

IOT Based Intelligent Life and Accident Monitoring System

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ABSTRACT- Road incidents and traffic obstruct are the difficult issues in urban regions. At this moment there is no development for setback disclosure. In like manner, due to the deferment in acting the hero vehicle to the accident territory and the traffic stop up in the center of incident region and facility grows the chances of the death of harmed person. There is a need of familiarizing a structure with decline the loss of life due to disasters and the time taken by the salvage vehicle to show up at the crisis center. To vanquish the impediment of existing structure we will execute the new system wherein there is a customized distinguishing proof of setback through sensors gave in the vehicle. An essential server unit houses the database of all crisis centers in the city. An IOT module in the concerned vehicle will send the territory of the accident to the rule server which will flood a crisis vehicle from a nearest clinical facility to the disaster spot. Close by this there would be control of traffic light signals in the method for the crisis vehicle using RF correspondence. This will confine the hour of crisis vehicle to show up at the clinical center. A patient checking system in the crisis vehicle will send the basic parameters of the patient to the concerned center. This system is totally mechanized, thusly it finds the setback spot and helping with showing up at the clinical center in time.

KEYWORDS- Pressure Sensor, Vibration Sensor, IR Sensor, IOT module, Accelerometer, LCD, Buzzer.

I. INTRODUCTION

At this moment, incident have extended a ton in light of individuals unaware and various lives have been lost. An investigation of 75% of death has been recorded by road setbacks. Regardless, these estimations are useful for assessing the present traffic blockage level and not for foreseeing its occasion in a future setting. As a result of traffic blockage, it has been showed up. An IOT module in the concerned vehicle will send the territory of the incident to the guideline server which will flood a crisis vehicle from a nearest clinical facility to the setback spot. Close by this there would be control of traffic light signals in the method for the crisis vehicle using RF correspondence. This will confine the hour of crisis vehicle to show up at the center.

II. EXISTING METHOD

Fog system based designing and has check. There is no channel appropriations for fundamental customers. Complex framework structure and continuous use. The Victoria Transport Policy Institute, which is an independent research association of traffic obstruct investigate, described a couple of estimations that can be used to evaluate traffic-blockage. Regardless, these estimations are useful for assessing the present traffic blockage level and not for foreseeing its occasion in a future setting. Due to traffic stop up, it has been appeared to straightforwardly influence the typical travel times of all customers on a road organize, which regularly prompts conceded or dropped events, get-togethers and booked movements.

III. PROPOSED METHOD

A couple of squares for neighborhood pros and locally accessible sensors, tallying radio sensors and GPS. Database has rules, go information, (RSSI) signal quality, and radio maps. Emotional engine that is the middle everything being equivalent.

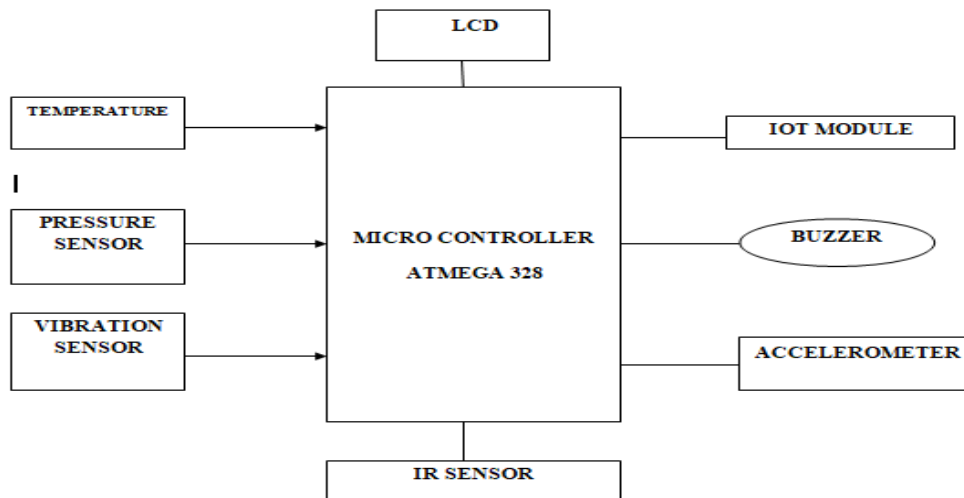


Fig.1 Block diagram of the proposed system

IV. PRESSURE SENSOR

A weight sensor is a device for pressure estimation of gases or liquids. Weight is an outpouring of the force required to keep a fluid from developing, and is regularly communicated similarly as force per unit region. A weight sensor ordinarily goes about as a transducer; it delivers a sign as a segment of the weight constrained. For the purposes behind this article, such a sign is electrical.

V. METHODOLOGY

A. Atmega8 bit microcontroller

The low-power Atmel 8-piece AVR RISC-based microcontroller joins 8KB of programmable glimmer memory, 1KB of SRAM, 512K EEPROM, and a 6 or 8 channel 10-piece A/D converter. The gadget bolsters throughput of 16 MIPS at 16 MHz and works between 2.7-5.5 volts.

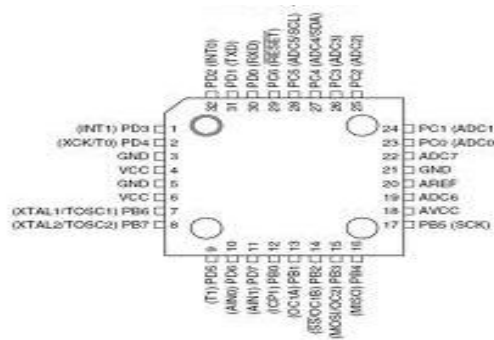


FIG.2 VIEW OF MICROCONTROLLER

B. LCD display

LCD speaks to Liquid Crystal Display. LCD is finding wide spread use replacing LEDs (seven area LEDs or other multi part LEDs) by virtue of the going with reasons:

1. The declining expenses of LCDs.
2. The ability to show numbers, characters and structures. This is rather than LEDs, which are limited to numbers and two or three characters.
3. Fuse of a resuscitating controller into the LCD, right now the CPU of the endeavor of stimulating the LCD. On the other hand, the LED must be restored by the CPU to keep demonstrating the data.
4. Simplicity of programming for characters and plans.

These sections are "specific" for being used with the microcontrollers, which suggests that they can't be started by standard IC circuits. They are used for forming different messages on a little LCD.

C. Temperature Sensor

The LM35 course of action are precision consolidated circuit temperature contraptions with a yieldvoltage straightly comparing to the Centigrade temperature. The LM35 device has a great situation over straight temperature sensors balanced in Kelvin, as the customer isn't required to subtract an immense consistent voltage from the respect get profitable Centigrade scaling. The LM35 device doesn't require any external arrangement or slicing to give basic rightness' of $\pm 1/4^{\circ}\text{C}$ at room temperature and $\pm 3/4^{\circ}\text{C}$ over a full -55°C to 150°C temperature run. Lower cost is ensured by cutting and modification at the wafer level. The low-yield impedance, direct yield, and accurate characteristic arrangement of the LM35 device makes interfacing to readout or control equipment especially basic. The device is used with single power supplies, or with notwithstanding and short supplies.

D. Vibration sensor

The vibration sensor is also called a piezoelectric sensor. These sensors are versatile devices which are used for assessing various systems. This sensor uses the piezoelectric effects while evaluating the movements inside speeding up, pressure, temperature, power regardless strain by changing to an electrical charge. This sensor is in like manner used for picking smells inside the air by rapidly assessing capacitance similarly as quality.

VI. CONCLUSION

At the present time reason that checking of road incident with help of IOT application that prompts abatement of accident and lives can be secured.

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