GPS, are very helpful right now; with this method, the owner can view and track his car and learn about its movement and previous activities. This new technology, also referred to as vehicle chase systems, made a number of amazing improvements to vehicle security. UN employees inside or outside the truck cannot see this gear because of how it is mounted on the vehicle. It functions as a covert unit that transmits system data to the observation unit constantly or if the system is interrupted. Once the car has been taken, the chasing system's scenario data will be used to detect the problem and may even be forwarded to the police for further action. When they detect an unauthorised movement of the car, certain vehicle pursuit systems even inform the owner. This gives it an advantage over other technological items for continuous use. Its accident warning system finds the accident's location and identifies it, delivering GPS coordinates to the appropriate mobile device, computer, etc.If the temperature inside the vehicle rises above a certain level, a fire discoveror circuit in the vehicle is used to detect fire.If the temperature inside the car rises above a set threshold, a mechanical warning is mechanically sent to the intended recipient. The infrared device, which is also interfaced to the microcontroller, is used to detect obstructions and accidents; however, if any mishap occurs, a warning is immediately sent to the intended recipient. The system automatically sends an answer to that particular mobile device, showing the position of the vehicle in terms of latitude and longitude, in response to an electronic device's request for user participation. A software has been developed that is utilised to travel a track and locate the car precisely.

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 7 July 2022, pp: 814-823 www.ijaem.net ISSN: 2395-5252

II. FRAMEWORK

A. Detection section

If the temperature inside the car rises above a set threshold, a mechanical warning is mechanically sent to the intended recipient. The infrared device, which is also interfaced to the microcontroller, is used to detect obstructions and accidents; however, if any mishap occurs, a warning is immediately sent to the intended recipient. When an electronic device receives a request for user participation, the system automatically sends an answer to that specific mobile device, indicating the location of the vehicle in terms of latitude and longitude. A programme has been created that is used to navigate a track and determine the exact location of the vehicle. (Smartphone measuring device sensing element: To record the force unit (acceleration force) experienced by the dweller, the detection section continuously extracts data from the measuring device sensor.

(GPS on a smartphone: To determine vehicle speed, the detection section continuously extracts GPS information. The use of vehicle speed increases the possibility of a police investigation involving accident-related measuring device data.

Smartphone microphones are susceptible to picking up powerful acoustic events like airbag detonations. The possibility of a successful police inquiry utilising GPS data and accident-supportive measuring device sensing element data is increased by the usage of the microphone. (Smartphone camera: It is known that using a smartphone camera increases the possibility that the police will look into the aforementioned car collision. The smartphone camera of the owner and the cellphones of onlookers are both prone to capturing and sending footage to the emergency response centre for extra examination.

Element of the detection section

1) Detection Section Specification: The force unit rate, of higher than 4G, intimate with by smartphone measuring device sensing element is the most important factor that is used by automobile accident detection systems to discover automobile accidents. Furthermore, numerous studies involving rear-end collisions with willing subjects have been conducted; the data from these studies present a novel opportunity to examine how acceleration affects the risk of injury.The findings indicate that the majority of the population exhibits medically specific symptoms and has a mean acceleration greater than 4G. True force unit price alone is insufficient evidence to find an automobile accident because it would produce a false positive result. The smartphone's internal projected detection module continuously samples and reads the measuring device sensing component in order to identify collisions. Due to the fact that smartphones are frequently carried in an extremely close pocket to the occupants, they experience an equivalent acceleration force to that experienced by the occupants in the event of an accident. In actuality, there are a lot of issues that need to be considered throughout the accident detection section. These issues have been listed andThe empirical results mentioned in this article showed that once the smartphone is born inside the vehicle, it experiences roughly 2G's on the coordinate axis and coordinate axis with nearly 3G's on the coordinate axis before it is reset. (To strain acceleration values caused by dropping the phone inside the vehicle or fulminant stop, whose acceleration values may well be taken as automobile accident. The acceleration experienced by the smartphone during a full stop (emergency braking) that does not result in a crash is also less than that experienced during the fall; it only experiences about 1G in each direction. In order to suppress any false positives that may occur inside the vehicle, 4G was selected as the acceleration threshold price. The empirical results mentioned in this article showed that once the smartphone is born inside the vehicle, it experiences roughly 2G's on the coordinate axis and coordinate axis with nearly 3G's on the coordinate axis before it is reset. (To strain acceleration values caused by dropping the phone inside the vehicle or fulminant stop, whose acceleration values may well be taken as automobile accident. The acceleration experienced by the smartphone during a full stop (emergency braking) that does not result in a crash is also less than that experienced during the fall; it only experiences about 1G in each direction. In order to suppress any false positives that may occur inside the vehicle, 4G was selected as the acceleration threshold price(The most crucial system activated in this field occurs when the vehicle is moving at a high speed of more than 24 km/h and the smartphone acceleration is greater than 4G. This method did not account for accident detection when the vehicle is moving at a slow speed, below twenty-four kilometres per hour, which is also susceptible to accidents. One of this paper's major contributions is the detection of car accidents at sporadic speeds below 24 km/h and the resulting larger-than-4G smartphone acceleration experiences.

