A Review on Android Based Smart Help System with Location Alerts

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***Abstract*: In this day and age, it is very perilous to travel alone, particularly for ladies. Since heaps of startling. also, disgraceful occurrences are going on around the world. Issues may originate from anyplace and whenever, as ladies are additionally developing similarly like men so for that reason they need to travel alone around evening time any place they go, they need to travel alone out in the open vehicle also. what's more, therefore, we have to comprehend and tackle this issue of ladies so they additionally ought not to feel any dread in regards to their wellbeing. This report speaks to an android application that will fill the need to protect ladies from hazardous conditions. As we as a whole realize that these days each individual conveys their cell phones and the employments of android applications have been expanded quickly so it is smarter to have such an android application which will give a protected situation openly transport.**

***Keywords*: Android application, Bluetooth, Women Safety, Panic button, Location tracking.**

1. Introduction

In this day and age, women's security has turned into a noteworthy issue as they can't venture out of their home at some random time because of physical/sexual maltreatment and dread of savagery. Indeed, even in the 21st century where the innovation is quickly developing and new contraptions were produced yet at the same time women' and young women are confronting issues. Women are skilled at assembling differing bunches for a typical reason. They frequently work crosswise over ethnic, religious, political, and social partitions to advance freedom. We are generally mindful of the significance of women's security, yet we should investigate that they ought to be appropriately ensured. Women are not as physically fit as men, in a crisis circumstance some assistance would be helpful for them. The most ideal approach to dog tail your likelihood of turning into a trick of vicious wrongdoing (burglary, rape, assault, abusive behavior at home) is to perceive, barrier and look into assets to enable you to out of unsafe circumstance. In case you're in predicament or get part from companions amid a night out and don't have the foggiest idea how to discover back habitation, this gadget with you will protect you and can decrease your hazard and bring help when you need it. There are a few application diminish the danger of rape on women by

illuminating control focus and their partners through SMS, yet inlay of those this mechanical assembly have considerably more effective approach to educate those this regarded personals and furthermore has a protection system which can't be given by existing application Even, however, numerous measures are taken to keep these exercises, none should influence the development rate of violations and continues as before. Every single wrongdoing argument against women ought to be caught into a record and moves ought to be made seriously. Along with these lines, this powers the new idea of giving a Bluetooth supported security gadget which encourages the women to deal with the issue as she is in danger. To help settle this issue it proposes a GPS based Women Safety System that has a double security include. This is a Bluetooth based gadget that comprises of a system that guarantees double alarms (Message and call) on the off chance that a lady is bugged, or she supposes she is in a bad position. This is a security system that is intended for giving security to women with the goal that they never feel powerless while confronting such basic circumstances. A propelled system can be assembled that can recognize the area and wellbeing state of women that will empower us to make a move likewise. We can make utilization of the number of sensors to absolutely recognize the continuous circumstance of the women in basic circumstances. The temperature of women in such circumstances is typically higher which decides. The Smart band coordinated with Smart telephone has an additional favorable position to decrease the expense of the gadget and furthermore in diminished size. GPS and GSM can be utilized as an advanced mobile phone. This additionally empowers in diminished power use and that the watch can be introduced with Bluetooth 4.0 BLE (Bluetooth Low Energy) which proves to be useful for a few days on a solitary shot of charge. Step by step the women's security is turning into the normal issue, such applications do exist, and they are similarly brilliant to appropriate the injured individual's telephone. Thus the procedure to change to a piece of free equipment is engaged in our undertaking. Here we present a gadget that guarantees the Protection of women. This recognizes secure and approaches assets to enable the one to out of risky circumstances. The system comprises of heartbeat and

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temperature sensor, which when initiated, sends qualities to the preparation dataset to be contrasted and per 10sec. If the examination result is anomalous, at that point a popup message is sent to women. The fundamental reason for the system is to give security and wellbeing. Similar to an autonomous countrywomen' are not protected even today. There should be some compelling measures for the security of women. These days there are numerous applications created for women security however principle disadvantage of these applications is it required introductory cooperation of women and that circumstance is beyond the realm of imagination The principle point of the undertaking is to give very honest security to a lady. The proposed system comprises of a few sensors, Bluetooth module, Microcontroller, and Android Mobile. Here, it gives a dependable minimal effort gadget utilizing GPS based following system (women security system). The system is utilized to follow the present area of the individual who has an android empowered versatile by extricating the longitude and scope of that objective individual and the self-preservation gadget (Taser).

