

A SURVEY ON SECURITY DEVICE FOR WOMEN AND KIDS SAFETY

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Abstract : This paper studies about the security framework for ladies and kids which permits quick reactions in any badgering in open spots, social orders and so on. Viciousness against ladies in India is in reality more present than it might show up at first look, the same number of articulations of savagery are not viewed as wrongdoings, or may some way or another go unreported. These reasons all add to India's Gender Inequality Index rating of 0.524 in 2017, placing it in the base 20% of positioned nations for that year. Ladies everywhere throughout the world are confronting exploitative physical badgering and kids can't be left unattended at a get-together or outside the home. Our task tackles both the issues. A convenient gadget which will have a frenzy switch. When assailant assault the ladies/youngsters press the frenzy switch, in a flash with the assistance of GPS and GSM, the injured individual's area will be sent to their folks/gatekeepers phone numbers put away in the gadget, and furthermore to the closest police headquarters. The gadget will create the alert sound to the fascination of adjacent individuals. The aluminum sheet which is set on the gadget delivers little measure of electric stun exertion to the aggressor, if attempts grab the gadget.

Watchword - Security gadget, GPS and GSM, alert sound, Electric shock.

I. INTRODUCTION

Today young ladies are not ready to walk unreservedly in the lanes without stressing over their wellbeing. Guardians are stressing for their little girl, to send for the activity. Presently multi day's Women are rivaling men in each field of society. Ladies contribute equivalent need to the improvement of our country. In any case, the ladies have dread of getting irritated and executed. Every one of these sorts of ladies provocation cases are expanding step by step. So it is essential to guarantee the security for ladies.

Ladies from different moves of life face issues that make them feel compromised in various conditions. More level of ladies inappropriate behavior cases are accounted for in the year 2010 at New Delhi. In urban conditions, ladies are increasingly inclined to encounter badgering particularly in creating nations. In such case, the guide of a security gadget will educate the injured individual's relatives or the specialists may enable ladies to feel more secure, sure and diminish the odds of provocation.

As the school child's wellbeing are significant worries for guardians just as school the executives because of the ongoing occurrences of youngster wrongdoings like kids missing, misuse and so forth.

The ladies and youngsters are exposed to such abominations, physical and sexual, there is a need a gadget that would assist them with altering somebody in instances of crisis. This paper proposes a gadget that would be turned ON by an activity of human hand. The principle thought isn't just have a ready framework yet additionally a gadget that would gather proof.

As indicated by an article "55,000 youngsters hijacked in 2016 in India: Report". Distributed by Times of India at Jul 8, 2018. The Article advises that According to the 2017-18 report of the Ministry of Home Affairs (MHA), 54,723 youngsters were hijacked in 2016 however charge sheets were recorded in just 40.4% of the cases.

II. Literature Survey

2.1 "A Smart Watch for Women Security Based on IOT Concept 'Watch Me' "

At the point when a ladies or youngsters is presented to sexual or defenseless assault, The gadget "Watch me" that they wear in the gadget the sensor is to identifies the heart beat rate of an individual which will be high right now by the discharge of epinephrine hormone from hpa pivot and gets actuated. The gadget gives an alert sound to the consideration of close-by individuals, it will consequently make a call to our enlisted contact and furthermore through GPS/GSM it will identify the adjacent police headquarters and make a ring. So it will be useful for police to arrive soon at the spot by following the GPS, such a framework will prompt more secure and better condition.

Points of interest:

- Easy to keep up the gadget.
- Safer and better condition for ladies and children.
- Battery is kept consistent.

Burdens:

- Heart beat rate is fluctuates as per the circumstance, surprisingly the gadget is turns ON.
- Immediate wellbeing is absent.
- If the signs are absent then option isn't existed.

Date of Conference: 2017

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2.2 "SMARISA: A Raspberry Pi based Smart Ring for Women Safety Using IoT".

Ladies are at the present situation, a shrewd security gadget that they wear, for a lady dependent on Internet of Things is proposed. It is actualized as a brilliant ring (SMARISA) and involves Raspberry Pi Zero, Raspberry Pi camera, signal and catch to enact the administrations. This gadget is amazingly convenient and can be initiated by the injured individual on being dynamic just by the push on a catch that will bring her present area and furthermore catch the picture of the assailant through Raspberry Pi camera. The area and the connection of the picture caught will be sent to predefined crisis contact numbers or police via smart telephone of the person in question.

Points of interest:

- Portable.
- More productivity.
- Image catch is uses for police confirmation.

Burdens:

- More complex to plan the miniaturized scale parts.

