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# GPS Tracker System

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**Abstract:** Security girls [for ladies/ for women] has become a serious issue because the range of crimes over women and girls increasing day-by-day. This project describes concerning girls safety and their security by victimization device to each find the matter & alert Authorities.

This project suggests a brand new perspective to use technology to shield girls. we have a tendency to use associate degree robot based mostly} good phone with associate degree integrated feature that alert and supply location based data. "Women Security System "that gives the mix of GPS devices as- well-as provide alerts associate degree message with an emergency button Trigger.

Whenever someone is in hassle They solely ought to press Button subsequently a message alert is shipped to Register Contact list and provides a message "I AM In hassle PLEASE facilitate ME" and switch on camera to click image. currently on a daily basis safety of ladies is changing into terribly poor with the assistance of this Application.

**Keywords:** Safety and security, harassment, killed, raped, emergency, IOT, sensors, gps, station, etc.

## I. INTRODUCTION

This project focuses on a security system that's designed simply to serve the aim of providing security to ladies so they ne'er feel helpless whereas facing such social challenges. a complicated system may be engineered can[that may} sight the situation and health condition of individual that will change America to require action consequently supported electronic gadgets like GPS, vital sign sensing element and IOT. we are able to create use variety of sensors to exactly sight the \$64000 time scenario of the ladies in important abusive things.

The heartbeat of an individual in such things is often higher that helps create choices along side sensors. the concept to develop a wise device {for ladies|for ladies|for girls} is that it's utterly snug and simple to use as compared with already existing women security solutions like a separate garment, large belts and notorious mobile apps that area unit simply terribly abstract and obsolete. The good band integrated with good phone has an additional advantage thus on cut back the value of the device and additionally in reduced size. The GPS and IOT may be used of a wise phone. This additionally allows in reduced power use which the watch may be put in with that comes in handy for many days on one shot of charge.

## II. LITERATURE SURVEY

1) Paper Name: IOT Based Women Security: A Contemplation.

Author Name: Deepinder Kaur, Ravita Chahar, Jatinder Ashta.

Description: Currently, safety of women is a paramount concern all over the globe. Particularly in India, crime against women is increasing rapidly on hourly basis. With the advancement of technology, many solutions have been developed to curb this serious issue. A swarm of IoT (Internet of Things) software applications is available which are programmed for helping the women in unfavourable circumstances by sending alert messages to the registered contacts. Similarly, there are smart hardware gadgets accessible which comprises of sensors and microcontrollers that can sense the unsafe situation. These gadgets can produce screaming alarm or produce electric shocks to the assailant.

The objective of this paper is to scrutinize various IoT applications for women safety and to identify whether the mobile applications are more efficient or IoT based hardware gadgets are more effective solutions for securing the females in emergency situations. To find the answer of this issue, the comparative study of the literature of five years has been reviewed. The related literature has been reviewed using google scholar, Science direct and CiteSeer. Laconically, we found out the smart hardware gadgets with inbuilt programming are more effective as compared to mobile applications for securing the women in dangerous circumstances.

2) *Paper Name: Smart Security Solution for Women based on Internet Of Things(IOT)*

Author Name: G C Harikiran, Karthik Menasinkai.

Description: Today in the current global scenario, the prime question in every girl's mind, considering the ever rising increase of issues on women harassment in recent past is mostly about her safety and security. The only thought haunting every girl is when they will be able to move freely on the streets even in odd hours without worrying about their security. This paper suggests a new perspective to use technology for women safety. "848 Indian Women Are Harassed, Raped, Killed Every Day!!" That's a way beyond HUGE number! We propose an idea which changes the way everyone thinks about women safety. A day when media broadcasts more of women's achievements rather than harassment, it's a feat achieved! Since we (humans) can't respond aptly in critical situations, the need for a device which automatically senses and rescues the victim is the venture of our idea in this paper. We propose to have a device which is the integration of multiple devices, hardware comprises of a wearable "Smart band" which continuously communicates with Smart phone that has access to the internet. The application is programmed and loaded with all the required data which includes Human behavior and reactions to different situations like anger, fear and anxiety. This generates a signal which is transmitted to the smart phone. The software or application has access to GPS and Messaging services which is pre-programmed in such a way that whenever it receives emergency signal, it can send help request along with the location co-ordinates to the nearest Police station, relatives and the people in the near radius who have application. This action enables help instantaneously from the Police as well as Public in the near radius who can reach the victim with great accuracy.

