

IOT Based Women Safety Using Raspberry PI

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Abstract — Women's security has become a major issue, with the number of crimes against women and girls increasing on a daily basis. This project describes women's safety and security through the use of electronic devices to detect both problems and alert authorities this project suggests a new perspective on the use of technology to protect women. We use an Android-based smartphone with an integrated function that alerts and provides location-based information. "Women Security System" which provides a combination of GPS devices as well as alerts and messages with the Trigger Emergency button. Whenever someone is in trouble, just press the Button After a message alert is sent to the Register Contact list and send a message "I AM IN TROUBLE PLEASE HELP ME" and turn on the camera to click on the image. Now with the help of this Application, women's safety is becoming very strong. Also, here we send the location and image to police Station by email.

Keywords- Safety and security, harassment, killed, raped, emergency, IOT, sensors, gps, police station, etc.

I. INTRODUCTION

This project focuses on a security infrastructure that is intended specifically to serve the purpose of providing women with security so that they can never feel vulnerable when facing such social challenges. An sophisticated device can be designed to predict the position and health of a human, allowing us to respond on the basis of electronic gadgets such as GPS, pulse rate sensor and IOT. We may use a variety of sensors to accurately identify the real-time condition of women in sensitive cases of violence. In such cases, the heartbeat of a human is usually higher, which helps to make decisions together with the sensors. The concept of designing a wearable technology for women is that it is totally convenient and simple to use relative to current protection options for women, such as different clothes, heavy belts and notorious smartphone applications, which are very abstract and outdated. The Smart Band combined with Smart Phone has an additional benefit that decreases the expense of the device and also reduces the size of the device. The GPS and the IOT can be found on a smartphone. This also makes it easier to use the decreased power and to mount the watch that comes in handy for a few days on a single charge clip

II. EXISTING SYSTEM

1. Among the poorest countries in violence, India has an abhorrent record in all kinds of sexual harassment.
2. Indian women are in perpetual surveillance, like a nation on a terrorist alert.
3. Grotesque reports of abuse of children, child rape of eight years of age and trafficking of women have occurred.

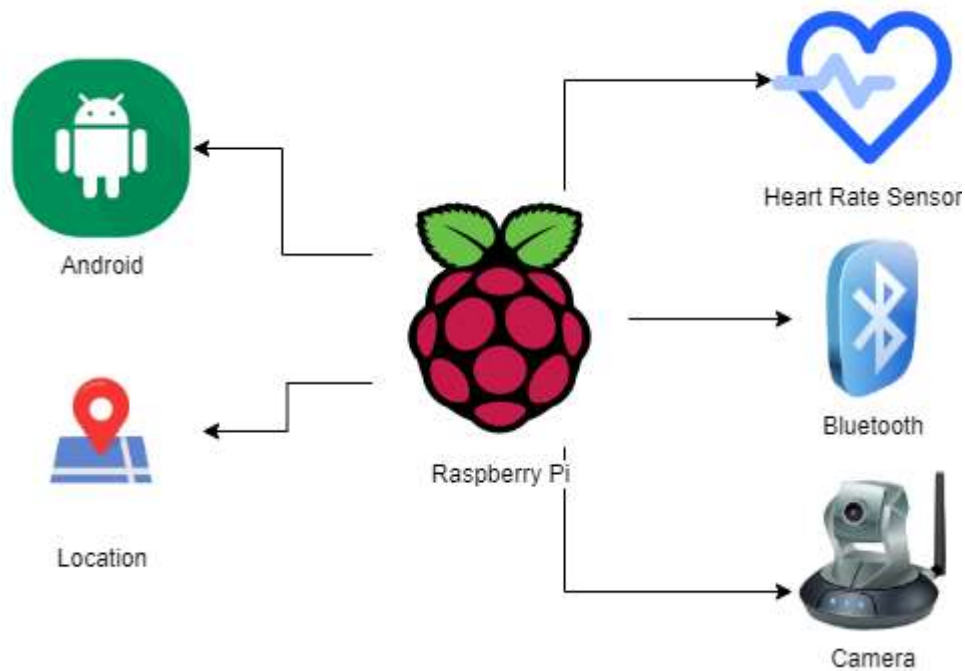
4. We also built a country where women are learning how contend to existential anxieties.
5. There are a few pre-existing applications that do deliver a message to your saved friends, and none of them will be powerful and fast enough, and according to the poll, the existing technology doesn't make most women feel comfortable.
6. In certain cases, it is reported that women do not file a lawsuit it against accused for just a variety of reasons, such as not knowing the proper jurisdiction to report it or feeling ashamed/guilty about the incident.

III. PROPOSED SYSTEM

The main purpose the project is to provide highly reliable security system for the safety of women.

- The proposed system is based advanced sensors, Microcontroller and GSM.
- If heartbeat of women not in the range of 80-120 then system will capture image, location and notify to police.
- The basic aim of the system is to develop a low-cost solution for GPS based women tracking system (women safety system).
- an emergency button press GPS device must to be placed inside the hardware device.
- The device will provide the position information such as latitude, longitude of women and image.
- An emergency button is fixed on the device at a particular position.
- Whenever women in any kind of trouble she will press the emergency button and an alert will be immediately sent to the nearest police station.
- Then it is the responsibility of police squad to handle the situation. Here, we proposed mobile application for notification of location.
- Notification in the format of email to police station and relatives.

IV. SYSTEM ARCHITECTURE



VI. APPLICATION

1. Women Security in Society
2. Police Department for Alert.

V. ADVANTEGES

1. Smart24x7 app is available FREE
2. By just shaking smartphone SMS will be shared with location in case of emergency.
3. This application sends the live location of the user

VI.CONCLUSION AND FUTURE WORK

- In this project, We totally focused on women Security.
- Here ,We proposed hardware and software for more accuracy.
- Pulse rate Sensor and Image with microcontroller gives more security with respect to other system
- In future, System will add more module i.e. Image processing for object detection.

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