

Android Application for women security system

Kavita Sharma, Anand More

M.Tech Student ,Assistant Professor

*Department of Computer Science &Information Technology Devi Ahilya Vishwavidyalaya ,
Indore, India*

*Department of Computer Science &Information Technology Devi Ahilya Vishwavidyalaya ,
Indore, India*

Abstract -Women's security is a critical issue in today's world and it's very much needed for every individual to be acting over such an issue. This documents describes a GPS and GSM based "women security system" that provides the combination of GPS device as well as provide alerts and messages with an emergency button trigger. whenever some body is in trouble They might not have so much time, All that they have to do is pressing the volume key. Our system provides a realizable, cost effective solution to problem detection. Now a days due to recently happened cases such as rape by drivers or colleagues, burglary etc., women security, especially women security has become the foremost priority of the world. System uses the Global Positioning System (GPS) technology to find out the location of women. The information of women position provided by the device can be viewed on Google maps using Internet or specialized software. The IT companies are looking forward to the security problem and requires a system that will efficiently evaluate the problem of women security working in night shifts, traveling alone. We focuses on the proposed model that can be used to deal with the problem of security issue of women using GPS and GSM based tracking system.

Keyword: Women security, Smartphone, Registered contacts , Database ,GPS(Global Positioning System),GSM(Global System for Mobile

I. .INTRODUCTION

Women are adept at mobilizing diverse groups for a common cause. They often work across ethnic, religious, political, and cultural divides to promote peace. We are all aware of importance of women's safety , but we must realize that they should be properly protected. Women's are not as physically strong as men, in an emergency situation a helping hand would be a relief for them. The best way to minimize your chances of becoming a victim of violent crime (robbery, sexual assault, rape, domestic violence) is to identify and call on resources to help you out of dangerous situations. Whether you're in immediate trouble or get separated from friends during a night out and don't know how to get home, having these apps on your phone can reduce your risk and bring assistance when you need it. Although several were originally developed for students to reduce the risk of sexual assault on campus, they are suitable for all women In the light of recent outrage in Delhi which shook the nation and woke us to the safety issues for our daughters, people are gearing up in different ways to fight back. A host of new apps have been developed to provide security systems to women on their phones.

Here we introduce an app which ensures the safety of women. This helps to identify and call on resources to help the one out of dangerous situations. These reduce risk and bring assistance when we need it and help us to identify the location of the one in danger.

This app designed to provide security to women main purpose of this app to provide the awareness on the time of critical situation for women.

Generally you can active this service by clicking on ACTIVE SERVICE BUTTON. When you clicking on this button service get activate and know whenever you click on VOLUME KEY it open a new window and send SMS to those contact which you saved at the time of registration the SMS contain your message and your current location. This app is provide deactivate service also when we fill secure this app is mainly required correct information to fill otherwise this app will not work correctly

II. RECENTLY MOBILE APPLICATION FOR WOMEN DEVELOPED SAFETY IN INDIA.

- A) **FIGHT BACK:** This app is developed by Mahindra faction. In earlier days, this app was not complimentary, customer have to compensate for this app. But after Delhi gang rape this app is on hand at no cost. This app sends a message to your friend or contacts that “user is in trouble” using Email, GPS, SMS and GPRS. This app works on that mobile which supports Android Java Programming. Using this application, you can send SMS of your location using maps also
- B) **GUARD:** This app is developed basically for women safety intention. This app put a phone call by your name, instantaneous location, and emergency hit to your selected friends. In this app you have to give your details in profile sheet e.g. birthdates, tallness, weight, eye-color, blood group, hair-color, etc. This app is also used in iPhone, iPod, BlackBerry, Windows Phone etc.
- C) **LIFE 360: Family Locator:-**This is free app. In emergency this app report to your friends and family. Using this app you can find relative mem-

bers on personal map. This app helps you to know about your family, whether they are safe or in trouble. Life360 shows wellbeing places like hospital, police stations, etc near to you as well as recent crimes nearby and registered sex offenders.

D) **STREET SAFE:** This application is developed on worldwide Women’s day. It will call community to help you in any situation. This app has 4 features for crisis which would be started by just clicking on the button. These features are as – First, it automatically updates on your Face book account with your recent location. Second, SMS will be sent to chosen associates with your locality. Third, an alarm is started with large volume on your mobile. Fourth, call is to be found to your chosen emergency number .

III. SYSTEM STUDY

A) **EXISTING SYSTEM :**There are many electronic devices and systems are used to provide security for human:-

- 1) Spy camera is the most popular method for providing security which is unreliable.
- 2) The existing systems are of wired systems and most of them are alarming systems which is Conventional and cannot communicate efficiently.

B) **PROPOSED SYSTEM :**The proposed system is especially for the women safety and overcomes the disadvantages of existing systems:-

- 1) In this proposed system when the women are in danger it can be immediately inform to the control rooms.
- 2) The proposed system is based advanced sensors, Microcontroller and GSM. .
- 3) Transmitter part contains heart beat sensor, temperature sensor and vibration sensor. They Collects the signal information from women’s body and give it to the processor, after Processing, it transmits the signal over network to receiver which is the control room
- 4) The instant mica and amplifier strengthens the voice the women screams or shout above the threshold limit.