(Concurrently, it's important to take into account some situations that result in false positives, such as accidentally dropping a smartphone while the user is outside of a car and other false positives whose acceleration values

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 7 July 2022, pp: 814-823 www.ijaem.net ISSN: 2395-5252

ii. Low Speed Accident

90% of all traffic collisions occur at speeds under 14 mph (22.53 km/h), resulting in serious injuries for the passengers. As a result, the following two states demonstrate how to apply CADANS' anticipated low speed parameters:

a. The second criteria utilised to guarantee that the user is inside the car is the speed threshold of 24 km/h, which is equally prone to accidents, when the automobile is continually driving at a high pace.While the total speed is below the speed threshold (24 km/h), this parameter, known as the speed variation amount, is employed to maintain speed variation values within acceptable bounds. The theory behind it is that the automobile won't be able to keep its constant pace for as long in irregular traffic travelling at a speed below 24 km/h. Based on field studies, the amount of speed fluctuation is fixed at thirty seconds to signal that the user is still in the vehicle. On the other hand, the user's pace variation when holding a smartphone while walking or running slowly is often different from when he is in a car, which is going at a speed resembling that of a coffee shop. speed same to beforeThe common deviation is determined utilising a range of speed values that are taken every thirty seconds with a fifteen-second pause in between each measurement in order to distinguish between the two states. The quality deviation of various speed values for a person walking ranges from 1.056 to 1.88, and the average deviation for a person jogging slowly is 2.06, as shown in Fig. 3. These findings are from actual testing. It was found that the quality deviation for these studies was higher for an automobile travelling at different speeds below the 24 km/h speed limit.

In light of this, there is proof that an accident happened if a smartphone encounters an acceleration event that is larger than 4G and the variance of the speed variation amount parameter is more than the tipping point (2.06). Variation in Vehicle Low Speed Deviation for Thirty Seconds. Variation in Walking Speed for Thirty Seconds.

b. It commonly happens that a car is travelling at a high speed when it abruptly or gradually slows down to less than the 24 km/h speed limit. Therefore, the second parameter indicated in step (a) greater than is employed to address this development in this circumstance. In reality, the second parameter's activation requires a specific period of time before the variance can be determined. The third criterion that will be used to certify that the user is inside the automobile is thus the greatest length of time the vehicle is travelling from the last location when the speed was decreased below the speed threshold of 24 km/h (when the car is travelling at a high speed and decreased to a low speed). According to the logical conclusion, it is sort of sufficient to ensure that the user is unable to escape the vehicle during the maximum quantity of progress thirty seconds.

This parameter is used specifically when the vehicle's speed was unusually high and had to be decreased to stop at junctions, traffic lights, or because of other unexpected circumstances. Therefore, if an acceleration event experienced by a smartphone while driving below 24 km/h is greater than 4G and the progress duration is shorter than the higher than given maximum amount, it is considered evidence of an accident. Obviously, if the larger than stated maximum quantityis crossed without any indication of an accident, the second parameter described in Step 2 will manage this situation.higher than in (a). Additionally, while calculating the quality deviation of the interleaved speed variation amount parameter specified in step (a) above, the progress most amount is taken into consideration. demonstrates how the parameters given in steps (a) and (b) above are combined and turned on.

The timing diagram shows how the low speed parameters are turned on.

iv. Options for support

The following settings are used to improve the identification procedure and reduce the possibility of false positives in any situations when their acceleration values are unknown:

When looking for an accident, the built-in electro-acoustic transducer concentrates on high-volume auditory events including airbag activation, impact sounds, and automobile horns. However, the airbag ready system will interpret loud noises made by the driver and passengers during activities like dropping phones, yelling, laughing, listening to loud music, and driving with the windows down as harmless noises. None of these noise-producing actions would be louder than the associate airbag readying range of 160 dB, according to the empirical data in [4].

