

IOT Based Women Safety Security System

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1. Abstract

In this day and age, all kinds of people are having equivalent obligations in their work and compete with each other in every one of the fields. Ladies face difficulties in the working environment and wellbeing becomes a significant issue in a large portion of the nations. Increment in issues like sexual behavior is one of the normal offenses happening habitually. Various preventive measures have been taken by the public authority to shut down these getting rowdy exercises yet have not impacted the development pace of these violations and have stayed unaffected. In this task, we studied the current component for recognizing areas, sending correspondences, and gathering actual boundaries of the human body utilizing an electric shock generator. Inappropriate behavior at work is progressively coming out step by step. Inappropriate behavior in a work

area is an undesirable way of behaving of an individual that makes uneasiness offense or misery the other. Most of such cases happen to ladies by men working in an elevated place in an association. The issue of lewd behavior in the work environment is progressively coming out step by step. Lewd behavior in a work environment is an undesirable way of behaving of an individual that influences uneasiness, offense, or pain to the next.

2. Introduction

In this day and age, the well-being of ladies is in harm's way. The pace of wrongdoings against ladies Page 1 not diminishing in that frame of mind at a disturbing rate, particularly provocation, attack, eveprodding, assault, and aggressive behavior at home. Numerous preventive measures have been taken by the public authority to shut down these getting rowdy exercises yet at the same time have not impacted the development pace of these wrongdoings and have stayed unaffected. In

this task, we studied the current system for distinguishing areas, sending correspondences, and gathering actual boundaries of the human body utilizing an electric shock generator. Inappropriate behavior at work is progressively coming out step by step. Inappropriate behavior in a work area is an undesirable way of behaving of an individual that makes uneasiness offense or troubles the others. Most of such cases happen to ladies by men working in an elevated place in an association. The issue of lewd behavior in the work environment is progressively coming out step by step. Lewd behavior in a working environment is an undesirable way of behaving of an individual that influences inconvenience, offense, or trouble to the next.

3. Literature Survey

1. Nishant Bhardwaj¹ and Nitish Aggarwal² Design and Development of "Suraksha"- A Women Safety Device November 8, 2014, Gurgaon, Delhi, India. November 8, 2014, Gurgaon, Delhi, India. The gadget, named "Suraksha" is a security framework uniquely intended for ladies in trouble. It is a straightforward to-convey gadget with unselfish usefulness. The essential methodology is to scare moment area and a troubling message to the police and unlisted

number, with the goal that lamentable episode would be deflected and to give constant proof to quick activity against the culprits of wrongdoing against ladies.

2. Nanditha Viswanath, Naga Vaishnavi Pakyala, Dr. G. Muneeswar Smart Foot Device for Women Safety 2016, Bali, Indonesia. A little foot wearable gadget is created. It comprises a light blue bean microcontroller, while the tapping sound happens multiple times it sends an alarm message to the crisis associated through Bluetooth. The speed of the light blue bean microcontroller is the least.

3.1 Proposed System

This work had proposed that when the gadget is initiated, tracks the area of the casualty utilizing GPS and sends crisis messages utilizing GSM, to three crisis contacts and the police control room. The framework furthermore consolidates a shouting caution that utilizes an ongoing clock, to choose out for work with and produces an electrical shock to harm the assaulter for self-preservation.

4. System Design and Architecture

Hardware used in the system

- * Microcontroller (ATmega328)
- * GSM module (SIM900)
- * GPS module (Neo-6M)
- * IoT module (ESP-12E)
- * LCD Display (16*2)
- * Sensor
- * Neuro stimulator
- * Buzzer
- * Battery

Microcontroller (ATmega328)

ATmega328 is a microcontroller board. It comprises of 6 simple info pins, advanced information, and result pin 14. USB association, a power jack, and a reset button. It contains all the necessities to help the microcontroller. It is essentially associated with a PC with a USB link or power it with an AC to-DC connector or battery to get everything rolling.

