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Enhanced Emergency Alert System for Women's Safety using IoT

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ABSTRACT: An application software that have access to the offices of, the time it takes to the pre-programmed GPS and messaging with one another, so that in emergency signs, at the request of to send the police be able to help, as well as from the place to the moorings of the coordinates. At the centre of the nearest blood relatives that are near to those who have experience. At this point allow me to help the police out of the immediate as well as in the last public action of the rays, which is able to arrive to the slaughter, with a great care. Today, the current global television, the main issue against all girls, to enhance the growth of women's issues harassment years, mainly refers to her health. The fact that places, with all the ways they cannot be freely without worrying about the odd hours of the one is to consult the young woman. As this article is to use the technology offers new perspective for women's health. Indian women are harassed, raped, killed all the day!! "It's the way the great number! We come up with the idea of everyone who thinks about the way he changes women's health. From the day she gives the media more publicity than the achievements harassment is not perfect in praise! When (people) do not respond well in critical situations, and the work does not save to the slaughter, and for the device to automatically discover our adventure of is an idea in this article. it is our purpose, which is to have the structure of the majority of integration is found to be on the hardware includes a portable from the "smart band" as being sorrow by the phone, and when this inflows, they shall have access to the Internet. Application is programmed and all the information required for carrying the bread for the journey, and among men, and his character as well as those of the sense of, like anger, fear, and anxiety. This is the sign after conception, and which is transmitted to the smartphone.

Keywords: Nodemcu, heartbeat sensor and vibration sensor.

INTRODUCTION:

This document focuses on the security system that is simply designed to serve the objective of ensuring security of women to feel, like never seen in the face of social challenges. The reason for a person's state of health, I found that to be able to hold a higher place as it was in building, electronic gadgets and those who suffer according to the body temperature of the sound as a GPS receiver, GSM, the sounds are thinking of the heart. In order to more accurately detect can use the sensors in the number of women in the real-time state of the crisis in the violence. A person's heart rate is normally located in such a higher court, in the supreme council of a conversation with the other organs of sensation that helps us, in order to detect the abnormal to the movement of the movement of the organs of sensation that are not of the bore, with the women. In order to explain the nature of a pre-existent to the vigorous ability of women at all in safety and solutions that the several parts of the woman, the filthy garments effort is making a sad, sashes, easy to use mobile apps are just the abstract is too antiquated and worn. What has a District in the smartphone order to reduce the cost of the integrated into the fabric of the band, and reduced all things therein and in the size of the additional advantage of. When using GSM smartphone can be a GPS. This allows reducing the energy consumption and can be installed on the eve of the Bluetooth 4.0 BLE (Bluetooth Low Energy) in a practical charge for several days.

The development of the Internet of Things (IOT) is faster, but not very lengthy brings together a number of points of interest, including devices and spots will offer not transmit the information, and improve the quality of business and create great business opportunities. For now it is, that it is only the matter of time, to the right, the structure of the Church and the truth of what comes from heaven, and they may correspond. Recently been a significant movement in the IOT is moved from one network of consternation in the decentralized structure consumer devices.

This movement extended networking is a cloud, and the activation of a wide range of physical devices on machines and devices for domestic cars. Thanks to this change, how we need to coordinate, control, verification and reporting data storage by the consumer viable football. No doubt about that life is simple. IOT was based on a wide range of semiconductor technology, including power management devices and sensors microchip execution, starting with security and application conditions change dramatically next one. How the realization of smart homes, connected automobiles and energy production lines 4.0 will be dependent to a certain position, simple to use and protects

the security it gives. The exchange of information on the Internet of Things, and one of his high position, the volume of the sensitive, to a greater knowledge of God and knowledge of the danger of fraud, to the commandment of the manufacturer, the fraudulent information, steal a lot of the servant, and the IP address / control system is the most remarkable. In this article we talk to them to secure the IOT, which have taken steps to develop a framework and a film that threatens to reply IOT for use in the context of our secure IOT was found.

The system is designed for safety of women should not be able to feel safe, so that in such critical situations. The reason for a higher state of salvation, I found that it can be prepared a place for a woman to uncover is to be done. In order to more accurately detect can use the sensors in real-time situation of many women in critical situations. The temperature is higher than the woman in such a state that simply helps in making decisions.

LITERATURE SURVEY:

With increasing popularity of the IOT (Internet of Things) and devices getting smarter day by day. This approach of enhancing the security solutions, to ensures that the system is wireless and smart to make life easy without compromising on privacy. Security and privacy are now critical factors in the successful introduction and acceptance of the Internet of Things.

In the current situation, the important goal is to provide security to women from issues of women harassment. The only thought haunting every girl is when they will be able to move freely on the streets even at any time without worrying about their security. This paper suggests a new idea to use technology for women safety. “Over 34,600 cases of rape have been reported across the country last year with Madhya Pradesh and Delhi topping the infamous list of states and union territories ,this statistics released by the Country's National Crime Records Bureau(NCRB) had revealed” That’s a HUGE number! We propose an idea which changes the way everyone thinks about women safety. We propose to have a device which is the integration of multiple devices, hardware comprises of a wearable “Smart band” which continuously communicates with Smart phone that has access to the internet.