However, certain smartphone microphone systems experience signal clipping at decibel levels exceeding 140 dB, making it challenging to differentiate between noises like an airbag inflating and the radio being played at maximum volume. Due to this, it is challenging to utilise the sound alone to locate the accident, but it may be used as a secondary filter in conjunction with an acceleration threshold value to enhance the identification process and lower false positives. Additionally, the sound threshold in

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 7 July 2022, pp: 814-823 www.ijaem.net ISSN: 2395-5252

the CADANS is estimated to reach 140 dB due to signal clipping.

The projected detection system trains the smartphone camera to record a video of what is happening at the time of the associated accident in real time when the detection method indicates a proof of accident in order to increase the probability of associated accident, increase detection accuracy, and reduce false positives. The emergency responder will next go over the film to look for any additional proof of an accident. Furthermore, the technology is intended to allow spectators to record films and transmit them to emergency personnel for further analysis.

B. Notification part

Detecting an automobile collision without warning is the same as doing nothing. According to logic, the detection component's most essential duty should be the accuracy of the detection approach, while the notification component's most significant job should be the timeliness and kind of information accessible to emergency responders. The proposed notification part's design is seen in Fig.6. In the notification area, the smartphone will deliver three distinct sorts of notifications:

1. Driver and /or traveler Notification

When the detection part confirms that an accident has occurred, a smartphone GPS receiver is required to notice the geographical location of the accident associated with then utilises the integral 3G knowledge association to send accident info such as: g (acceleration force) experienced by the occupants throughout an accident, speed of the vehicle, the GPS location, airbag readying state, time of the accident, and a recording video (showing what happened). Driver and/or traveller notifications are sent to emergency responders via smartphone.

2.The CADANS are enabled by Bystander's Notifications for the continuous transmission of several streams of videos and images from the scene of an accident by bystanders. A smartphone GPS receiver is also necessary to detect the exact location of the accident and contact emergency officials. Images and videos from the accident are being transferred by bystanders.

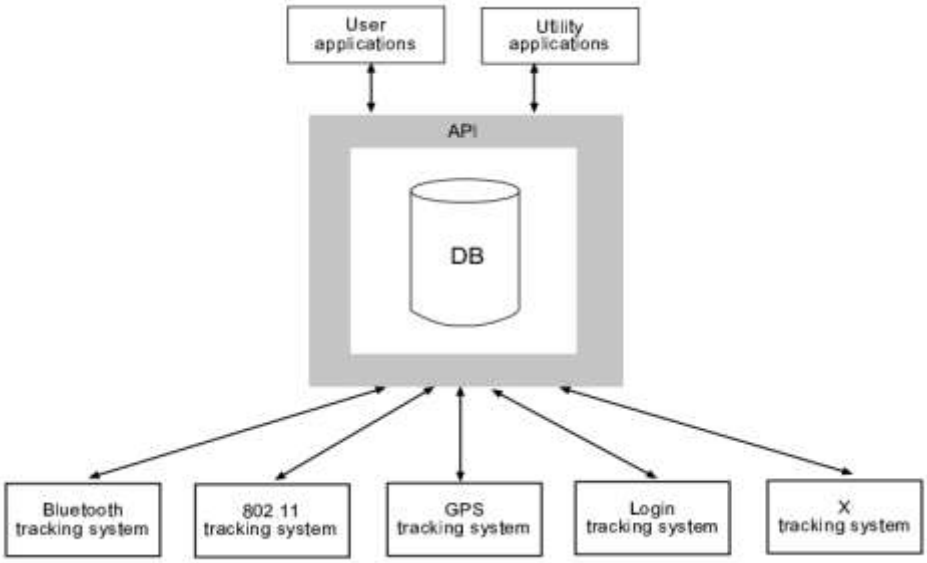
3. SMS Notification

Its use is to strengthen the component of notification, it was found that sending an SMS message with the location of the accident to the driver's or passenger's contacts, such as a family member, would be an effective approach to notify them of the accident.

