

Anti-Molestation Wearable device for Women Safety Using IOT

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Abstract— Due to the increase in violence against women in recent times and frequently hear about botheration, dusk - teasing and rape cases in the public places of the society. The safety of women has come an issue we are erecting a safety device to act as a deliverance and to help from detriment at the time of hazard is largely necessary especially for women. Presently, there is no ideal result to this problem. Existing apps and bias weren't very veritable effective in the history because they needed a lot of user interaction to function properly and the size of the device is also one of the drawbacks of current system.

The thing of this Project is to design a wearable safety system for women. In which the victim just has to press the Button and the system will automatically call and text respectively to multiple people set in nearest Contact and to the nearest police Station with location Coordinates with or without the connectivity of the Cell Phones, so that help can be sent to the person in dilemma or in Horrible Situation.

Index Terms— Arduino, GSM, GPS, Internet of Things (IoT), Smart Device, Women Safety, Switch, Battery.

I. INTRODUCTION

Women play an important part in the bright future of the country. Due to the fact that some societies have a bad station towards crimes against women, various crimes against them go unlisted and unrecorded. Victims who try to inform society of assaults on them suffer various humiliations and errors of judgment. In India, only one out of every four cases leads to a formal conviction, not to mention the lengthy process. To best respond to this situation, applicable defensive measures must be taken. This study proposes a wearable device grounded on the Internet of Things approach to women's security. This device calls and sends Location according to the dangerous cases defined by the stoner by clicking the button in the device and it promptly alerts authorities such as police and family members of the victim. He helps women get out of dangerous situations and makes sure they have enough safety coffers at their disposal by helping them out when needed. It can also be used to gather evidence of an unfortunate situation endured by the victim.

II. LITERATURE SURVEY

The thing of Islam .[1] is to " Design and apply a Women's Auspice System Using GPS and GSM." In they used a GPS module, three pushbuttons, and a PIC16F887 Microprocessor in this setup. To get to the customer's position Snappily, GPS is used. Three press catches are used to describe the types of mishaps that a victim is likely to face. Any of these three buttons can be pressed if the customer encounters any troubles anywhere. The microcontroller will admit it at that point, and an SMS will be transferred to a certain phone. The customer's Position will be tracked until the customer saves the frame and switches it off. Also, they've used to govern the Overall frame.

"Women Safety Device Designed Using IoT and Machine literacy," Muskan .[2] enforced. The thing of this exploration is to produce a device. The device is customised to understand and learn the individual pattern of temperature and heart rate and to determine the threshold when both temperature and heart rate exceed the threshold. When both temperature and heart rate exceed the threshold, it will automatically shoot SMS and position to an exigency contact number so that action can be taken.

[3] R.S. Yadlapalli . This system has offered a cuff for the safety of women. This device can be actuated by pressing a pressure button, which also activates the tear gas and blowing alarm system for tone-defense. When a trouble is linked, the device will notify the position to girding police or authorities.

Priyadarshini [4] proposed " Women commission for India's Development." Women's bastion is grounded on empowering every woman in the country to make them tone- governing in all aspects as a rule, to be apprehensive of their rights, and to prepare them for physical security. This study focuses on depicting the challenges that women face in their day- to- day lives in India and the tone- Help Group, which is published in the International Journal of Engineering Research & Technology (IJERT) ISSN 2278-0181.www.ijert.org is the publisher.

Volume 9, Issue 12 Special Issue- 2021 NCCDS- 2021 Conference Proceedings Volume 9, Issue 12 Special Issue- 105 effectively running in the fiefdom of Tamil Nadu, Ideas on Self Help Group for unborn enhancement, and a

Contextual examination of Women G.Monisha [5]. Proposed a system that includes a position shadowing medium; it works by transferring an SOS communication with current position to pre-given connections every 2 twinkles if the person in peril presses a single button; if the person presses a button further than formerly, it records and sends sos dispatches and also calls to the pre-set contact figures when the person presses a button for a long time.

G.c. hari kiran .[6] proposed and created a smart strain band that's pre-programmed with all mortal gesture, similar as fear, anxiety, and so on, and transfers the observed data to a smartphone linked to the internet. all of these responses are valid. [7] Orlando Pereira, (2010) proves that the use of body sensors works on Network mobile solutions for biofeedback monitoring. The Bluetooth and

Shimmer firmware has been used in this work but, there is a drawback that the device could not run independently it has to be connected with the Bluetooth device.

