

**ANDROID APPLICATION FOR MITIGATE PROBABILITY OF
THREATENING TO WOMEN IN UNWILLING SITUATIONS**Prof. Neelesh Chourasiya¹, Mr. Abhijit Kore², Mr. Abhinav Gaikwad³, Mr. Roshan Mahajan⁴*Department of Computer Engineering, Modern Education Society's College of Engineering (M.E.S.C.O.E.),
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Abstract - Women's security may be a crucial issue in today's world and it's substantially required for each individual to be acting over such a problem. This document describes a GPS and GSM based mostly girl's security system that gives the combination of GPS system moreover as offer alerts associate degree messages with an emergency button whenever somebody is in bother. They could not have most time all that they need to try to be pressing the quantity key. Especially girl's security has become the foremost priority of the globe. System uses the world Positioning System (GPS) technology to seek out the situation of girls. The data of girl's position provided by the device is viewed on Google maps victimisation net or specialised computer code. The IT Corporation's square measure wanting forward to the protection problem and need systems which will with efficiency security operating in night shifts, travelling alone. We tend to concentrate on the proposed model which will be accustomed affect the matter of security issue of girls victimisation GPS and GSM based mostly tracking system. Our country has new technology development however still there square measure some crimes in opposition to girls, risky neighbours, violence.

Keywords- Google Map, Security, GPS, Notification, conscious and unconscious situations

Nomenclature

Sr.No.	Short Form	Description
1	GSM	Global System for Mobile Communication
2	GPS	Global Positioning System
3	NGO	Non-Governmental Organisation
4	API	Application Program Interface
5	SQL	Structural Query Language
6	RFID	Radio Frequency Identification
7	SDK	Software Development Kit

I. Introduction

Women unit adept at mobilizing various teams for a customary cause. They typically work across ethnic, religious, political, and cultural divides to market peace. we have a tendency to tend to face live all responsive to importance of women's safety; however we have a tendency to tend to have to be compelled to understand that they have to be compelled to be properly protected.

Women's aren't as physically durable as men, in Associate in nursing emergency state of affairs a facilitate would be a relief for them. the sole attributable to minimize your potentialities of fixing into a victim of violent crime (robbery, domestic violence) unit to spot and switch resources to assist you out of dangerous things.

Whether or not or not you're in immediate bother or get separated from friends throughout an evening out and don't astuteness to urge home, having these apps on your phone will prune your risk and switch out facilitate once you'd adore it. though many were originally developed for school students to cut back the danger of crime on field, they're applicable for all ladies among the sunshine of recent outrage in Old Delhi that barrel the state and woke USA to the protection problems for our daughters, individual's unit train up in varied ways in which throughout which to fight back. kind of recent apps unit developed to produce security systems to women on their phones. Here we have a tendency to tend to introduce Associate in nursing app that ensures the protection of girls. This helps to spot and invoke resources to assist the one out of dangerous things. These prune risk and switch out facilitate once we might adore it and facilitate USA to spot the position of the one in peril.

This app designed to produce security to ladies main purpose of this app to produce the notice on the time of necessary state of affairs for girls. Question in every girl's mind, considering the ever rising increase of issues on girl's harassment in recent past is typically regarding her safety and security. the only real thought haunting every girl is once they're attending to be able to move freely on the streets even in odd hours without worrying regarding their security. This paper suggests a replacement perspective to use technology for girls safety. on a daily basis once media broadcasts further of women's achievements rather than harassment, it's associate action achieved Since we have a tendency to tend to (humans) can't respond aptly in essential things, the requirement for a tool that automatically senses and rescues the victim is that the venture of our arrange throughout this paper.

II. Related Work

D. G.Monisha¹. [3] focus on presentation of FEMME is likewise a security gadget extraordinarily intended for ladies in crisis and in trouble. It's straightforward and easy to utilize and convey with changed functionalities .The quantities of shrewd telephone client's region unit transforming into bigger in sum everywhere the world. a shrewd telephone has numerous applications that is helpful to individuals all through that our FEMME will wind up one in each of these. it is an individual wellbeing item intended to remain you and your companions safe day in and day out. It's packed with decisions for each regular security and genuine crises, making it degree last apparatus for all. This basic application is gotten to by anybody global association office has put in it in their savvy telephones more as worldwide association organization has our gadget.