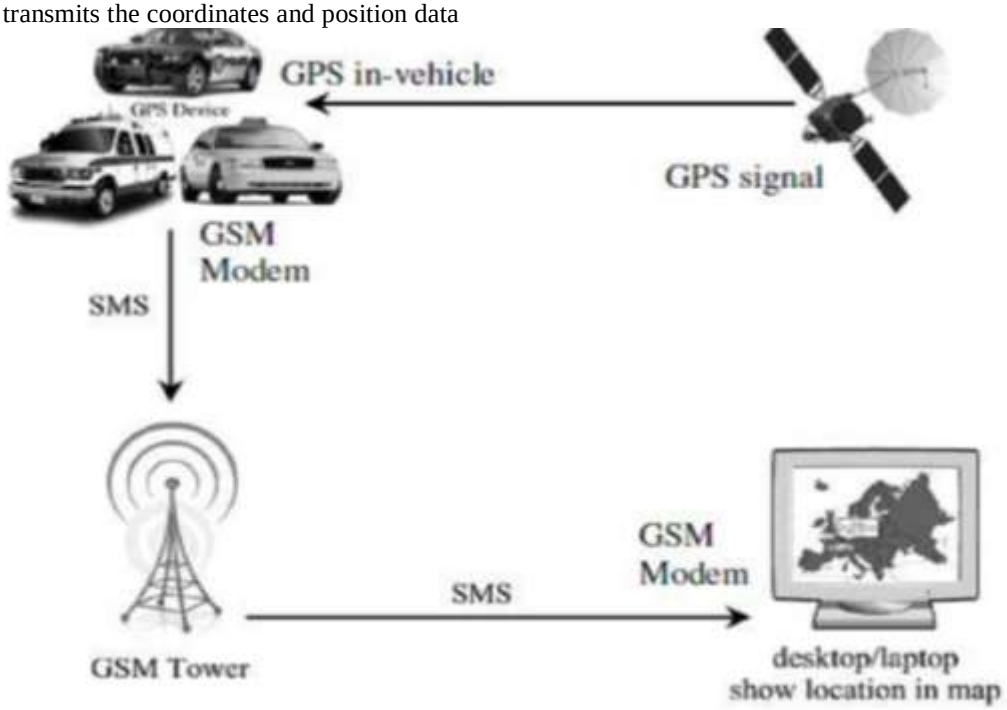
III. RESEARCH METHODOLOGY

The project comprises of a tiny controller, a GPS receiver, and GSM technical equipment. The entire system is linked to the car. One GSM itinerant is connected to the computer using VB programme in the distinct finish (primary vehicle station). Therefore, the GSM electronic equipment can receive from the GPS system longitudinal and altitude data that are identical to the position of an automobile. Consider that the bus departed the city at noon to start the day. The officer in charge of that car may go back to the computer and choose the vehicle range in the VB software if he needs to know where the vehicle is. The VB programme may send SMS messages to the vehicle range. Because the moving vehicle is equipped with a GSM device and a sim card, the SMS sent would be routed through the GSM service provider to reach the moving vehicle. This GSM electronic gadget is capable of receiving SMS messages and transmitting them to the vehicle's microcontroller. The microcontroller may receive this SMS and compare the positive identity and the command.It will carry out the request required by the employer if all the criteria are met. Each great circle and latitude has a designated region name. These details are obtained via the GSM receiver in the car's office, which then provides them to the computer through a connection.The computer's VB application compares this information to its database and presents the key features of the car on the screen. The gadget is positively identified controlled, meaning that it can only be used by someone who is aware of its positive identity. In the event of an accident like a fire, crime, or barrier, the device can automatically deliver Associate in Nursing awake to the registered range, i.e., the quantity that is sent into the memory of the microcontroller.

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 7 July 2022, pp: 814-823 www.ijaem.net ISSN: 2395-5252