Date of Conference: 2018

Creators: Navya R Sogi, Dept. of Information Science and Engineering, Dayananda Sagar College of Engineering, Bangalore, India
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2.3 "Smart Security Solution for Women dependent on Internet of Things (IOT)"

A gadget which is the combination of numerous gadgets, equipment contains a wearable "Brilliant band" which persistently speaks with Smart telephone that approaches the web. The application is customized and stacked with all the required information which incorporates Human conduct and responses to various circumstances like displeasure, dread and uneasiness. This produces a flag which is transmitted to the advanced mobile phone. The product or application approaches GPS and Messaging administrations which is pre-customized so that at whatever point it gets crisis flag, it can send help demand alongside the area co-ordinates to the closest police headquarters, relatives and the general population that in the close range who have application. This activity empowers help momentarily from the police just as open in the close sweep who can achieve the unfortunate casualty with incredible precision.

Focal points:

- More secure to ladies at desolate territories.
- Less current is required.

Weaknesses:

- Human practices are changes as indicated by circumstance then it is consequently switches on.
- The gadget is un dynamic when the signs of advanced mobile phone are frail.

Date of Conference: 2016

Authors: G C Harikiran, ECE Department BVBCET Hubballi-31, India.

Karthik Menasinkai, ECE Department, BVBCET, Hubballi-31, India.

Suhas Shirol, ECE Department, BVBCET, Hubballi-31, India.

2.4 "The Personal Stun-A Smart Device for Women's Safety".

A keen footwear chip which is stucked to the footwear that gets initiated when the individual taps one leg behind at other multiple times. They center around building up a model that is a brilliant band which gets initiated by tapping on the screen twice. When the gadget is begins to actuate it sending the GPS area to the ICE contacts and police control rooms. The band when tossed with powers the power sensor will get initiated and sends the present area of the person in question. A Piezo ringer alarm will begin after 1-2 min of the real gadget getting switches on. The scope of the ringer is of 80-110 dB which can be gotten notification from a separation of 50 feet long. An electric stun circuit is structured that emanates electric flow. On the highest point of the band screen there are two metal focuses that produces the stun when the two metal focuses interact with any surface or anyone.

Preferences:

- An electric stun age.

Disservices:

- Taping a leg behind at multiple times.
- Tapping on the screen at twice.
- Buzzer is enacted after 1-2 min.

Date of Conference: 2018

Authors: Shivani Ahir, Bachelor of Engineering Student, Universal College of Engineering, Kaman, Mumbai.

Smit Kapadia, Bachelor of Engineering Student, Universal College of Engineering Kaman, Mumbai.

Prof. Jigar Chauhan, Assistant Professor, Universal College of Engineering Kaman, Mumbai.

Prof. Jigar Chauhan, Assistant Professor, Universal College of Engineering Kaman, Mumbai.

2.5 "Smart Foot Device for Women Safety".

An endeavor has been made to build up a shrewd gadget that can help ladies when they feel risky. The shrewd gadget will be cut to the footwear of the client and can be activated carefully. On tapping one foot behind the other multiple times, an alarm is sent by means of Bluetooth Low Energy correspondence to an application on the unfortunate casualty's telephone, customized to create a message looking for help with the area of the gadget connected. The outcomes got are broke down

utilizing Naïve Bayes classifier and this minimal effort gadget demonstrated a general precision of 97.5%.

Preferences:

- Sending the message.
- Less costly.

Disservices:

- Tapping foot.

Date of Conference: 2016

Authors: Nandita Viswanath, III year, Department of Information Technology, SSN College of Engineering, Chennai.

Naga Vaishnavi Pakyala, III year, Department of Information Technology, SSN College of Engineering, Chennai.

Dr. G. Muneeswari Associate Professor, Department of Information Technology, SSN College of Engineering, Chennai.

2.6 “Women’s safety using IOT”.

A model which will guarantee the wellbeing of ladies and kids' everywhere throughout the worldwide. They have utilized various sensors like heartbeat sensor, temperature sensor, and accelerometer sensor for identifying heartbeat, temperature and unexpected change in movement of client. We have likewise utilized GPS which will recognize area of the client . GSM model is utilized to send ready message to gatekeepers, relatives and police headquarters. They have proposed Iot (web of things) based gadget which will help to ceaselessly screen estimations of various sensors and GPS utilized in gadget to send the area.

Points of interest:

- With GSM model the alarm message is sent to the polices
- Location sharing

Burdens:

- In summer the temperature is high the gadget is initiated by the temperature sensors.

Date of Conference: 2017

Authors: Prof. R.A.Jain, Professor, Electronics and media transmission Dept., Sinhgad Academy of Engineering,

Savitribai Phule Pune University, India.

Aditya Patil, Electronics and media transmission Dept., Sinhgad Academy of Engineering, Savitribai Phule Pune University, India.