Ashish M. Husain. [5] Technology has even so to have a firm grasp on the locals in rural areas, not like true at intervals the urban areas, where technology has advanced significantly, even so the bridge between rural and concrete health development remains less substantial. The projected answer can provide concerned folks with wholly totally different sets of data, involving health and living conditions, which could facilitate deploy health care connected solutions in rural areas with further delicacy and efficiency. This answer would promote the parents to avail the technological health care from the valid sources around their zone as a result of it connects the user of the applications to shut facilitate sources at intervals the range of hospitals and NGOs.

Gopal Krishna Shyam [6] Providing intelligence to waste bins, victimisation Associate in Nursing IoT image with sensors. It will browse, collect, and transmit large volume of information over the net. Such data, once place into a spatio-temporal context and processed by intelligent and optimized algorithms, is wont to dynamically manage waste assortment mechanism. Simulations for many cases area unit applied to research the advantages of such system over a standard system. We tend to attempt to replicate the situation victimisation Open information from the town of Pune, Asian nation stressing on the opportunities created by this sort of initiatives for many parties to introduce and contribute to the event of good waste management solutions.

S. S. Pethakar. [7] is referrers to GPS GSM primarily based Vehicle run after associated employee Security System combine the mechanism of a tool throughout a vehicle, with purpose-designed computer package to change the company to trace the vehicle's position. In vehicle chase systems we've got an inclination to use world Positioning System (GPS) technology for locate the vehicle. Vehicle information is also viewed on electronic maps via internet or specialised package. Because of recently happened mishaps like crime, rape cases etc., the employee safety, esp. for the women staff, has become selection one priority for several of the companies. Although the companies take wise precautions to create positive that its staff square measure safe, there square measure some serious loop holes among the present system. First of all there is no full proof mechanism to trace the outsider to avoid this sort of disadvantage we've got an inclination to square measure attending to apply a system that provides further security to the employee. The car Unit is placed among the car .When the car picks up the employee he/she should exchange the RFID card. The little organizer matches the RFID card no. with its information records and sends the staff id, cab id the cab situation co-ordinates to the company unit via GSM module.

Niti shree. [1] represents this work is predicated on IOT (Internet of Things). As we all know in gift era everything is predicated on digital technology. These days all and sundry is connected with one another by many ways, wherever most well-liked communication is net thus it's net that connects folks. This paper proposes Associate in nursing automaton based mostly resolution to help oldsters to trace their kids in period. Totally different devices area unit connected with one device through channels of net. The involved device is connected to server via net. The device is often utilized by oldsters to trace their kids in real time or for girls safety.

The projected resolution takes the advantage of the placement services provided by GSM. It permits the fogeys to induce their Childs location on real time by SMS. Here, a model model (device) is formed that is simulation based mostly. The work contains ARM-7 LPC2148 as microcontroller, together with GPS and GSM module.

Prof. Basavaraj Chougul. [14] The status of ladies in India has experienced numerous awesome changes in the course of the last couple of centuries. From break even with status with men in old circumstances through the low purposes of the medieval period to the advancement of equivalent rights by numerous reformers, the historical backdrop of ladies in

India has been memorable. In present day India, ladies have decorated high workplaces in India including that of the President, Prime Minister, Leader of the Opposition and Speaker of the Lok Sabha. Be that as it may, ladies in India keep on facing social difficulties and are regularly casualties of manhandle and savage violations and, as per a worldwide survey led by Thomson Reuters, India is the fourth most hazardous nation on the planet for ladies, and the most noticeably awful nation for ladies among the G20 nations. This paper centers around a security framework that is planned exclusively to serve the reason for giving security to ladies with the goal that they never feel powerless while confronting such social difficulties. The framework comprises of different modules, for example, GSM shield (SIM 900A), Arduino ATmega328 board, GPS (GYGPS6MV2), shouting alert (APR 9600), an arrangement of weight sensors for initiation and power supply unit. The Delhi Nirbhaya case that set off the entire country was the best inspiration for this framework. It was high time we ladies required a change.