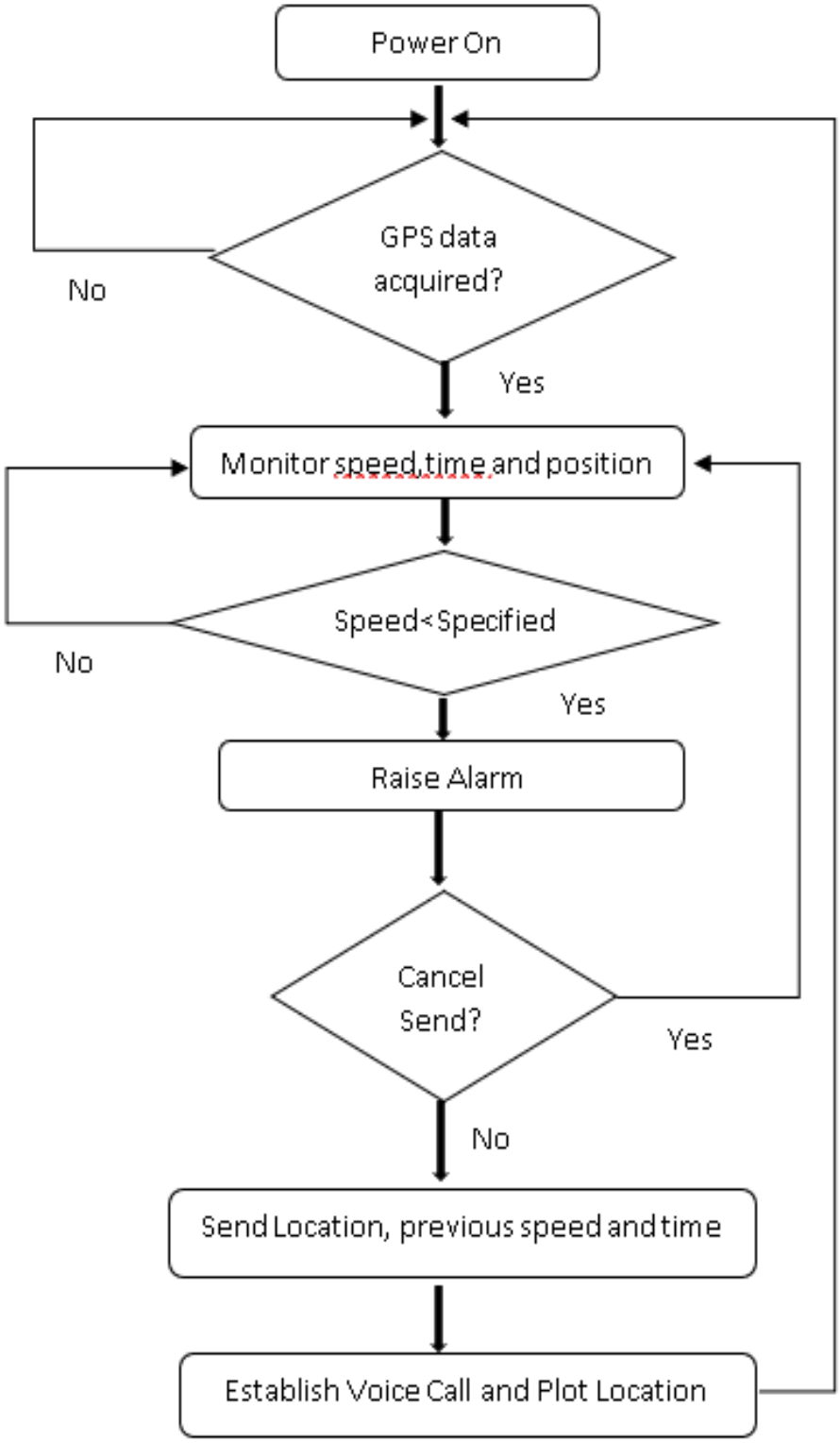


This car tracking system uses GPS input and sends it to the selected mobile or laptop victimising mobile communication through the GSM module. One of the most significant technology developments for tracking a vehicle's activity is the vehicle pursuit system. The safety system locates the monitored or self-propelled vehicle using the Global Positioning System (GPS) and then transmits the coordinates and position data to the observation centre via satellite or radio technology. At the observation centre, a variety of software programmes are employed to map the vehicle. This allows car owners to track their automobiles on a regular basis. As a consequence of the period chasing facilities of owners of high-priced automobiles, vehicle chase systems have developed among houses.



Basic Working

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 7 July 2022, pp: 814-823 www.ijaem.net ISSN: 2395-5252



Flow Chart

Findings Principal Causes of Traffic Accidents Stress and environmental variables are significant contributors to serious traffic accidents. Additional critical factors such as the age of the

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 7 July 2022, pp: 814-823 www.ijaem.net ISSN: 2395-5252

