Accident monitoring & tracking system

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ABSTRACT

In the modern world of the science and technology. Transportation system is an integral part of living. Roads accidents are placed fraction of second in all over life. Uncontrolled of Speed is the main part of accident in life. Detects the vehicle accident. Sends intimation to the registered mobile numbers. It sends the position of the vehicle to mobile number as an SMS with location. The GPS is used to track the vehicle .If any accident detected then an alert will be given with buzzer. It Send the intimation to the owner and hospital. It will process the data through microcontroller unit and then with GPS, GSM it will send a notification to the nearest Hospital.

INTRODUCTION

In highly populated areas, the human lose their life due to improper medical services at in time. The development of foundation and technology rapidly made one lives simpler. The appearance of technology has additionally increased the traffic hazards and the road accidents .In India in every five minutes are accident in the road then 77% of accidents are due to manual mistakes. In every vehicle consists of navigation system which continuously provides the alerts about a particular vehicle. A vehicle tracking system is used tracking the current location is used GPS and internet. The GPS system continuous monitors in real time system and send alerts to the tracking device.

RELATED WORK

GPS and GSM modules are implemented for detecting vehicle as well as for real time monitoring. The GPS is used GPS tracks the coordinates of geo-graphical area and GSM is used for sending the information about the vehicle to the user. A vehicle tracking system implemented for sending the text message to the owner from the mobile. If the GSM is used to the message from the owner send another text message for access with the help of his mobile to the modem of the GSM. The idea from the vehicle tracking is used to sharing the current location owner through a text message from his mobile phone. The implemented tracking system in this having the model of GSM and module of the GPS are interfaced along with microcontroller of ARDUINO. If the TRACK SMS received by ARDUNIO from the person with the help of GSM which uses the GPS for tracking the current location.

The safety of private and public vehicles is the concern now a day so that having GPS vehicle tracking system in vehicle that ensure their safety while travelling.
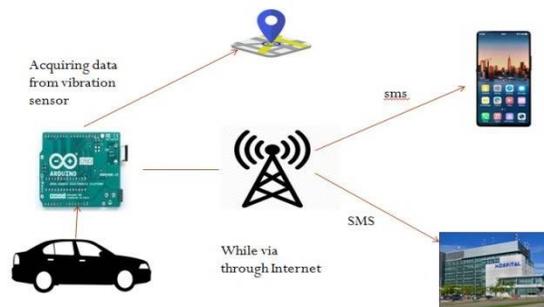[1-5]

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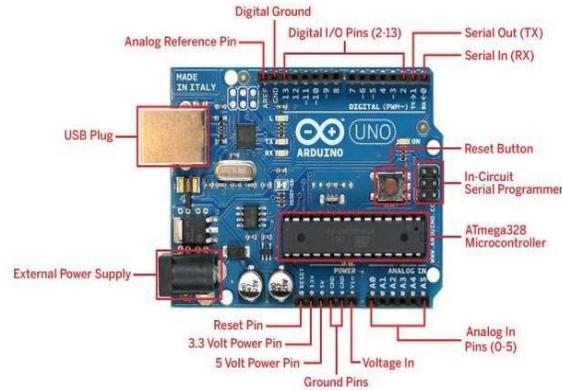
SYSTEM FLOW DIAGRAM

PROPOSED SYSTEM

The system we proposed consists of the GSM facility that allows the sending of message to the hospitals and to the owner. The systems that are already existed consist of the facilities of giving buzzer sounds, by giving the sounds doesn't give any alert to the owner or the hospitals if they are far away. Only the nearest peoples hear the sounds of the buzzer and inform to the hospitals and to the owner, that is the good thing but have some risks, but our system will directly send the message to the owner and to the hospital by the help of GSM. The main advantage in our system is the owner knows the incident as soon as possible by this method and it make the owner to take necessary action suddenly and also the message send to hospital paves the way to safeguard the victim as soon as possible.[6-10]

EQUIPMENTS AND METHODOLOGY

ARDUNIO UNO

ARDUINO is an open source hardware and software program. Manufacture by single board microcontrollers. Building digital devices and interactive objects control both physically and digitally.

GPS module

- GPS is used to detect the Latitude and Longitude of any location on the Earth.
- GPS module is used to tracking from the current location of accident places.
- This device receiving from the satellite for each and every second, with time and date.

