ALCOHOL BASED ENGINE LOCKING SYSTEM USING IOT AND GSM

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ABSTRACT:

Increment in population is the significant purpose behind quick development of innovation and vehicles, which is additionally liable for some number of mishaps in this quick moving world. Numerous passing is caused because of absence of crisis administrations. Along these lines, in this undertaking we intend to give crisis administrations to the individual who meet with a mishap as quickly as time permits. At the point when a vehicle meets with a mishap, promptly the accelerometer sends varieties to the Arduino and subsequently the Arduino sends the alarm message through the area which is distinguished by IOT to recently spared crisis contacts. In the event that the mishap is not serious, at that point the alarm message can be ended by the driver by a key gave. This paper points in giving crisis benefits as quickly as time permits for future extension, we include numerous applications like liquor recognition and rest discovery and so forth.

INTRODUCTION

The ability to accurately detect a vehicles location and its status is the main goal of automobile trajectory monitoring systems.&also The high demand of automobiles has also increased the traffic hazards and the road accidents. This is because of the lack of best emergency facilities available in our country This design is a system which can detect accidents in significantly less time and sends the basic information to first aid center within a few seconds covering geographical coordinates, the time and angle in which a vehicle accident had occurred. This alert message is sent to the rescue team in a short time, which will help in saving the valuable lives. These systems are implemented using several hybrid techniques that include: wireless communication, geographical positioning and embedded applications. project will establish a communication between the control station and the unit installed in vehicles. Vehicles will have GPS/GSM enabled tracking modules and will be tracked in real time using cellular networks. The software embedded in the microcontroller will control the various operations of the device by monitoring waveform from

the vibration sensor. In case of accident the device will send an alert message along with location data from GPS module to control station using GSM network. It is a comprehensive and effective solution to the poor rescue response in case of accident. The accident reporting can automatically find a traffic accident, search for the spot and then send the basic information to the rescue agency covering geographical coordinates and the time and circumstances in which a traffic accident took place. At the server end, a control function will extract relevant data.

LITERATURE SURVEY:

Now-a-days, mobile phone is used mostly by all people with internet usage are also at all.so these mobile phone also provide communication platform as they are equipped with 2G or 3G network .There are lots of cause of accident of car and they are drunkenness of driver, drowsiness of driver, unconsciousness of driver, and many time what happen driver is not responsible for accident but their (car) neighboring car behavior also have made role to enforce accident. There are also some system have been implemented to avoid accident but that do not give proper solution to implement in car to avoid various accidents that they are normally being happen. For example when driver at speed suppose 80 km/h suddenly stop ignition system may lead to chances of dangerous accident. In [2] , they had use PIC 16876A controller, Alcohol sensor, LCD Display And Alarm system to notify driver only, ignition system was immediately off when detected alcohol In [3] , IR sensor was used to detect obstacle which comes in front of this sensor(vehicle), and when obstacle detected vehicle was stop. It was also monitoring the toxic gases such as CO_2,LPG, Alcohol from inside area of the vehicle .If there is high content of gases then SMS had been send to authorized person to notify only. In [4] , It describes a real-time online prototype driver-fatigue monitor. It uses remotely located chargecoupled-device cameras which was equipped with active infrared illuminators to acquire video images of the driver. Various visual cues that typically characterize the level of alertness of a person are extracted in real time and systematically combined to infer the fatigue level of the driver. The visual cues employed characterize eyelid movement, gaze movement, head movement, and facial expression. If the eye of driver is being continuously closing it mean eye-blink frequency is beyond the normal state and it is in sleeping condition then ignition system would be off immediately In [5], It describes how breath alcohol concentration exhaled by driver is detected through the alcohol sensor MQ303A, the sensor output voltage signal through ADC0809 after converting input to MCU

EXISTING SYSTEM:

In previous project we implemented by using the only we can identify the accident area but we cannot track the location by this sometimes life will be in danger position lead to death to avoid this we have implemented IOT and GPS to track the location of the vehicle accident system.