vehicle, safety procedures, human error, and the time and place of the accident all contribute to the number of deaths and hence the severity of the accidents.The bulk of transportation accidents seem to be caused mostly by human mistake. Examining the operator or human factors may be a key component of accident assessments. One of the most crucial concerns relating to road safety is the investigation of the role played by humans in the traffic system. The operator's skill level and the flow of traffic are other variables in crashes.Stress brought on by monetary or familial problems can sometimes result in human mistake. They cause traffic accidents when they are in this mentality. One of the reasons for car accidents in our nation is carelessness. Using a phone while driving, running a red light at a stoplight, and straying into the path of another vehicle are just a few examples. One of the reasons for this is over-speeding, as the severity of an injury increases with the speed of a crash, and the lack of head protection is what causes the most catastrophic yet avoidable injuries.Road traffic accidents likely to occur more frequently when drivers lack appropriate experience, approve insufficiently qualified drivers, and have inadequate knowledge of traffic signs.Driving a car while inebriated is a crucial factor in the alarming rise in different types of traffic accidents. Drivers who are under the influence of alcohol or other intoxicating substances lose self-awareness and control of their vehicles, which adds to accidents. One of the factors is the governmental authorities' lack of responsibility and sensitivity.If traffic lights are not properly maintained, human sensitivity and life-respecting feelings of state officials look at items on the highways like malfunctioning traffic lights, which also contributes to accidents.The end consequence of traffic accidents on the road is extensive damage to the general public and private property, numerous temporary and permanent injuries, and serious human and material losses. Various reports highlighted the critical elements affecting accident severity. According to Kristle Young et al. (2007)'s research on in-vehicle driver distraction, which focused largely on mobile use, this item has gotten the most attention in the driver distraction literature. The paper also discussed the influence of in-vehicle technologies on driving efficiency.Haigney et al. (2000) investigated the potential impacts of using a cell phone while driving.With the use of stimulators and thirty individuals, researchers examined the relative effects of using a hands-free and a hand-held cell phone while driving. The findings showed a decline in mean speed and participant quality across all linguistic platforms. According to the findings, drivers are frequently concerned throughout a wide variety of hostile approaches in order to maintain a satisfactory level of driving performance while dealing with in-vehicle electronics.Road Traffic Accident FrequencyCalculable in nature.

Every year, 2 million people are killed in traffic accidents, while 50 million families are torn apart and 85 percent live in poor nations.

Asia is the region in the globe with the greatest rate of road accidents.According to National Crime Records Bureau figures, around 135000 persons die in vehicle accidents in Asian countries each year. According to the findings of a population-based research on injuries conducted by Moshiro et al. (2001), between 1992 and 1998, transport-related accidents were the leading cause of injuries in Dar es Salaam, Tanzania. According to the Annual United States Road Crash Statistics, over 37,000 people are killed in vehicle accidents each year.In 2012, there were 195,723 documented casualties on UK roads, including 1,754 fatalities and 23,039 serious injuries. According to a joint research conducted by the Ministry of Interior and the Ministry of Transportation, 33,000 individuals died in crashes that occurred 100,000 times between 2008 and 2012, while 100,000 people were wounded and 100,000 autos were totalled. The average chance of an associated accident in Washington, D.C. is a surprise every four.8 years, which is twice as frequently as the national average of ten years. Research on traffic accidents in various countries ThusoMphela gathered and wrote on the impact of traffic enforcement on fatal road accidents in Botswana (2005).The influence of traffic enforcement on deaths in the Republic of Botswana was studied during this study using secondary data from interviews with law enforcement officials and multiple multivariate analysis. According to studies conducted worldwide, licenced drivers between the ages of thirty and forty-five had the lowest fatality rates. Hossain claimed that the situation with regard to traffic accidents was particularly bad in the Asian nation of Khulna (2005). Two years' worth of data on traffic accidents were obtained from a variety of police stations located across the municipality. In the 157 traffic incidents that occurred during the reporting period, 25% of the victims were between the ages of 30 and 39, 33% of pedestrians died, and 34% were separated. According to Omar and Ashawesh (2008), road accidents will overcome other significant causes of mortality and disability to achieve third place by 2020. Atubi (2010) performed a monthly analysis of road accidents in

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 7 July 2022, pp: 814-823 www.ijaem.net ISSN: 2395-5252

