Electronic Jacket For Women Safety Using Raspberry Pi

Shafaque Mohsin Julaha[1], Mohd Jasir Noor Khan[2], Abdullah Basid Pathan[3], Aiman Shakir Ansari[4]
[1, 2, 3, 4] Dept of Computer Engineering
[1, 2, 3, 4] Haji Saboo Siddik Polytechnic

Abstract- *Today, in national as well as international society there are serious issues related to girls safety and harassment. The only ghasting question in women/girls mind is when are they going to move freely on the streets even in the odd hours of the day/night without worrying about their security. Although there are previous methods/ technologies, android based applications such as VithU, Nirbhaya or SOS based mobile technologies. But these methods prove to be ineffective on providing concrete solution rather than only addressing the problem. Also they have many constraints like mobo device being with the person 24X7 with enough charging, limited address to a close friend/police station in the form of SMS, text or tweet. The purpose of this project is to take this amazing tech to the next level by providing shock releases along with alarms for women safety.*

Keywords- VithU; Nirbhaya; SOS; ghasting..

I. INTRODUCTION

In worldwide situation, the prime inquiry in each young lady mind is about her security and the provocation issues. The main idea frequenting each young lady is the point at which they will have the option to move uninhibitedly on the lanes even in odd hours without stressing over their security. This venture recommends another innovation to secure ladies. This venture centers around a security for ladies with the goal that they will never feel vulnerable. The framework comprises of different modules, for example, GSM, GPS, memory card, stun circuit, bell, Raspberry Pi module. Right now are utilizing remote innovation for security reason.

An electronic coat for women's security implies that permit clients to ensure while voyaging odd hours or when they feel powerless. This undertaking depends on ladies' security as it is accounted for that regularly there is numerous cases about ladies badgering. Albeit an Android put together application with respect to Women security is as of now out in the market however for non-android clients, I thought a thought for building up an undertaking dependent on ladies security utilizing module. Raspberry Pi module gets the signs from GPS framework which has present area data and

afterward Raspberry Pi controller permits the GSM framework to send the Alert Message to the three predefined numbers additionally in our coat stun circuit is utilized to harm the aggressor for self-protection and a camera module that captures the image of culprit and send it police and victims family members.

II. PROBLEM STATEMENT

At the point when the crisis circumstance happens then ladies can't ensure and work the PDAs. Additionally, she can't be set alarm work, when they are in hazard circumstance and quickly they can't pass and send their area to the police and relatives.

III. BLOCK DIAGRAM

The architecture of proposed system as shown in Fig 1 consistsof Raspberry Pi controller as a main source and it receives input signals from the buttons, that is manually pressed by the victim who is in danger. The architecture of proposed system as shown in Fig 1 consists of Raspberry Pi controller as a main source and it receives input signals from the buttons, that is manually pressed by the victim who is in danger.
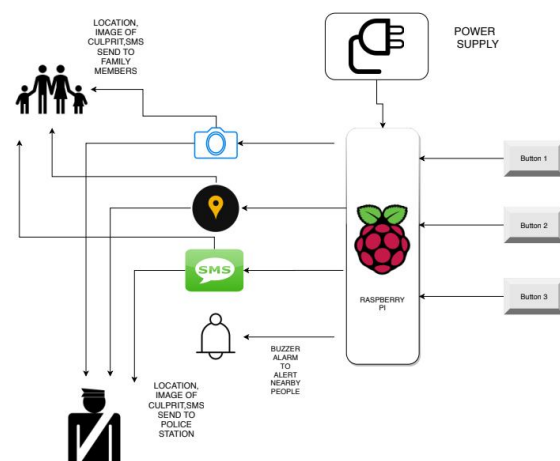

Fig. Block Diagram

In this project, we are using Raspberry Pi module which is the core part of the project. In our project, we are utilizing three pushbuttons. Out of that three pushbuttons, first pushbutton is utilized for circuit on/off. Second one is utilized for on GPS, GSM& bell and third pushbutton is utilized for shock circuit. When the first pushbutton is pressed, at that time circuit turns ON. When second pushbutton is pressed, the GPS turns ON and sends location information to predefined numbers. We can customized the location notification to people of our convenience like police Dept IT cell, parents, guardians, etc.. Area is send to that three numbers in the type of scope and longitude additionally utilizing GSM alert message "I AM IN DANGER" and the image of the culprit that was captured by the camera module is sent to the police and family members of the victim. At that moreover bell will be on .When third pushbutton is pressed at that time shock circuit will be on. At the point when assaulter assaults to women at that time shock circuit is utilized to harm assaulter for self defense. The present scenario this framework is quite helpful.

Table no 1 : Shows Characteristic of Zero

Parametric Name	Value
Processor	1GHz, single-core CPU
Memory	512mb
Camera	CSI camera connector
Bluetooth	Bluetooth 4.0
HDMI	Mini-HDMI port
Power Supply	Micro-USB power

IV. WORKING PRINCIPLE

Right now Raspberry Pi module is primary part. In our undertaking we are utilizing three catches. Out of that three fastens first catch is utilized for circuit on/off. Second base is utilized for on GPS, GSM& signal. Third catch is utilized for stun circuit.