PROPOSED SYSTEM:

The ability to accurately detect a vehicles location and its status is the main goal of automobile trajectory monitoring systems.& also The high demand of automobiles has also increased the traffic hazards and the road accidents. This is because of the lack of best emergency facilities available in our country This design is a system which can detect accidents in significantly less time and sends the basic information to first aid center within a few seconds covering geographical coordinates, the time and angle in which a vehicle accident had occurred. This alert message is sent to the rescue team in a short time, which will help in saving the valuable lives. These systems are implemented using several hybrid techniques that include: wireless communication, geographical positioning and embedded applications. project will establish a communication between the control station and the unit installed in vehicles. Vehicles will have GPS enabled tracking modules and will be tracked in real time using cellular networks. The software embedded in the microcontroller will control the various operations of the device by monitoring waveform from

METHODOLOGY:

In this project we have developed a real time model that can automatically lock the engine when a drunken driver tries to drive a car. Now-a-days car accidents are mostly seen. By fitting this alcohol sensor into the car, we can save guard the life of the driver and also the remaining passengers. It is very simple application. The life time of the project is high. It has low or zero maintenance cost and of course low power consumption. This is a developed design to efficiently check drunken driving. By implementing this design a safe car journey is possible decreasing the accident rate due to drinking. By implementing this design, drunken drivers can be controlled so are the accidents due to drunken driving. Government must enforce laws to install such circuit in every car and must regulate all car companies to preinstall such mechanisms while manufacturing the car itself. If this is achieved the deaths due to drunken drivers can be brought to minimum level. In this type of system, future scope can be safely landing of car aside without disturbing other vehicles.

Block Diagram
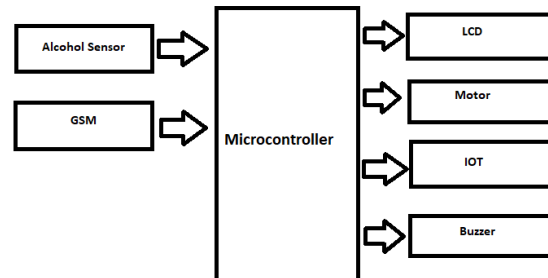
HARDWARE REQUIREMENTS:

Motor

An electric motor is a device used **to convert electrical energy into mechanical energy**. Scientifically speaking, the electric motor is a unit used to convert electric power into motive energy or electrical energy into mechanical energy.

Alcohol sensor:

The alcohol sensor is technically referred to as an MQ3 sensor which detects the ethanol in the air. When a drunk person breathes near the alcohol sensor it detects the ethanol in his breathe and provides an output based on alcohol concentration.

GSM:

The **Global System for Mobile Communications** (**GSM**) is a standard developed by the European Telecommunications Standards Institute (ETSI) to describe the protocols for second-generation (2G) digital cellular networks used by mobile devices such as mobile phones and tablets. GSM is also a trade mark owned by the GSM Association.[2] GSM may also refer to the Full Rate voice codec.[

LCD:

we always use the devices which are made up of LCDs such as CD players, DVD players, digital watches, computers, etc. These are commonly used in the screen industries to replace the utilization of CRTs. Cathode Ray Tubes use huge power when compared with LCDs, and CRTs heavier as well as bigger. These devices are thinner as well power consumption is extremely less. The LCD 16×2 working principle is, it blocks the light rather than dissipate. This article discusses an overview of LCD 16X2, pin configuration and its working.

Buzzer:

A **buzzer** or **beeper** is n audio signaling device,[1] whichmay mechanical, electromechanical, or piezoelectric (*piezo* for short). Typical uses of buzzers and beepers include alarm devices, timers, train and confirmation of user input such as a mouse click or keystroke.

RESULT:
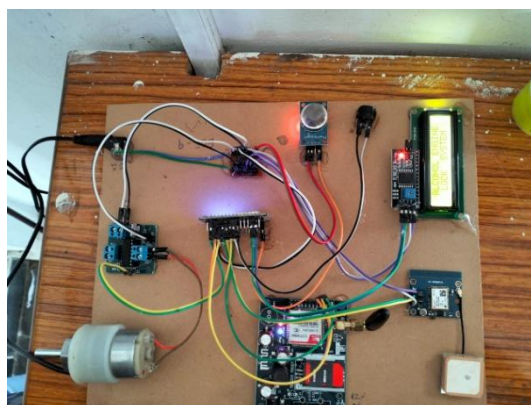
CONCLUSION:

This system was proposed to increment in population is the significant purpose behind quick development of innovation and vehicles, which is additionally liable for some number of mishaps in this quick moving world. Numerous passing is caused because of absence of crisis administrations. Along these lines, in this undertaking we intend to give crisis administrations to the individual who meet with a mishap as quickly as time permits. At the point when a vehicle meets with a mishap, promptly the accelerometer sends varieties to the Arduino and subsequently the Arduino sends the alarm message through the GSM MODULE, including the area which is distinguished by GPS MODULE to recently spared crisis contacts. In the event that the mishap is not serious, at that point the alarm message can be ended by the driver by a key gave. This paper points in giving crisis benefits as quickly as time permits for future extension, we include numerous applications like liquor recognition and rest discovery and so forth.

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