the Nigerian state of Laos using data from secondary sources.This research recommended safety measures for both prevention and correction in order to lower traffic accidents. Over the past thirty years, a worrying trend in the number of traffic accidents has been seen in Nigeria. In comparison to the United Kingdom, the risk of being killed is 47 times higher in Nigeria. Banik et al. have examined a study on road accidents and safety in an Asian nation (2011).The Sylhet region of the Asian nation, which may be quickly reached at 28180 Muthusamy It faces serious traffic accidents due to the simultaneous increase of the road vehicle fleet and economic tourism. By having a greater understanding and awareness of the accident causes, the severity of road accidents may be avoided and decreased.Despite the lack of an effective tiredness detector, Igor Radun (2009) investigated the role of exhaustion in the occurrence of accidents and found that, according to the police, weariness was a factor in three out of every four single-vehicle accidents. A driver who is involved in an accident after being awake for more than 24 hours in a row risks up to ten years in jail.The relationship between traffic safety and vehicle alternatives was examined by Shanjun Li in 2012.This was accomplished by quantifying the impact of the competition on the demand for vehicles, producer performance, and traffic safety. The latest light trucks' twelve-tone music sold out in 2006, and 204 traffic fatalities may be attributable to the race, with the appearance match between light-weight trucks and passenger vehicles being the cause. A lightweight truck's accident spatial relation costs $2444 over the vehicle's lifetime. Seth Daniel Oduro addressed breakdown and its influence on a traffic incident in Kumasi, Republic of Ghana (2012).This study's analytical method was a survey that depended on form input to provide the data for analysis and debate.One-fourth of car owners agreed that a lack or shortage of brake fluid was to blame for brake failure, while one-third of respondents felt brake heat was to blame. The principal causes of traffic accidents include motorised vehicles on our roads, flagrant disregard for traffic regulations, excessive loading, and weary driving. investigate several road safety concepts Acqua, Gianluca, et al. (2003) employed mathematical algorithms to predict injury accidents and offered a road safety example.With a 95 percent level of confidence, two accident prediction models—one for multilane country roads and the other for four-lane highways—were labelled using the victimisation process assisted technique of least squares.The instructional factors included traffic volume, lane width, vertical slope, rate of curvature modification, and length of highway segments. The network of the Salerno Province was lined with 223 kilometres of Italian roads, which were then examined. The Taylor series was used to estimate the coefficients of the variables utilised, and it was supported by the Gauss-Newton technique. Taimur Usman et al. proposed a modelling approach in their 2010 work Accident Analysis and Bar that related accident frequency to visibility, paved surface characteristics, and other influencing aspects during a snowfall occurrence. This study's research is utilised to assess various maintenance strategies that employ performance-based safety. The study defined the actual relationship between safety and paved surface parameters, making it easier to evaluate safety advantages. In an African country, data processing techniques were utilised to correlate recorded road characteristic data with accident severity, and set regulations that the Ethiopian Traffic Agency might employ to improve safety.Information about several aspects of the Ethiopian traffic system, such as traffic volume, traffic concentration, and conveyance accidents, is available. According to the study, accidents don't just happen randomly around the road network, and drivers aren't just randomly involved in collisions.

The accident report has close to forty text, number, date, and time elements. The type of licence plate and the driver's name were among those with unbroken confidentiality for Privacy Features. In terms of locations, frequency, vehicles, and time periods, traffic accident prevalence and severity distributions were analysed using a technique by Ahmad Hasan Nouri et al. in 2012. Furthermore, Poisson and negative binomial regression models can be used in accident modelling (Lee 1999).

Increased city road safety in Sweden was the topic of a contingent valuation (CV) study, according to Lars Hultkrantz et al. (2006).

The respondents have economics and finance degrees. Gain for decreased risk was achieved by educating people about risk reduction and price assurgents, and comparing the results from samples with various risk correction values.Wang, Baojin (2002) Sampling Drivers' opinions on common road settings and how they affect safety were surveyed. A face-to-face survey of a sample of Sydney drivers was used to estimate an ordered Integrity model, which is an approach commonly used in travel research. A survey respondent evaluated 27 situations designed to depict a driver's view of road safety. the percentages of non-public injury crashes (PIC) that

happened on the roads in English authority regions in the last 10 years There was a considerable difference in improvement rate between the urban and rural components, and previous PIC risk estimations were well supported.The study examined the accident situation at locations where police cameras are always at work and how it affects accidents.According to Dinesh Mohan (2011), a few affluent countries have unreliable data on traffic accidents, whereas a few developing nations have sophisticated information systems. A thorough evaluation of the state of road safety in 178 nations was produced by this investigation. The data from a typical survey that was not passed down from national governments was frequently used to recommend laws and strategies for improving road safety. Numerous maintenance techniques for preventing accidents as well as coefficients of commonly used variables like traffic flow and lane dimensions would be calculable from the research of various safety models.The model studies are valuable in identifying essential factors that cause accidents and the distributions of traffic accidents so that effective prevention strategies may be implemented. Because of model research on analysis of the driver's position and performance, it will be simpler to build particular preventative measures to stop accidents that are usually caused by riders. The use of video police investigation to examine accident hotspots has been found in studies to be helpful in preventing accidents.