When first button is pressed at that time circuit is on. At the point when second button is pressed that time GSM is on and GPS is additionally on. It sends area to predefined numbers. We spare three numbers that three numbers are police headquarters, neighbor's, and guardians. Area is send to that three numbers as scope and longitude likewise utilizing GSM ready message "IAM IN DANGER SITUATION" and the image of the culprit that was captured by the camera module is sent to the police and family members of the victim. At that likewise ringer will be on .When third catch is squeezed that time stun circuit will be on. at the point when assailant assault to ladies that time stun circuit is utilized to

harm aggressor for self defense.At time camera will be on for catching picture and that catching picture is saved money on memory card. In this manner it is useful for police for looking through assailant. The present life this framework is generally helpful.

This Is The Architectural Model Of Our Project. In That GPS,GSM Modules Are Used.

GSM:- A GSM Modem Is A Wireless Modem That Works With A GSM Wireless Network .It Operates At Either The 900mhz Or 1800mhz Frequency Band . It Supports Voice Calls and Data Transfer Speeds.
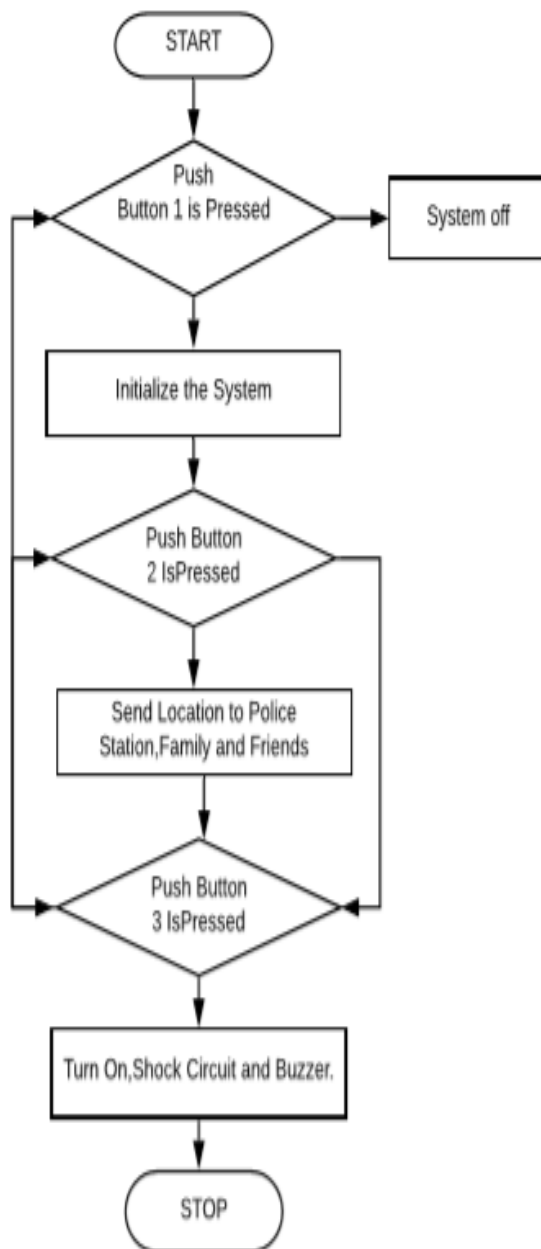
GPS:- Useable In Solder-Free Breadboard Projects prepared Use With Both 3.3 V And 5 V Microcontrollers

BUZZER:- The Alarm is designed to assist in alerting somebody In case Of emergency Situations.

RASPBERRY PI:-The is a series of small single-board computers developed in the United Kingdom by the Foundation to promote teaching of basic computer science in schools and in developing countries This data will be the input of the software than starts the work of the Software system that is been developed to determine whether the person is autistic or not.

Camera:-A Camera Module to Capture the image of the culprit and send it to police and victim family.

All this description can be designed in flow of operations.

V. RESULT

Electronic Jacket for Women Safety In That We Use Remote System to Send Message, Location .It Is Very Useful For Security Purpose. Stun Circuit Is Used To Injure Attacker For Self Defense. Consequently This System Is Used for Protection and to Control Other Activities Which Are Happen the present Life. Signal Is Used For Help. All These Tiny Circuit Connected To The Raspberry Pi Module.

VI. CONCLUSION

The proposed plan will help the young lady when she is peril zone. She can make salvage of herself in peril circumstances. What's more, this circuit will use to expel or diminish the strain of young lady when she strolls alone in night hour likewise, with the goal that she will never feel vulnerable at any circumstance and can secure her without anyone else

VII. FUTURE SCOPE

Wearable gadgets, for example, action trackers are a decent. case of the Internet of Things, since they are a piece of the system of physical articles or "things" inserted with gadgets, programming, sensors and availability to empower items to trade information with a maker, administrator or potentially other associated gadgets, without requiring human intercession. This task is valuable in future for a ladies security.

Primary School Children Safety:- As the younger students security are significant worries for guardians just as school the executives because of the ongoing episodes of kid wrongdoings like kids missing, misuse, capturing and so on. This module screens the kid wellbeing when they are going in school transports.

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