3) *Paper Name: A SMART WATCH FOR WOMEN SECURITY BASED ON IOT CONCEPT 'WATCH ME'*

Author Name: A. Helen ,M. Fathima Fathila, R. Rijwana, Kalaiselvi .V.K.G

Description: Today, in the current global scenario, Women were facing lot of challenges. We can hear the news of women harassments than their achievements. There are many existing apps and devices for women security via smart phones. Though the smart phones have increased rapidly, it is not possible to have the phone all the time in our hand to make a call or click on it, so here we introduced a new technique via smart watches. When a women or child wearing this 'watch me' is exposed to sexual or vulnerable attack, the sensor present in it detects the heart beat rate of a person which will be high at the moment by the secretion of epinephrine hormone from hpa axis and gets activated, this will not only provide a alarm sound to the attention of nearby people, it will automatically make an call to our registered contact and also through GPS/GSM it will detect the nearby police station and make an ring there so it will be helpful for police to arrive soon at the spot by tracking the GPS , such a system will lead to safer and better environment.

4) *Paper Name: A Novel modernistic techniques in women security system using ESP32 and Arduino Uno*

Author Name: Prem Prakash Murmu, Dr.Roopa Jeyasingh.J.

Description: A battery powered portable self-defense device is contained in a bag. The bag contain a camera, gps module, an alarm system and a compressed gas can. All of these modules are interfaces together and a single switch control is given for all the modules. As when a panic switch is pressed the camera will capture the image of the culprit, send the current geographic location with the image to http web server, simultaneously spraying the gas and generating alarm. The image and the geographic location can be accessed anytime to deal with the culprit. All of these modules are to be fitted at the bottom of any ladies purse or in any bag. The nozzle of the compressed gas can along with the camera will be at the side walls of the ladies purse or in a strap of a bag. A portable self-defense device with a camera, gps module, an alarm system and a compressed gas can was developed and interfaced together with a single switch control, culprit image was captured sent to the current geographic location with the image to http web server, simultaneously spraying the gas and generating alarm. This setup was obtained for the security of the women. enough. In order to overcome all these problems, we should aim on a promising society where women feel safer and secure throughout the world. This proposed idea describes the steps and process as to how the safety device works in ensuring the welfare of the women by instantly sending a message and the location of the victim to the

### III. PROBLEM STATEMENT

Among the worst countries in crime, Asian nation has Associate in Nursing obscene data all told styles of sexual exploitation. Indian ladies area unit in an exceedingly constant state of vigilance, sort of a country on terrorist alert. There are grotesque cases of rapes of toddlers, gang rape of eight years previous and ladies trafficking. we've created a nation wherever ladies area unit learning to deal with existential anxiety.