The application is activated and loaded with all the required data which includes Human behaviour and reaction. This generates a signal which is transmitted to the smart phone. The application has access to GPS and Messaging services which is pre-programmed in such a way that whenever it receives emergency signal, it can send help request along with the location co-ordinates to the nearest Police station, relatives. This action enables help instantaneously from the Police.

As the threats against women and children increasing rapidly we proposed a system that works on security solution using smart devices based on IOT. In this paper the system intends to a wireless technique in the form of embedded device namely Raspberry Pi for women that will serve the purpose of alerts and way of communicating with secure channels and it captures the image using R-pi camera. There are many android applications for women safety but they as not as much as efficient. So to solve this issue of women safety we developed a prototype which is easy to use and which is efficient to provide help to that victim. so when the victim press kits button, our application will capture the photo, collect users information to send notification to registered phone numbers with link of captured image. This saves the time and that victim get help without loss of time. Also in the case of Children security the system proposes a speed monitoring and location tracking facilities using GPS, GPRS, and GSM. The system consists of bus unit. The bus unit which is used to detect the path of Bus by using GPS. Weather the bus is travelling on its day to day route and also it monitors the over speeding of bus. For the mechanism of vehicle tracking Haversine and Trilateration algorithm are used. According to that the by using GSM alert messages will be send to their parents and vehicle owner. The system has been developed on web based data driven application and android application has provides the useful information. The advance Feature of this system is image capturing. Accuracy of developed system is 97%.

EXISTING SYSTEM:

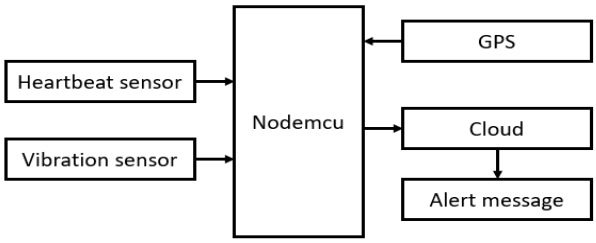
Having this concern in mind many developers have come up with creative applications. Some of such applications are: Codes like *91# is used to provide emergency services, which will alert police control. Free mobile application 'Help me on mobile' to ensure safety of women was launched to assist those who need emergency. These applications need a single click to do this task. But when a girl is in trouble, there can be times that the girl is not capable of taking the phone and pressing button.

PROPOSED SYSTEM:

We use multiple sensor for the safety purpose like vibration sensor, heartbeat sensor and GPS. The GPS is used to identify location. Heartbeat sensor is used to identify the heartbeat level if any critical level means heartbeat level is high by using IOT sends message alert to police and also to the home. If any Harassment is

happening means tilt and vibration become high by using IOT sends message alert to police and also to the home.

BLOCK DIAGRAM:



HARDWARE USED:

- Nodemcu
- heartbeat sensor
- vibration sensor
- GPS

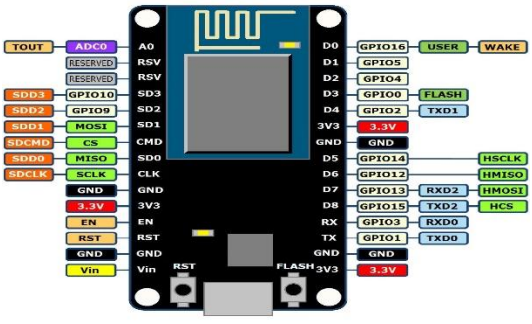
SOFTWARE USED:

- Arduino IDE
- Embedded C

SYSTEM DESIGN

Nodemcu:

Nodemcu is a microcontroller which combination of Wi-Fi module and Arduino, by using Nodemcu we can easily connects between sensor and microcontroller. And easily interface many things wirelessly and we can monitoring controlled from anywhere in the world by using Wi-Fi module.



Heartbeat sensor:

Heartbeat sensor is used to measure the pulse rate of the human. Here we are going monitor the pulse rate of the women, when the women get harassment by someone that time automatically pulse rate will change. That's why we used heartbeat sensor.

Vibration sensor:

Vibration sensor is used to calculate the any vibration, the controller continuously monitor the vibration. When the sensor energized by any different vibration. It will uploaded into a cloud.

Ubidots Explorer:

Ubidots Explorer is an open source application. It is used to continuously monitor the women condition of the heartbeat and vibration level from anywhere in world. And also it will shows the real time location of the women.

Conclusion:

In proposed system we are continuously monitor women's by the relatives like parents. And when the women get any problem by someone the controller send the intimation to the police and their parents. By this system we can save women's life.

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