[8] S.A. More made a smart band which works basically on three type of sensors i.e. Pulse rate sensor, Temperature sensor and motion sensor. But again the same drawback i.e. the device has to be connected with the mobile phone through Bluetooth.[9] Mohamad Zikriya proposed a system whose first priority was on Self-Defence by providing the tolerable electric shock to the attacker which reduces the exited state and help women to escape from that situation.[10]. D.G. Monisha has used a sim module with Dual band which work on the frequency of 900/1800 MHz. [11]. Dr. Sridhar Mandapati Proposed an app which will help in identifying that whether the women is safe or not !

III. LITERATURE REVIEW

Women safety device and operation: In this paper an ARM regulator and Web operation are used in which both the device and the smartphone are accompanied using Bluetooth, hence both can be touched off singly. It can give an alert call and communication to the pre-set contacts with the instant location every 2 minutes and can be tracked live using the Web application.

IV. ALGORITHM

Our system is a wearable Device for women, In which GPS is used to identify a possible position using equals, And sends a message locating it to his friends and cousins. Provides a button on the wearable that can be used to manually shoot an announcement to her whereabouts to her friends, relatives and the nearest Police Station

V. OVERVIEW OF TECHNOLOGY

- Can be employed for the security of ladies, kids, impaired and matured individuals.
- Can be employed as a licit evidence of wrong doing with correct.

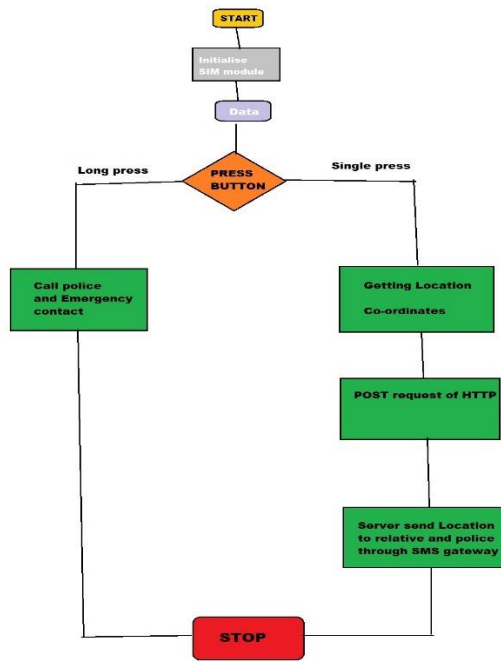
Advantages

- Safety Device which can be conveyed by Everybody.
- Very-low power utilization.
- Compact in size with wireless network.
- Easy and quick to install & Easy Maintenance.
- Environmentally friendly system





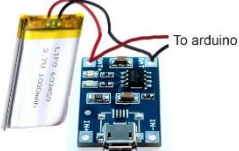
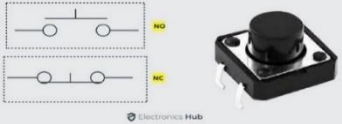


Overview of Device


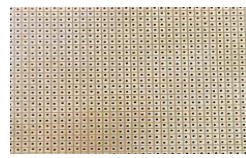

VI. BLOCK DIAGRAM



VII. COMPONENT

A. Hardware Component

<p>Arduino</p>	
<p>GSM</p>	
<p>Battery</p>	
<p>Switch</p>	
<p>GPS Module</p>	
<p>Battery Connecting wire</p>	

M to F Jumper Wire	
PCB Board	
10k ohm Resistor	

qui

B. Software Requirement

- Arduino IDE
- C++

VIII. CONCLUSION

In this project, the major goal of creating a woman safety device is to function as a rescue and prevent any harm to women in the case of a hazard. A smart device for women's safety is built using the suggested approach, which automates the emergency alarm system. This device recognizes and sends notifications to loved ones with the women's position coordinates in emergency situations. It instantly sends an emergency message to the family members and the nearest police station. The prototype may be carried in a variety of bags, including purses and laptop bags. It is stated that the prototype can be carried in these bags since the person attempting to hurt may not discover the device within the bag. This prototype may be transformed into wearables like smartwatches, bracelets, and necklaces through the Customization process. The key benefit of our suggested system is that it includes manual mechanisms. It is also cost-effective and simple to use. When the alarm is received, the suggested system can be enhanced (not Included in this project) with features such as recording audio and video of the culprit by adding some camera and microphone module in the device which can be produced as a piece of evidence in the court.

An alternative method for device switching combining fingerprint recognition technique with web server and GPS functions was proposed. Switching equipment from a remote location eliminates the need for someone nearby to operate it. This approach allows multiple people to control the device's functionality, and the authentication provided by the switch reduces failure recovery time.

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