

A Review Paper on Women’s Security from Unethical Physical Harassment Using Smart Wi-Fi Device

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Abstract

In today’s world safety for women’s is one among the foremost pressing issues that ought to be a fundamental, undeniable concept for any civilized society. Many of us are crying aloud for better ways to make sure women’s security and make things better for them. And it looks like, that a lot of people are definitely trying to do; something about it by implementing various mobile apps for ladies safety & security from unethical physical harassment but the requirements of working women is that they require a transportable smart device which will be administered anywhere easily. By considering this example, here we present an idea to style a tool within the sort of push button which may be attached to cloths. During unethical situation we don’t have time or not in conscious mind to work our phone so push button are often used. After pressing the push button the phone will automatically start doing its work without touching it. This button are going to be connected to the system which has two modules, one which may be used when someone makes some kind of unethical movement and therefore the other one which may be used once you sense danger. the primary module which is pendant which contains spy camera that's making a brief video to capture the present surrounding and therefore the situation by which you're suffering, while the other which is push button which is employed during times of threatening to send location information to family or friends also because it alerts the closest police headquarters and also the calls the helpline number for ladies, in order that the assistance can reached from a minimum of one source. Parameters on which performance: Awareness Cost, Attention, Alertness, Security, Sensibility.

Keywords: Smart Wi-Fi push button, Smart Pendant

1. Introduction

We’ve design a prototype that’s a sensible device which will be worn by a person on their body. The device is usually active, the victim must tap on the screen twice when she feels the necessity of it or she feels someone is abusing her. After tapping on the screen, the device will start sending the present latitudinal and longitudinal co-ordinates to the ICE contacts and therefore the police room. The device consists of a piezo buzzer that emits beep sound after 1 minute of actual activation of the device. The range of the buzzer covers up to 50 meters of radius. The buzzer will start ringing after the particular activation of the device and therefore the current location are going to be shared. The device and therefore the smart phone are connected using Bluetooth, which is liable for the general data sharing and connectivity. The guts of the device

is arduino which controls the whole device functionality. The appliance connects the hardware to the software via Bluetooth and therefore the application is employed to send the panic message/alert message to the pre-stored contacts in it. We design a transportable device for the ladies security. It consists of power supply, Arduino, touch sensor, tear gas, GPS and GSM modem. It's a definite aid product designed to stay the user and their associate safe 24/7. Our aim is to supply you with firmest and natural thanks to connect your nearby hand. It share the present location and a message to the cops and therefore the emergency contacts, in order that disastrous circumstance are often avoided. This is often very useful for local department to compress the law-breaking, which are abuse. Emergency alert can prevent the victim from any physical or sexual abuse. This is often also called a "Virtual Friend" especially designed for the ladies security. The essential use of Arduino is sending and receiving data by the GSM shield provided within the Arduino board. The present location of the thing is identified by the GSM network using Arduino UNO by initiating the user's smart phone.

2. Working Block Diagram

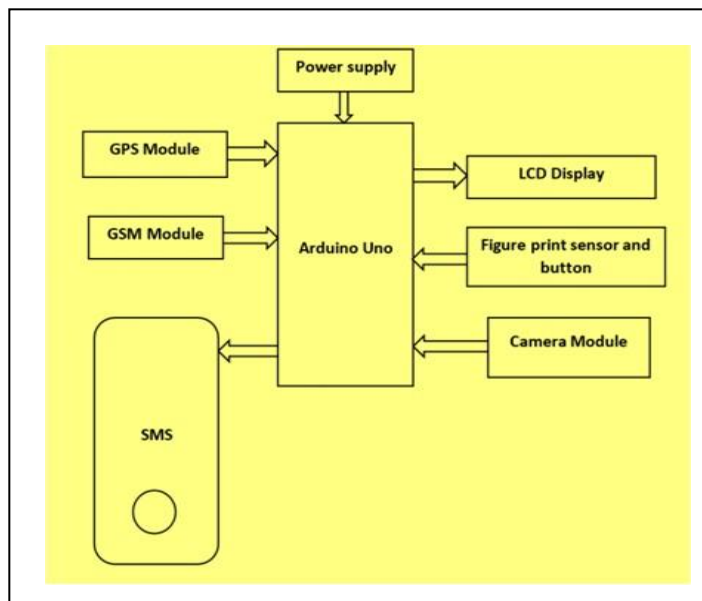


Figure 1. Working Model of Women's Harassment System

3. Methodology

To make the proposed system work, both the smart watch and pendant camera must be charged and turned on. The below mentioned steps must be done before the user using the system.

