Automated women safety device

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Abstract - *In India, women's safety has become a major worry. Women's crime rates in the country have risen drastically. Women, especially late at night, are hesitant to leave their homes. Unfortunately, this is the tragic reality of our country, which is perpetually terrified. Our concept is to develop a smart device that safeguards the safety of women by informing the nearest police station or guardians of their whereabouts in real time. Women's success is essential for a country's growth, but we see a lot of harassment in the path, which is a hindrance to their progress. As a result, we decided to start an initiative that will help millions of women. The most significant benefit of using this safety system is that it provides women the courage to go outside since they can quickly seek assistance from the system if they are in danger. The development of a country is determined not only by its economic progress, but also by the safety of its residents. Individual safety is ensured by effective and timely communication. Parents and guardians may unwind knowing that their children are secure.*

***Key Words*: Women's safety, Smart device, Bracelet, GPS , Communication**

1. INTRODUCTION

This project focuses on the safety of women. In India, women's safety has become a major worry. Women's crime rates in the country have risen drastically. Women, especially late at night, are hesitant to leave their homes. Unfortunately, this is the tragic reality of our country, which is perpetually terrified. Our concept is to develop a smart device that safeguards the safety of women by informing the nearest police station or guardians of their whereabouts in real time. Women's safety has been a major concern for many years. There isn't a day that goes by in India without news of a crime against women. Indeed, at least five news articles have been published describing the heinous details of the multiple atrocities. The situation of women's safety in India is distressing, especially in a country where women are worshipped as goddesses. The list of crimes against women is long, to say the least. Our idea is to create a smart device that ensures women's safety by informing the local police station or guardians via live location sharing and a buzzer for requesting help from nearby people.

2. PROPOSED WORK

Our ultimate goal is to create a simple means of communication for them to use when they are in need. When a person feels threatened, the gadget can be activated, which will provide the guardian a live location via a mobile application with an emergency call capability. An Individual can cancel an emergency call via application in the event of a false warning. They can even contact the local police station if they are in danger. This project exhibits the creation of an automated safety device simulation model. This project can be worn as a bracelet and used in an emergency when a woman feels unsafe. Two emergency buttons are connected to the GPS and GSM modules. The GPS module is detachable from the bracelet and can be placed in our pocket, backpack, or other location. The location of that person will be sent to a local police station when the button connected to GPS via WIFI is pressed. When they touch the other button, an emergency message/call is sent to their close friends/family.
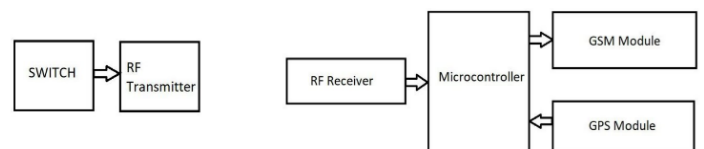

Fig -1: Block diagram
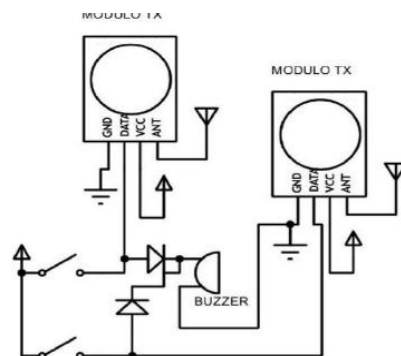
2.1 CIRCUIT DIAGRAM

Fig -2: Transmitter circuit

Our proposed solution will be implemented as two circuits: a transmitter circuit Fig -2 and a receiver circuit Fig -3. The transmitter component will be worn as a wristband with two buttons. The first button, which was attached to the buzzer, was for transferring location to the guardian, and the second button was for phoning the nearest police station. The transmitter circuit's signals were encoded and delivered to the receiver circuit.
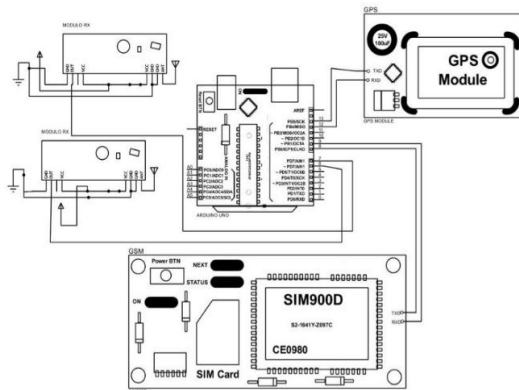