2. Literature Survey

Security is a significant issue in India and furthermore in different nations particularly for ladies. In the present situation, it is especially fundamental to spare ladies from provocation and brutality. Even though the Government has given wellbeing through rules and guidelines, security is a significant concern. We are living in present-day India things has changed a great deal in all fields like training and medicinal offices, the places that ladies are holding however the main thing which has not changed is the wellbeing of ladies. Pretty much consistently when we get the morning paper, we shudder finding out about the young lady who is physically ambushed. This occurs in a nearby shopping center, stopping or at school. Ladies have come to wherever in each field yet at the same time, security isn't guaranteed for them. Ladies in India a superior portion of Indian culture are turning into the most defenseless area to the extent their wellbeing and security are concerned. It is unexpected to take note that such occurrences are not uncommon in our nation. In current situation security for ladies is a significant concern. There is nobody without Smart Phones; this can help the person who is in threat to remain in contact with their companions, family members and relatives anyplace and whenever. Android is a broadly utilized stage in cell phones and it is easy to use. It gives highlights like, Wi-Fi, high-goals camera, contact screen, GPS route which causes cell phone clients to stay in contact with the cutting edge world. Android is a product stack for cell phones. It incorporates a working framework, key applications, and middleware. Android gives access to the utilization of libraries and devices used to fabricate rich applications. In this manner, the client can utilize android applications created and on occasion of crisis, one can spare them. Their numerous applications created to give security through SMS, GPS, call, voice acknowledgment, caution and

catch press.

Simon L et. al. [1] here examine the present situation of security to women is extremely less and to give security to women is basic. Consequently, to give security, an application is to be fabricated and given with adequate information like human conduct. It must be gotten to GPS administrations. This application can recognize the area and check the state of women's wellbeing by which moves can be made appropriately. Consequently, this proposed system help in managing the issue looked by women which can be comprehended with specialized learning.

Vail B et. al. [2] Nowadays the critical issue in the general public is women's wellbeing. In this paper, the model will shield the women from the aggressors. The proposed model contains different gadgets like GPS, GSM and frenzy catch. Here GPS is utilized to recognize the area of the gadget. This paper shows has proposed a band which will give women the goal that they can do work late at night. This paper guarantee security to women in the general public by giving sending of dangers and sends a warning to their relatives and closest police headquarters.

B. Chougula et. al. [3] In this paper, the creator talked about how the system is intended to guarantee women's security. This system is utilized to find women dependent on GPS innovation. Along these lines, the signs that have been made are sent to the board, deal with the signs and give SMS administrations, so crisis calls can be imparted to the area of the directions to spare women from badgering.

Sell Beng Lim et. al. [4] Today in this world the women are being attacked, grabbed and hassled by physically tough individuals. So to guarantee wellbeing and security of women brilliant gadgets is fabricated which is agreeable and extremely simple contrasted with another massive system which as of now exists? This paper proposes the hazardous issues looked by the women and it will help in finding the guilty party effectively with the assistance of high advancements. What's more, it will be anything but difficult to execute in various regions for security and observation of women.

Premkumar. P et. al. [5] This paper are tied in with giving security to women on structuring the keen gadget. This gadget distinguishes the basic circumstance of women. Women's security has turned out to be a serious issue in the everyday world. They can't have a genuine opportunity as men since they are not physically sufficient. Along these lines in risky circumstances, this will go about as securing hand. This uses GPS and GSM modules with Arduino gadgets. At the point when a lady feels shaky in any circumstance, she can press the remote key which gives the area from GPS and GSM. This structure handles the unsafe circumstance looked by women. This paper likewise helps for the further advancement of the plan by giving fundamental and specialized data.

Suraksha et. al. [6] In our nation there is no wellbeing for women so this paper is intended for women in crisis and trouble. It is basic and simple to utilize. Numerous individuals utilize

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shrewd stage which has numerous applications and it is helpful to individuals on the off chance that any crisis happens, at that point we intend to give you.

S. Kumaravel et. al. [7] in this day and age, it isn't ok for an individual to travel alone around evening time particularly for women; it will be high time to travel alone because a lady isn't profoundly solid as men to shield herself from them. Social disasters like attack, lewd behavior and eve prodding security for women are as yet a noteworthy issue as the number of violations against women is expanding step by step. In such circumstances, the guide of security gadgets that will educate the injured individual's relatives may enable women to feel more secure, certain and diminish the odds of provocation.

3. Motivation

In this day and age, it isn't all right for an individual to travel alone around evening time particularly for ladies; it will be risky to travel alone because a lady isn't profoundly solid as men. To give security to ladies the great w to decrease risks in turning into a casualty of fierce wrongdoing is to recognize and approach assets to assist y with a trip of perilous circumstances. Having a security application on your telephone can decrease our hazard and bring an associate when we require it. Not at all like different applications accessible, which work just at the hour of Emergency or Danger, this application can be utilized as security or safeguard measure. As it is said that precautionary measure is superior to fix. Our maxim in building up this application is to give a protected domain through the cell phone as today the vast majority are conveying cell phones to any place they go.