Poonam Bhilare. [18] Womens security is a basic issue in todays world and its particularly required for each person to act over such an issue. This paper depicts a GPS and GSM based vehicle following and ladies representative security framework that gives the blend of GPS gadget and specific programming to track the vehicles area and give cautions what's more, messages with a crisis catch trigger. The data of vehicle position gave by the gadget can be seen on Google maps. The IT organizations are anticipating the security issue and require a framework that will effectively assess the issue of ladies representatives security working in night shifts. This paper centers around the proposed demonstrate that can be utilized to manage the issue of security issues of ladies workers utilizing GPS and GSM based vehicle following.

In an investigation led by Activity Aid in 2015, 73% of Bangladeshi guardians trusted that it is smarter to have their young ladies wedded youthful instead of face provocation issues, 79.8% guardians trust badgering is a issue and 84.5% are frightened of it. Nova Ahmed. [15].

The Sauver [16] and Iprob [17] applications concentrated on sending area outline of the casualty as an instant message to predefined numbers. Be that as it may, nothing from what was just mentioned works concentrated on earnest openness from the casualty and sending solid notice to a relative/close-by healing facility/police station.

III. Comparison of existing apps and devices

NAME	APPLICATIONS	LIMITATIONS
Nirbhaya	Lets the user send SMS alert or call with single touch to be pre-selected contacts with exact location. And 300 meters as victim moves.	This app is continuous battery consumer and physically dependent.
HereMe	The hidden camera system that provides video, also audio of victim as notification.	Not useful in at dark (night) places. And victim physical interaction is compulsory.
vithU	Sends a message to preselected contacts when the power button of the phone is pushed twice.	The physical dependency. Not useful when victim is on distance place from device.
Sauver	Sending location map information of the victim as a text message to predefine numbers.	No focus on urgent accessibility from the victim and sending reliable notifications to family, hospital.
Safety Pin	Depicting the safe routes based on crowd sourcing.	Does not ensure reliable feedback.
Move Free	Collecting general database, to solve health related problem critical situations.	The database which is fake database and no proper band has been connecting with applications.
FEMME	Battery is running low, it automatically sends the location to the pre-stored contacts.	Unnecessary send location related information. Compulsory hardware requirement.

IV. Problem and solution description

A. Motivation

Incidences of attacks on women are increases day by day. Kidnapping of children. Attack or kidnapping of physically challenged people. A legal evidence of crime with exact location information for hearing. And unconscious person get help. Problem Statement and Choice of Solution. Every day, ladies area unit injured, injured and profaned on the streets of their own cities. Violence against ladies happens all over the globe, considerably in developing countries. This violence will take several forms: physical, psychological.

B. Problem Statement and choice of solution

Our country has super power ,electronic devices and economic development but still their are many crime against women. Unsafe neighbours, Domestic violence. Hidden camera detector. This type of crime day by day increases but nothing to doing for this conditions. So overcome this problem we develop our system for women safety. We develop GPS/GSM based smart android application for women Tracking purpose and if the person got into unconscious situation then with help of another person it get health services from nearest police station and hospital. With the help of this application we can solve person health related issues.

C. Objectives

Main objectives are women faced lot of problems. Easy tracing women location. SMS alert system at receiver side if women having any problem at the time of notification send Unconscious woman has to got service by capturing image Google Map is used for viewing exact location of women.

V. Application Development

A. Software Development Process Model

The development of Woman Safety followed the Rapid Application Development (RAD) model proposed by James Martin. Three main properties of the RAD model are listed below:

- 1) Fast development and delivery
- 2) Low cost of development
- 3) Acceptable quality end-product

The model uses iterative, evolutionary prototyping, which suited the circumstances of development well. The high speed of development and the consistent deliveries enabled the team to collaborate amicably with the Pune police.