Neuro stimulator

Neuro Stimulator is the intentional tweak of the sensory system's action utilizing intrusive or painless means. Neuro stimulation innovation will further develop the existence nature of these United Nations offices square measure seriously ill-suited or covered with significant misfortunes to various receptors

notwithstanding long-lasting decrease of extreme, persistent agony which could somehow require consistent (nonstop), a high-portion narcotic clinical guide. This electric shock generator is an electronic gadget that produces voltage around 1200mv and a flow of 3microamp. It comprises of AC to DC converter, generator, and a web or network.

Buzzer

A Buzzer or electronic device is an audio signaling device, which can be a mechanical, mechanical device, or electricity. Usually, piezo speakers(buzzers) are used "piezo buzzer" is a tiny speaker that you can connect directly to an Arduino.

LCD

The Liquid Crystal Display screen is related to the nursing electronic showcase module. A 16x2 LCD is an essential module and it is normally utilized in different gadgets and circuits. These modules are unit most well-known north of seven areas and different multi-fragment LEDs. LCDs are unit conservative; programmable and have no limit of showing special& even custom characters (in contrast to in seven fragments), movements, etc. The order register will store the order guidelines given to the LCD. An order is guidance given to an LCD that will do a predefined task like instating it, clearing its screen, setting the cursor position, controlling the presentation, and so on.

GSM Module

GSM module is utilized to lay out the correspondence between a PC and a GSM-GPRS framework. Page 3 Worldwide System for Mobile Communication (GSM) SIM card is embedded inside the cell phone to send and get the messages exploitation GPRS.

GPS Module

The Global Positioning System is a location tracker. Tracks current location by longitude and latitude.

Working Procedure

Step 1: Get started.

Step 2: Turn on the 12 Volt power supply.

Step 3: The emergency button is pressed.

Step 4: GPS detects the signal, GPS will start calculating the victim's current latitude and longitude and send it as an SMS to the registered mobile phone using the GSM module.

Step 5: Any vibration detected by the vibration sensor, locate the GPS location and send it to the GSM module.

Step 6: The IoT module tracks the victim's last location and that location is updated on a web page. Step 7: The Neuro stimulator is turned on, inflicting shock on the attacker.

Step 8: Buzzer is on to alert people nearby.

Future Scope

In this task, Communication using the new GPS & GSM is a useful part of being helpful to the individual. The framework will likewise be useful to all individuals the people who are in far-off regions for their security against criminal issues. This framework can defeat the apprehension that terrifies each lady in the city about security and wellbeing.

5. Methodology

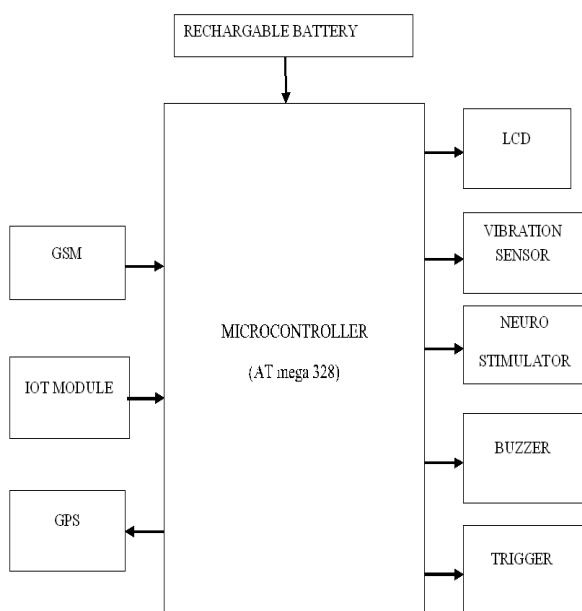


Fig 5.1 Methodology

Conclusion

Existing programs are not strong enough to prevent crimes against women. The main objective of the system is a fast process, low development costs, acceptable quality, and accurate tracking. This paper outlines how a woman when in danger, can approach the relevant authorities. This image will help protect women from attackers and help police arrest them. It will help to track the current location and send information to the person who can come to the rescue. and thoughts. The value of this work not only provides well-being but also provides safety through the use of self-defense tools. Violence against women can now be eliminated with the help of a real framework for the proposed model.

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