IV. CONCLUSION

The vehicle chase system improves fleet management, which ultimately results in enormous revenues. Better planning or route designing will change how you tackle bigger assignments at specific times. Vehicle chase enhances safety and security, communication channels, performance awareness, and productivity for both private and corporate purposes. Consequently, it is expected to have a big impact on how we live in the coming year. The project's primary goal is to incorporate various sorts of sensors to help reduce the likelihood that someone would perish in an accident that we can't prevent.When an accident is reported, paramedics are called to the scene to help people survive. This concept is far more beneficial for accidents that occur at night or in uninhabited places. This automobile chase and collision alert function will become even more vital in daily life in the future.

REFERENCES

[1]. Indian Penal Code,1860, Section 279- Rash driving orriding on a public way. [Online]:http://indianlawcases.com/Act-Indian.Penal.Code,1860-1726

[2]. InaraHasanali (2016) Alcohol andDriving. [Online]:http://www.medindia.net/patients/patientinfo/alcoholdriving-indian-law.ht S. Weiner, "Feasibility of a 802.11 VANET Based Car Accident Alert System," http://origin.www.ieee.org/documents/weiner_feasibility_802.11.pdf, 2010.

[3]. G. Ou, Y. Gao and Y. Liu, "Real-Time VehicularTraffic Violation Detection in Traffic MonitoringStream," in WebIntelligence and Intelligent AgentTechnology (WI-IAT), 2012 IEEE/WIC/ACM International Conferences, Macau, 2012

[4]. William Stalling, "Wireless Communication and Networks", 2nd edition, prentice hall of India, 2005.

[5]. Chen, H., Chiang, Y. Chang, F. H. Wang, Toward Real-Time Precise PointPositioning: Differential GPS Based on IGS Ultra Rapid Product, SICEAnnual Conference, The Grand Hotel, Taipei, Taiwan August 18-21,(2010)

[6]. Asaad M. J. Al-Hindawi, Ibraheem T alib, "Experimentally Evaluation ofGPS/GSM Based System Design", Journal of Electronic Systems, Volume 2 Number, 2 June, 2012.

[7]. Kunal Maurya , Mandeep Singh, Neelu Jain, "Real Time Vehicle Tracking System using GSM and GPS Technology- An Anti-theft Tracking System", International Journal of Electronics and Computer Science Engineering, ISSN 2277-1956/V1N3-1103-1107 .

[8]. Vikram Kulkarni & Viswaprakash Babu, "embedded smart car securitysystem on face detection", special issue of IJCCT, ISSN(Online) : 2231-0371, ISSN(Print):0975-7449,volume-3, issue-1.

[9]. R.S Gaonkar, "Microprocessor Architecture Programming andApplication", Wiley Eastern Ltd, New Delhi.

[10]. Krishna Kant, "Microprocessor and microcontroller", Eastern Company Edition , New Delhi 2007

[11]. C. Thompson, J. White, B. Dougherty, A. Albright, and D. C. Schmidt, "Using smartphones to detect car accidents and provide situational awareness to emergency responders," in MOBILWARE'10, 2010, pp. 29– 42.

[12]. D. Punetha, D. Kumar, and V. Mehta, "Article: Design and Realization of the Accelerometer based Transportation System (ATS)," International Journal of Computer Applications, vol. 49, no. 15, pp. 17–20, July 2012.
[13]. P. Lawitzki, "Android Sensor Fusion," http://www.thousand-thoughts. com/2012/03/android-sensor-fusion-tutorial/ [Acessed 20 February 2014], 2012
[14]. S. Weiner, "Feasibility of a 802.11 VANET Based Car Accident Alert System," http://origin.www.ieee.org/documents/weiner_feasibility_802. 11.pdf, 2010.
[15]. C. Thompson, J. White, B. Dougherty, A. Albright, and D. C. Schmidt, "Using smartphones to detect car accidents and provide situational awareness to emergency responders," in MOBILWARE'10, 2010, pp. 29–42.
[16]. D. Punetha, D. Kumar, and V. Mehta, "Article: Design and Realization of the Accelerometer based Transportation System (ATS)," International Journal of Computer Applications, vol. 49, no. 15, pp. 17–20, July 2012.
[17]. P. Lawitzki, "Android Sensor Fusion," http://www.thousand-thoughts. com/2012/03/android-sensor-fusion-tutorial/ [Acessed 20 February 2014], 2012