The application was divided into two components: a frontend user interface and a back-end functional unit. The user interface was developed in HTML/CSS and JavaScript, with native platform code in Java waiting for the user to engage the alert mechanism. The back-end was implemented using PHP and JavaScript, alongside MySQL for database querying. These two components were then fused seamlessly, communicating via JSON.

B. Interface Design

The user interface of the application was designed keeping in mind the need for simplicity. The use of the application was intended to be straightforward, as it would be accessed primarily in times of crisis, apart from the initial entering of emergency contacts.

C. Technology used

1. HTML/CSS and JavaScript for the front-end user interface, and
2. Java for native platform code to enable waiting for the trigger
3. PHP for server-side processing and for integration with the database
4. MySQL for management of the database
5. JSON for communication between front-end and backend of the application
6. Phone Gap API for necessary plug-ins
7. Android SDK to build an application supported by Android

VI. Operation of Application

The application architecture is designed to provide enhanced user experience to the users of WomenSafety. When the user first runs the application, she is asked to provide an emergency contact number and the location of residence. The user is shown an interactive help menu containing the functionality of the features. The application shows the nearest hospitals and police stations based on her location. There are shortcut widgets for camera and timer SMS which can be put on the device home screen for faster access. Basic user end facilities that WomenSafety provides are as follows:

- Privacy of the user - In order to provide a good level of end-to-end privacy of the user information, no data provided by the user is kept in any intermediate server.
- Minimization of data usage - The network data usage is optimized in WomenSafety. The absence of continuous data transmission ensures low battery drain.