4. Problem Statement

Utilizing Android, we are going to actualize QR Scanning and GPS area. Through GPS, the present address of the client will be gotten and afterward we are going to filter the QR code to get the vehicle subtleties by pointing the camera at the code which naturally then changed over into content design so SMS can be sent to any of the contacts relying upon the client.

A. Technology Used

A. Practical Requirements: This detail is utilized to determine the necessities for the underlying usage of the framework and update the framework later on. The product prerequisite particular crosses over any barrier between customer/client and the framework engineer. This is the record that depicts the client's needs precisely.
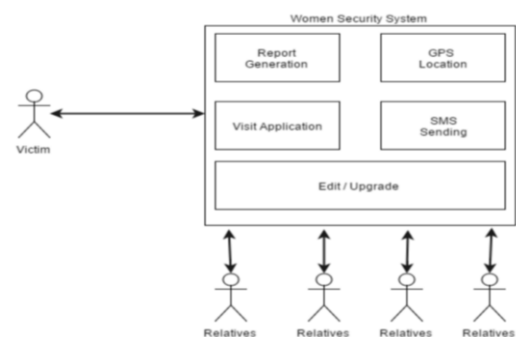
B. Programming Requirement

This framework bargains an Android Operating System, utilizing Java has a center language, with Android SDK 2.2 (Froyo) has its variant, Implementation of the Front end is finished by XML and we have utilized SQLite has back-finished, the documentation of this framework is finished utilizing MS-Office

C. Java Platform

A stage is the equipment or programming condition wherein a program runs. The Java stage contrasts from most different stages in that it's a product just stage that sudden spikes in demand for top of other, equipment based stages. Most different stages are portrayed as a mix of equipment and working framework. The Java stage has two parts: The Java Virtual Machine (Java VM) and The Java Application Programming Interface (Java API) Java VM is the base for the Java stage and is ported onto different equipment based stages. The Java API is a huge assortment of instant programming parts that give numerous valuable capacities, for example, graphical UI (GUI) gadgets. The Java API is assembled into libraries (bundles) of related segments. The accompanying figure of Java Structure delineates a Java program, for example, an application or applet, that is running on the Java stage. As the figure appears, the Java API and Virtual Machine protect the Java program from equipment conditions.

5. Proposed System

The proposed system is especially for women safety and overcomes the disadvantages of existing systems:

In this proposed system when the women are in danger it can be immediately informed to the control rooms. The proposed system is based on an android application. The block diagram of the system. Initially, when we click on the app, it first checks whether the location settings, data connection settings in the application are on or not. Then, it tracks the location of the victim via GPS and sends these locations co-ordinates in the form of a message to the registered contacts. Here, registered contacts mean the contact details that are saved in our application during its initialization. Now, at the received device, by clicking on the URL in the message, it spots the exact location of the victim. Also, as the message containing the victim's location is sent for every five minutes from the root device, the victim can be tracked wherever she goes and can be rescued safely and quickly.

6. Conclusion

Women's security is a basic social issue in this day and age. Through this paper, we intend to advance a proficient and helpful security gadget for women. The proposed plan can deal

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with some basic issues looked by women and will tackle them with mechanically solid and basic equipment. It very well may be reasoned that this system improves the sexual orientation uniformity by giving safe condition to women in the general public, and enables them to work till late evenings. Our real objective in this task is to give the sheltered condition to the women and make them feel safe. It has to teach women about their essential security and furthermore influence them to face any dangers with bravery. Contrasting with the existing electronic system, our system gives greater security and furthermore System gives the better easy to use condition for the clients. A lady, who is in basic or in peril can send their area to the relatives and SOS contacts by basically squeezing a catch. Additionally, the system sends ready messages and call to SOS contact. This system likewise goes about as a barrier gadget to shield us from peril. By and large, our system works for the wellbeing of the women. This system can beat the dread that

alarms each lady in the nation about her wellbeing and security

References

[1] Simon L. Cotton and William G. Scanlon, "Millimeter-wave Soldier –to soldier communications for covert battlefield operation," IEEE communication Magazine, October 2009.

[2] Vail B. Sangoi, "Smart security solutions," International Journal of Current Engineering and Technology, Vol. 4, No. 5, Oct.2014.

[3] B. Chougula, "Smart girl's security system," International Journal of Application or Innovation in Engineering & Management, Volume 3, Issue 4, April 2014.
Hock Beng Lim, "A Soldier Health Monitoring System for Military Applications," International Conference on Body Sensor Networks.

[4] Premkumar P, Cibi Chakkaravarthi R, Keerthana M, Ravivarma R, Sharmila. "One touch alarm system for women's safety using GSM," International Journal of Science Technology & Management, March 2015.

[5] "Suraksha, A Device to Help Women in Distress: An Initiative," ITM University, Gurgaon"

[6] Sankalp Mehta, "Abhaya: An Android App for the safety of women," IEEE INDICON, December 2015.