# Smart Women Security System: An Android Application Using GPS

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***Abstract***: **In recent world women's are facing a lot issues regarding their security. Women's also face many hurdles day by day and there is a need to develop a system for women's security. People using mobile phones have gradually increased and hence, a mobile phone can be used efficiently for personal security. In the current scenario, all woman are worried about when they could walk freely on the roads even at odd hours without minding about their security and certain situation that occur such as labour pain when they are all alone in the house. Providing security to women in the current world scenario is a bizarre but it is needed for every individual. Now a day's sexual harassment towards women has increased such as rape in public places and so on. Hence, safety of women has become the most important preference for many organizations were the companies are looking forward to solve the security issue and thus require a framework that will work efficiently in reducing the number of crimes. Although there are several existing systems for security purpose there is a need of advanced smart security system in this growing generation. To overcome these problems smart women security system is implemented. Smart Women security is an Android Application for the Safety of Women which can be used in case of abuse, labour pain and any emergency. This app locates the place using GPS and sends a message comprising the location with URL to registered contacts and cops. The proposed model can be used to deal with the problem for women security issue by using GPS based tracking system.**

***Keywords***: **Safety system, Security, GPS.**

## 1. Introduction

In today's world, women face many situations which makes them feel insecure and unsafe. Lot of challenges are faced by women's every day and there comes a need to construct a system to ensure the safety. Even though there are many existing systems for ensuring security of women, the new advanced smart security system is increasing all day. Here, a mobile application is used in smart phones that can be carried in a pocket or a purse. The mobile application can be accessed by anyone by installing it on their smart phones. The main perspective is to provide the women with a simplest way to contact their beloved ones for help, the main purpose of this app is also to provide an awareness to women at critical situation. The basic system which is triggered here is to send the current location with a message to police and desired contact numbers. This application can also be used for cases like rapes and perverts teasing girls. This helps them from any bad situation

and health problems too. This application can be used also for pregnant women if they suddenly have the labour pain, emergency call/notification will be send to the hospital.

## 2. Literature Survey

Geetha, [1] extracted the values about a smart intelligent security system for women. All over the world women are facing much unethical sort of physical harassment. This requires a fast solution due to lack of a suitable surveillance. This system makes them to overcome the fear that scares the country about safety and security.

Abhijit, [2] in his paper have reviewed various existing systems on safety of women. The author felt a need in advancement of women security system which provides the safety measure in public places and while travelling alone through public transports (buses, company vehicle etc.)

Shreyas R. S, [3] this paper focuses on self-defence and alert features for women's using a smart watch. The main objective of this paper is to help them with technologies that are embedded into the smart watch. The smart watch comprises of three sub-modules such as Sensing Module to sense, Control Module to control, Transmission Module to transmit.

Akanksha, [4] this paper focuses on women's who are less secure and their problems in daily life. The main aim of this paper is to make women's feel free to move out of their house in an odd hour without minding about their security. So a gadget was made for women safety.

Kavita, [5] in her paper suggests an android smart phone with integrated feature in it. Whenever women's are in danger or trouble they need to hold the volume key button in their mobile, it sends an alert message to the registered contacts and also a voice call.

Dr. Sridhar, [6] tells that unfortunate incidents have been taking place in recent world. Problems occur from any direction such as women leaving to their home after the work, going to malls, theatre or circumstances for which they go alone. In order to overcome these problems faced by women the I Safety mobile based application plays a pivotal role in women's security.

Shaikh, [7] developed a method on Security for women has become a major issue as the number of crimes over women and girls is increasing day-by-day. The implementation of smart

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women security system via GSM and RFID is to protect women and from sexual harassments and other violence against them.

## 3. Proposed Method

This method has many new contributions and advantages compared to the previous methodologies. It consists of GPS technology in Android Phone and an emergency button in the application. The device will provide the location information such as latitude, longitude of women present. Whenever women is in any kind of trouble she will press the emergency button in the application were an alert will be immediately sent to the nearest police station and also to saved contacts numbers. The features are,

1. This project works as an alert system for Women safety and security.
2. The system provides an efficient and reliable environment.
3. The application is user friendly to all the woman for use.
4. For the user there is no external hardware or software is needed.

The main purpose of the project is to provide a highly reliable and efficient security system for the safety of women. The working of the system is divided into three sections. They are described as follows:

Initially, when we use the application a list view of contact details and layout of three buttons save, close, start will be appeared. In this section, the contacts will be saved as different priority such as family, friends or police. These contacts are known as registered contacts; they are called so because they are registered in the application. After entering the contact details, save button must be touched so that the data will be saved and location will be shared, when she is in danger. The information that is sent to the database is in eventually shared to the registered contacts. The purpose of the database is that it can continuously track the location of the user since when the location information is shared to the contacts. The other major use of using database in future is that the database is used the app is city police control room database, so when the user is in danger, based on the location of the user observed from the database in the control room, the nearest police can go to the location and can rescue them from trouble. Hence, by sending the user's location to contacts, the location of the person is identified and so she is rescued quickly.
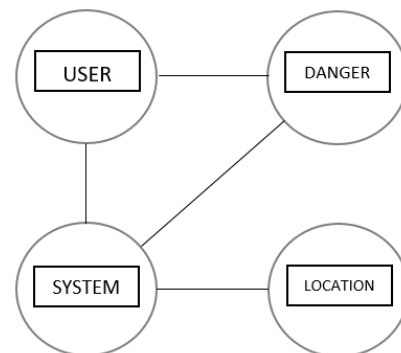


Fig. 1. Functions of app in block diagram

## 4. Conclusion

It can be concluded that the application helps to supports the gender equality by providing safety to women in the society, so that they could work till late nights. Anyone before trying for a crime against the women will be deterred and this helps reducing the crime rate. Women's security is a critical and social issue in today's world. It helps women at labour pain and also at any emergency situation. The crime such as molestations, rape, sexual assault, domestic violence against the women can now be brought to an end with the help of real system implementation of propose model.

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