Fig -3: Receiver circuit

The Transmitter circuit's signals were decoded. If the received signal was for sending a location to a guardian, a message will be sent to that guardian's phone number via GPS and GSM module; if the received signal was for calling the nearest police station, a call will be made to 100, and the call will be routed to the nearest police station using the Emergency call routing system. The purpose for the two separate circuits was that in the event that a stranger became aware of the device due to the buzzer, location communication should not be interrupted.
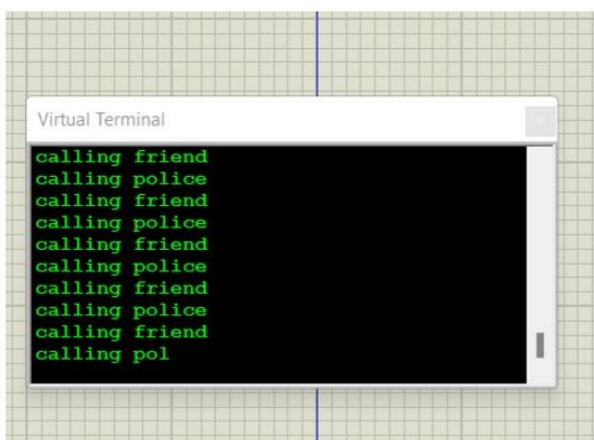
3. EXPERIMENTAL RESULTS

Fig -4: Simulation circuit

Using proteous 8.2 software, we showed the proposed approach.
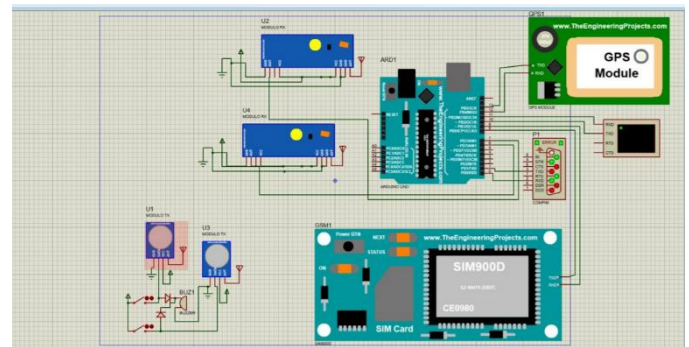
3.1 RESULTS

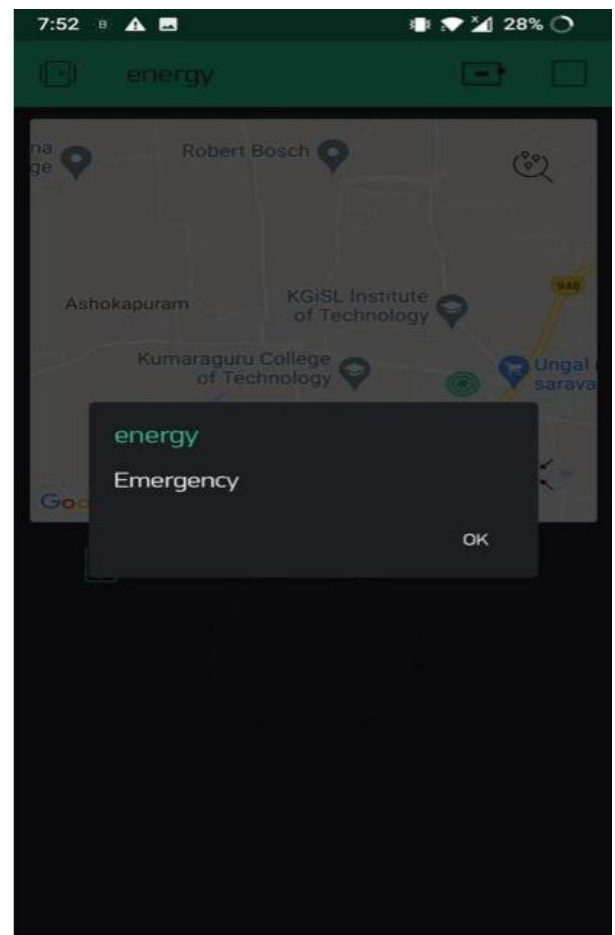
Fig -5 Simulation result

Fig -6 Emergency alert

Location was sent to Blynk server via Blynk web version 2 and latitude and longitude were plotted in client side (application)

CONCLUSION

In our Country, even though it has great power and an economic development, but still there are many crimes against women. The crime against the women can be brought to an end with the help of our product. A security device specially made for security of women. Main goal of this project is to ensure security to every woman. According to survey 53% of working women are not safe. For a comfortable side this device is made like a wearable watch So, the device achieved what it was aiming. The location of the woman was successfully tracked down and with the help of GSM, appropriate help can be sent on time and the suspect can also be tracked down ensuring complete safety to women.

FUTURE SCOPE

1. In future some of technique can be implement like connecting call etc.

2. In future it can tie up with other big companies to get better marketing

3. Some of smart activities like heart rate detecting, steps count can add it in this device

4. Size of a device can minimize by using some nano devices

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