Prasenjeet Nikam, Electronics and media transmission Dept., Sinhgad Academy of Engineering, Savitribai Phule Pune University, India.

Shubham More, Electronics and media transmission Dept., Sinhgad Academy of Engineering, Savitribai Phule Pune University, India.

Saurabh Totewar, Electronics and media transmission Dept., Sinhgad Academy of Engineering, Savitribai Phule Pune University, India.

2.7 “IOT Based Unified Approach for Women and Children Security Using Wireless and GPS”.

A gadget remote procedure as installed gadget to be specific Arduino for ladies that will fill the need of alarms and method for speaking with secure channels and it catches the picture utilizing electronic camera. There are numerous android applications for ladies safety but they as not as much as proficient. So to unravel this issue of women wellbeing they build up a remote sensor pack which is simple to use and which is productive to give assistance to that unfortunate casualty. So when the injured individual press units catch, our application will catch the photograph, gather clients data to send warning to registered telephone numbers with connection of caught picture. This saves the time and that unfortunate casualty get help without loss of time. Also in the instance of Children security the framework proposes a speed monitoring and area following offices utilizing GPS, GPRS, and GSM. The framework comprises of transport unit. The transport unit which is used to identify the way of Bus by utilizing GPS. Whether the transport is travelling on its everyday course and furthermore it screens theover speeding of transport. For the system of vehicle following Haversine and Trilateration calculation are utilized. Concurring to that the by utilizing GSM ready messages will be send to their

folks and vehicle proprietor. The framework has been created on web based information driven application that gives the helpful data.

Points of interest:

- Image catching.
- Vehicle following.

Hindrances:

- Immediate security is absent.

Date of Conference: 2016

Authors: Ms. Deepali M. Bhavale, Ms. Priyanka S. Bhawale, Ms. Tejal Sasane, Mr. Atul S. Bhawale

2.8 “Abhaya: An Android App for the Safety of Women”.

Individuals utilizing advanced mobile phones have expanded quickly and consequently, a PDA can be utilized effectively for individual security or different other insurance purposes. The appalling occurrence that offended the whole country have arouse us to go for the wellbeing issues thus a large group of new applications have been created to give security frameworks to ladies by means of their telephones. The presents Abhaya, an Android Application for the Safety of Women and this application can be enacted this application by a solitary snap, at whatever point need emerges. A solitary snap on this application distinguishes the area of spot through GPS and communicates something specific including this area URL to the enrolled contacts and furthermore approach the principal enlisted contact to help the one in perilous circumstances. The interesting element of this application is to send the message to the enrolled contacts persistently for at regular intervals until the "stop" catch in the application is clicked. Consistent area following data by means of SMS finds the area of the injured individual rapidly and can be safeguarded securely.

Points of interest:

- Utilizes the application.
- Sending the messages until it stop the catch.

Burdens:

- When the portable ids on then just the gadget is on.

Date of Conference: 2015

Authors: Ravi Sekhar Yarrabothu, Department of ECE, Vignan's University Vadlamudi, Gunture, India

Bramarambika Thota Department of ECE Vignan's University Vadlamudi, Guntur, India

III. Proposed Model

As indicated by the above papers, there are not many drawbacks, to defeat the issues we built up a model which contains the Arduino UNO board. The Arduino UNO is an open-source microcontroller board dependent on the microchip ATmega328P microcontroller and created by Arduino.cc. The gadget is enacted when alarm catch is squeezed which is put on a gadget. A frenzy switch is an electronic gadget intended to help with cautioning someone in crisis circumstances where a risk to people or property exists.

The area is sent through the message with the assistance of GPS and GSM. The message is sent to the police control room, and the watchmen utilizing the GSM model. The frenzy sound is produces with the assistance of transfer ringer which is associated with the Arduino board. A little measure of electric stun is produced with the aluminum sheet which is put on the gadget. At the point when the assailant endeavors to pull the gadget which is wear close by, he will get a shock. The electric stun is causes the client to self-protection.

The gadget conveys 50-70 volts of stunning force legitimately into your clueless victim's.

A remote camera is catches the area encompassed them and records the caught video. Driven presentation is utilized to confirm the capacities that plays out the gadget.

IV. Conclusion

This sort of a thought being the first of its sort assumes a urgent job towards guaranteeing Women Safety in the quickest manner conceivable naturally. The proposed structure will manage basic issues looked by ladies in the ongoing past and will help settle them through mechanically solid contraptions.

With further research and development, this venture can be executed in various regions of security and observation. The framework can play out the continuous observing of wanted region and identify the savagery with a decent exactness.

This paper studies about the security framework for ladies and youngsters which permits prompt reactions in any provocation in open spots, social orders and so forth. Savagery against ladies in India

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