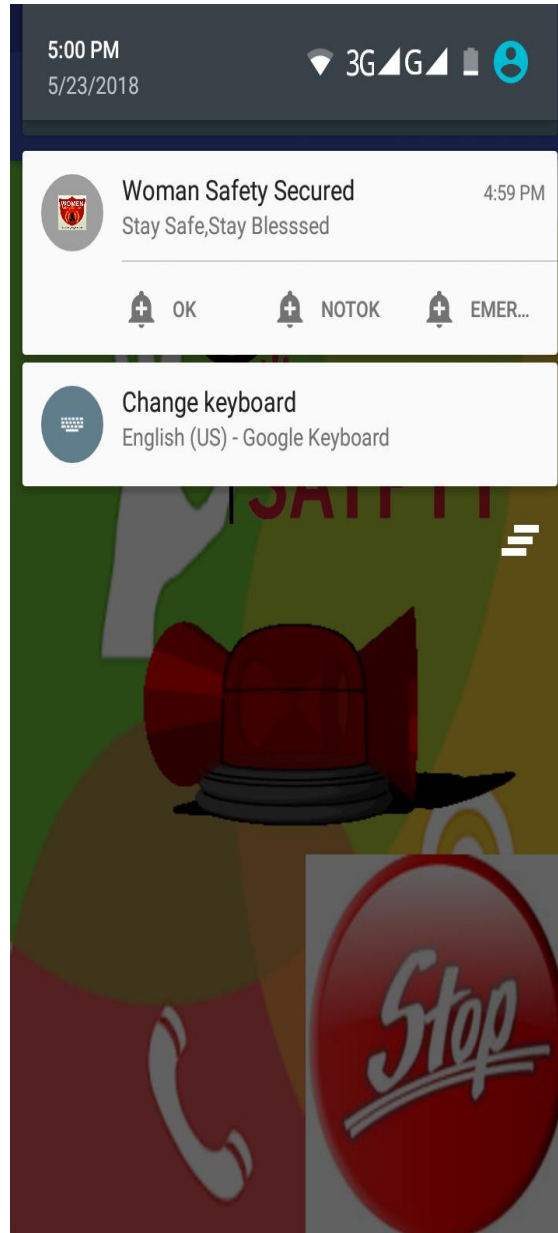


fig. 1. Notification

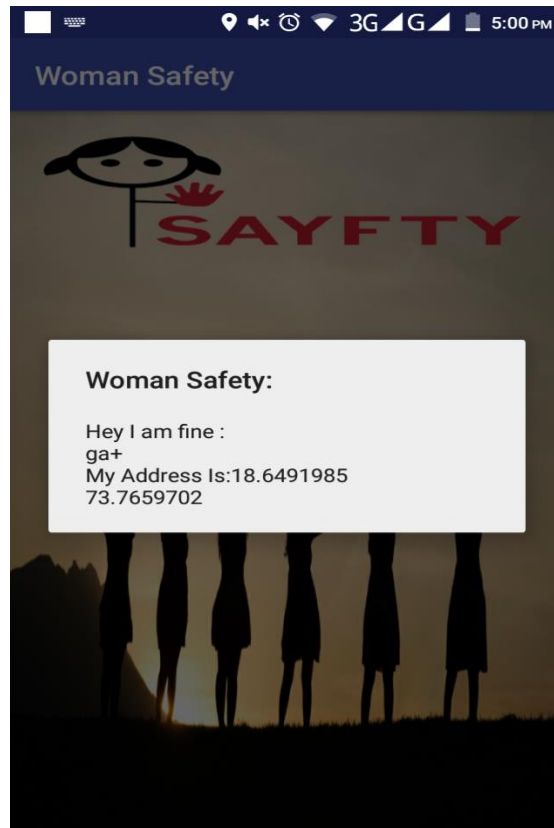


fig. 2. Messages



fig. 3. Home Screen

VII. Graphical survey

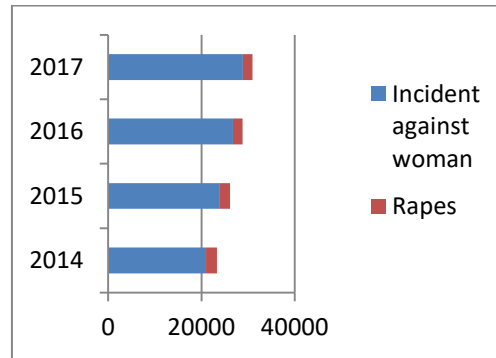


Fig. 1. Columnal representation of crime against women's

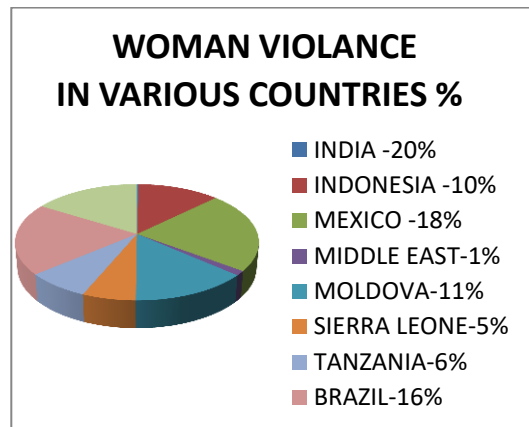


Fig. 2. Represent % of crime against women's in various countries.

VIII. Purpose

- 1) Incidences of attacks on women are increases day by day.
- 2) Also kidnapping of children.
- 3) Attack or kidnapping of physically challenged people.
- 4) A legal evidence of crime with exact location information for prosecution.

IX . Scope

- 1) Can be use to safety any type of person.
- 2) Monitoring the behaviour of persons, things, or data through space and time.
- 3) This application is useful for crowd places.
- 4) Also for tracing children's school bus or anywhere they play from away home.

VIII. Conclusion

The planned fashion will include critical issues round-faced by women inside the recent past and may facilitate solve them through technologically sound gadgets. We tend to tend to formulate here acutely aware and unconscious user throughout this application there are several varieties of applications rising one of most common being pursuit system i.e. observation the behaviour of persons, things, or info through house and time. The solution throughout this technique takes advantage of the created choices offered in Androids sensible phones. The device can have the emergency. simply just in case of any emergency, if anyone presses the key, automatic facilitate message are getting to be sent text messages to some peoples.

X. Future Work

With further examine and improvement, this project will use as a small wearable device like watch, pendent etc. The emergency message and call are automatically triggered either by shaking the phone 3 times or pressing volume button for 10 second.

XI. Acknowledgement

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