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GSM Module

Global System for Mobile Communication. Exact location co-ordinates will be provided by the GPS module. It will send the coordinates either to the Smartphone. It is used for sending the information about the vehicle to the user vehicle tracking system implemented for sending the text message.
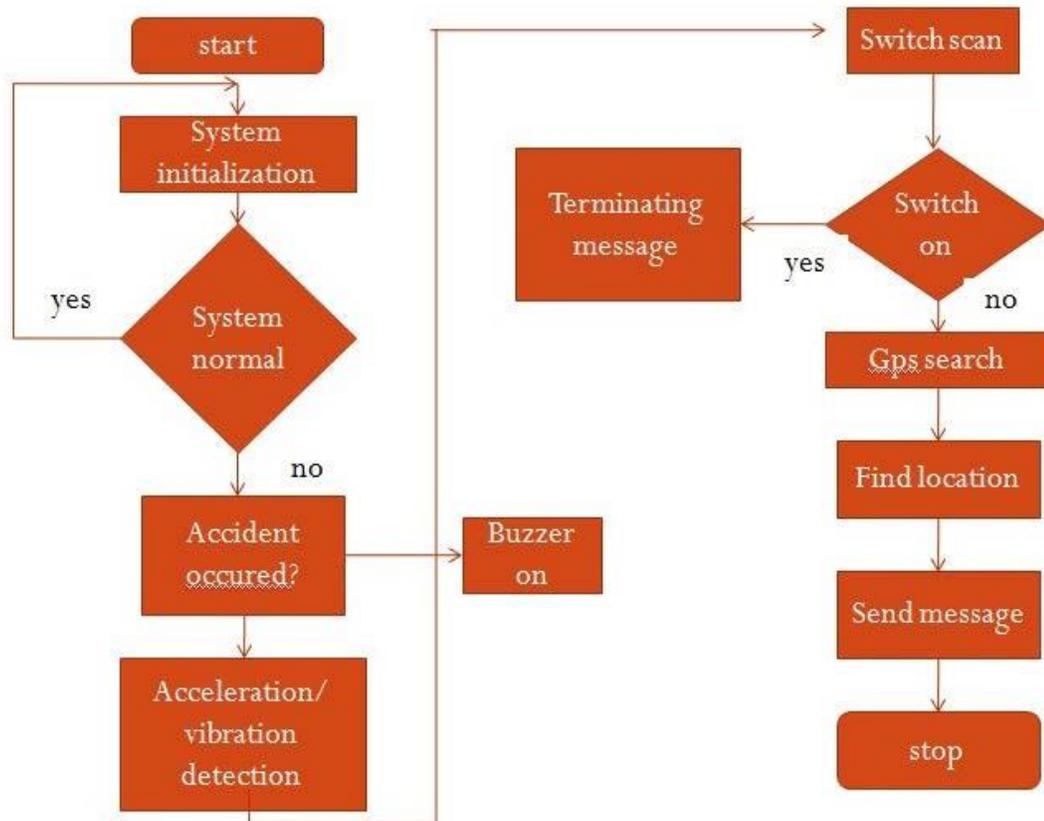

Vibration sensors

Vibration sensors are simply packaged the raw sensor. Vibration transducers are slightly more complex sensors which output a voltage or current supply. The vibration transmitters are sensor packaged with the means transmit a more complex output. The vibration is used integral sensor to make or break contact from certain vibration levels are detected.

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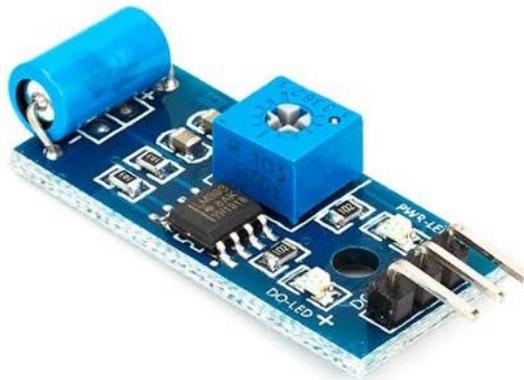
Flow Diagram

CONCLUSION

The implemented IOT based vehicle tracking system detects the vehicle accident severity. An alert will be sent to the registered mobile numbers such as family member of vehicle owner, nearest police station and hospital also. The vibrate sensor is used to detect the tilt. The GPS technology is used in the proposed work for sending alerts to the person concerned for faster response. Then one can provide the medical facility at right time. The proposed system re-acts quickly to send the SMS.

Acquired allow a sufficient space in the article for conclusions. GPS Module are already available in the vehicle so it can be said that as far as the power consumption and money saving aspects are considered it is in turn a low power consuming and a much cost effective device which in turn has no negative effect on the vehicle's performance and is easily deployable in it. This device is also false alarm proof as these alarms can be turned off manually by the user in any case of false alarm.

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