Step 1: Register contact numbers within the smart watch.

Step 2: Set the time duration for tracking the knowledge, in order that for each mentioned time the knowledge is updated within the server.

Step 3: Bluetooth must be enabled in both the devices (i.e. watch and pendant). This System are often utilized in different levels for a lady.

4. Application

The portable device is particularly designed to assist women in distress situations to urge the assistance also on alert the encompassing people and society. Its design purpose is to form the safety device more portable and cozy. This device is enabled with the GPS system to send the situation information to the contacts. The device is additionally enabled with camera which successively capture images and videos supported user trigger and these images will then be sent to the contacts.

5. Important Design Aspect

The idea to style one such device which may be made joined to the clothing. It'll be a pendant on chain and great fear button which can be made joined to the clothing. This device are going to be connected to the system which has 2 parts, one which may be used when some-one makes some kind of unethical movement and therefore the other one which may be used once you sense danger. the primary a part of a greater unit are often used just to record a brief video to capture the proof of attacker that's ornament on chain, while the other are often used during times of danger to send your placing to family or friends also because it gives danger signs the closest police headquarters, such help can get stretched to as soon as possible

Working of guard as Health Tracker

If the user enables Health Tracker, the system tracks the heart beat rate, heartbeat, calories burnt and blood oxygen levels of the ladies for each time duration depends on the setting of the user. This information are going to be stored within the server in order that she or her relations who know the URL address can view the info. When the reading of either pulse or heart beat or calories burnt or blood oxygen levels aren't in normal condition, immediately the system sends alert message “SHE IS IN abnormality, CONSULT DOCTOR” to the registered numbers with long beep sound at the receiver side. This technique also will help women to guide what proportion she has got to walk. It informs the ladies to “walk” if she sits for a while and also if she walks (or jog) for longer it informs the amount of calories burnt and suggest to “stop walk”. This technique helps the ladies to form herself fit and mainly during her pregnancy.

Working of guard as Geofence

The GPS in Smart watch racks the movement of the ladies and is employed to understand the speed from movement with the assistance of rate of change in latitudes and longitudes. For each time duration de pends on the setting the knowledge is tracked and saved within the server. When the ladies moves out of the world it immediately notifies with message to the registered numbers “SHE IS OUT OF BOUNDARY, TAKE CARE”. Especially this Geofence are often utilized in children (girls) in order that when the kid (girl) moves out of specific area. This will be viewed at the URL because the information is stored in the server.

Working off guard when women in vulnerable attack

When the ladies face with any vulnerable attacks, the sole thing she has got to do is press button for 2 seconds. Immediately the device gets activated and sends the alert messages like “I am in peril, please help me” with long beep sound with high volume at the receiver side even it's in silent profile, alongside location using GPRS. This technique works even within the absence of internet connectivity. The hidden camera within the pendent like device is additionally gets activated when button is pressed and captures the attacker's pictures. This information are

going to be also gets stored within the server in order that these pictures are often helpful for evidences.

6. Area of Application

It may be a security device during a button form. The button which may be attached to the clothing with a pendant and when button is pressed it performs the action of alerting contacts including the chosen loved one or friend, the closest police headquarters and also the emergency helpline number. The device enabled with the GPS system are going to be ready to send the situation to the contacts. The pendant are going to be enabled with camera which can capture images and videos supported the users trigger and these images also will be sent to the contacts. Here the trigger are going to be push button press which can activate the GSM module to send the situation which is tracked by GPS to the chosen phone numbers.

7. Value Addition to Work

The device contains a pendant and a push button the system is turned ON when button is pressed in instances of attack, manually by the lady. This switch triggers a microcontroller that activates a no body alarm. The microcontroller triggers the on-body camera and GPS module to capture the image and obtain the situation respectively. Images are stored during a micro SD card as a symbol for legal actions. Hand-held controller when triggered, receives location coordinates from the GPS receiver and transmits these within the sort of an SMS to the pre- decided telephone number.

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