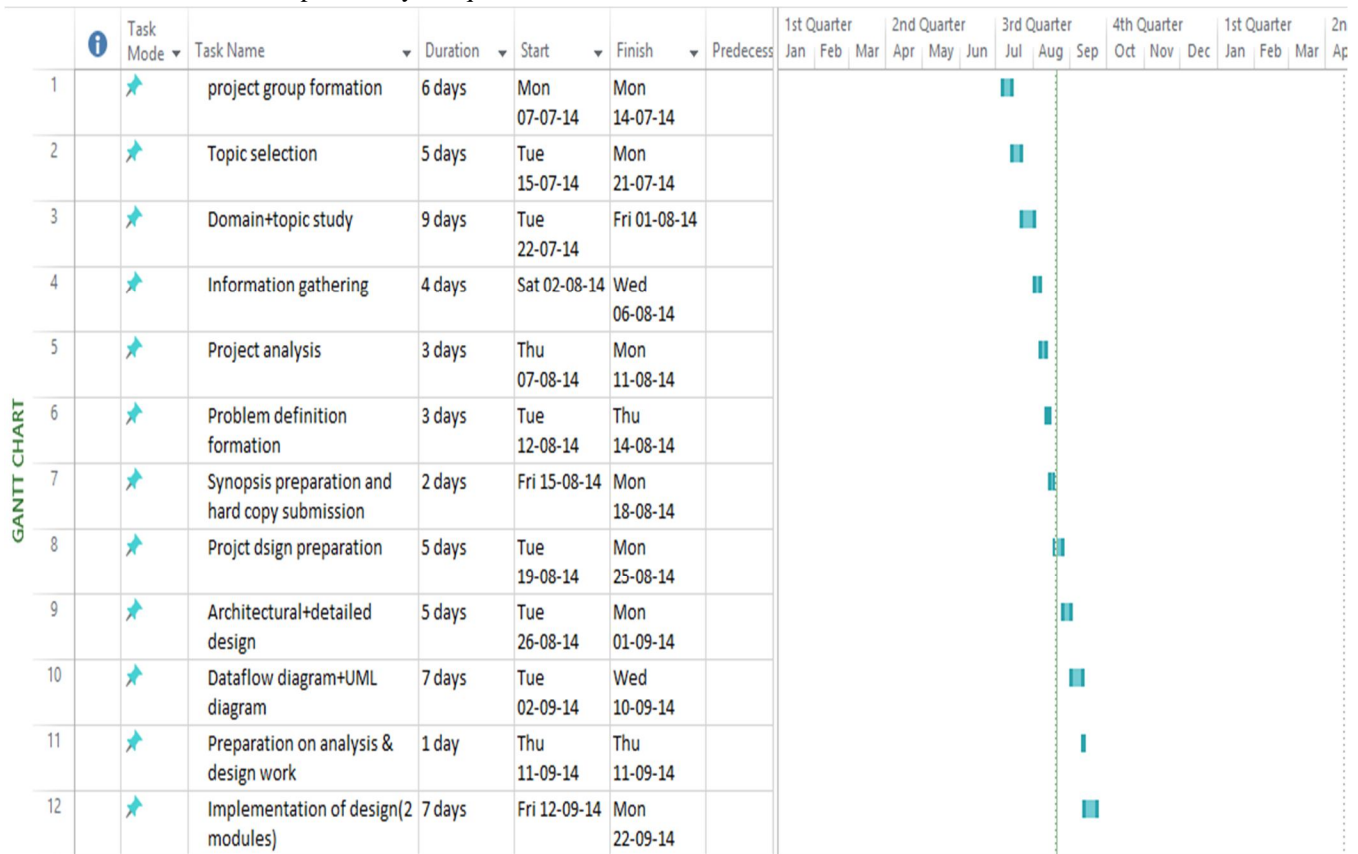
There are unit sure pre-existing apps that do send a message to the saved contacts however none of them is effective and fast enough and in step with a survey, the prevailing technology doesn't create most girls feel safe. In an exceedingly ton of cases, it's ascertained that ladies don't file a grievance against the defendant owing to numerous reasons like not knowing the right authority to report it to or feeling ashamed/guilty concerning the incident.

#### IV. PROPOSED METHODOLOGY

The main purpose the project is to supply extremely reliable security system for the security of girls.

The planned system relies advanced sensors, Microcontroller and GSM. The essential aim of the system is to develop an occasional price resolution for GPS primarily based girls trailing system (women safety system). AN emergency button press GPS device should to be placed within the hardware device. The device can give the position data like latitude, line of longitude of girls and image. AN emergency button is mounted on the device at a selected position.

Whenever girls in ANY reasonably bother she is going to press the emergency button and an alert are directly sent to the closest station. Then it's the responsibility of squad to handle matters.



#### V. CONCLUSION

In this project, we have a tendency to altogether centred on ladies Security. Here, We planned hardware and software package for additional accuracy. rate device and Image with microcontroller provides additional security with relevancy alternative system In future, System can add additional module i.e. Image process for object detection.

#### VI. ACKNOWLEDGEMENT

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- [10] U.S. Pat. No. 4,759,309 discloses a passive air, gas aerosol or pressurized fluid activated personal self-protection screech alarm device that is armed prior to the person utilizing it entering into a potentially dangerous area or situation.



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