IV. SYSTEM DESIGN

A) System Design

1) System Architecture:

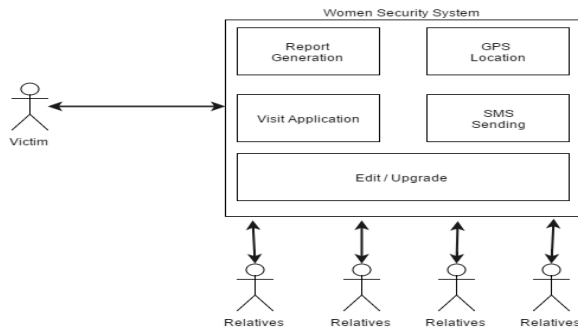


Fig 1) Block Diagram of System

Block diagram 1) of project show two users one is victim (Women) and another one is relatives. Victim user long press volume key then first find location (Longitude and Latitude) and send Message with longitude and latitude to relatives. Report will be generate all the message details and relatives who receive message

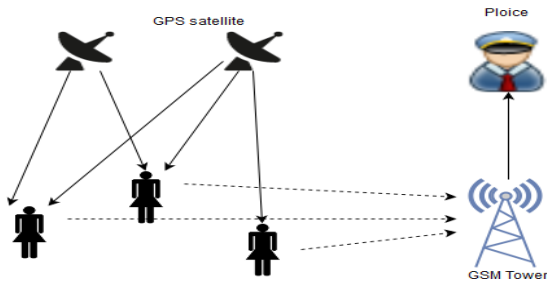


Fig 2) Working of System

Above diagram 2 show working of proposed system. Location of victim find with help of GPS system. If GPS isnot on in victim mobile the GSM tower location will add in to message

2) Functional Description

A user should be able to:

- Add emergency contact numbers.
- View and Change the emergency contact number after adding.
- Add their message for emergency help.
- Find nearest police station and contact number.

V . TECHNOLOGIES USED

A. Functional Requirement

This specification is used to **specify** the requirements for the initial implementation of the system and update the system in future. The software requirement specification bridges the gap between client/user and the system developer. This is the document that describes the user needs accurately

B. Software Requirement

This system compromises an Android Operating System, using Java has a core language, with Android SDK 2.2(Froyo) has its version, Implementation of Front end is done by XML and we have used SQLite has back end, the documentation of this system is done using MS-Office

C .Java Platform

A platform is the hardware or software environment in which a program runs. The Java platform differs from most other platforms in that it's a software-only platform that runs on top of other, hardware-based platforms. Most other platforms are described as a combination of hardware and operating system. The Java platform has two components: The Java Virtual Machine (Java VM) and The Java Application Programming Interface (Java API) Java VM is the base for the Java platform and is ported onto various hardware-based platforms. The Java API is a large collection of ready-made software components that provide many useful capabilities, such as graphical user interface (GUI) widgets. The Java API is grouped into libraries (packages) of related components. The following figure of Java Structure depicts a Java program, such as an application or applet, that's running on the Java platform. As the figure shows, the Java API and Virtual Machine insulates the Java program from hardware dependencies

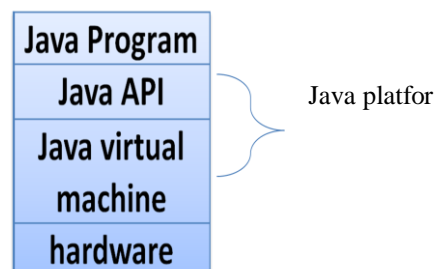


Fig Java Structure As a platform-independent environment, Java can be a bit slower than native code. However, smart compilers, well-tuned interpreters, and just-in-time byte code compilers can bring Java's performance close to that of native code without threatening portability

D. Android SDK 2.2 (Froyo)

Android is an operating system based on Linux with a Java programming interface. The Android Software Development Kit (Android SDK) provides all necessary tools to develop Android applications. This includes a compiler, debugger and a device emulator, as well as its own virtual machine to run Android programs. Android is primarily developed by Google. Android allows background processing, provides a rich user interface library, supports 2-D and 3-D graphics using the OpenGL libraries, access to the file system and provides an embedded SQLite database. Android application consists of different components and can re-use components of other applications. This leads to the concept of a *task* in Android; an application can re-use other Android components to archive a task

E. GPS & GSM : Advantages of GPS:

- GPS is extremely easy to navigate as it tells you to the direction for each turns you take or you have to take to reach to your destination.
- GPS works in all weather so you need not to worry of the climate as in other navigating devices.
- The GPS costs you very low in comparison other navigation systems.
- The most attractive feature of this system is its 100% coverage on the planet.
- It also helps you to search the nearby restaurants, hotels and gas stations and is very useful for a new place.
- Due to its low cost, it is very easy to integrate into other technologies like cell phone.
- The system is updated regularly by the US government and hence is very advance.
- This is the best navigating system in water as In larger water bodies we are often misled due to lack of proper directions.

Advantages of GSM:

- Less signal deterioration inside buildings.

- Ability to use repeaters.
- Talktime is generally higher in GSM phones due to the pulse nature of transmission.
- The availability of Subscriber Identity Modules allows users to switch networks and handsets at will, aside from a subsidy lock.
- GSM covers virtually all parts of the world so international roaming is not a problem.
- The much bigger number of subscribers globally creates a better network effect for GSM handset makers, carriers and end users.

E. Hardware Requirements

This System is built on Intel Pentium 4 CPU, having clock speed of 3.0GHz, with RAM size 512MB, 40Ghz of hard disk capacity, display is of 15 inch color monitor, and internet keyboard

VI . CONCLUSION

This is the "Android Application for women security system" which is very useful application mainly for girl's safety. When we feel that we are in emergency situation, for example travelling alone in the Auto/Cab at night time we can use this application..so that on one click we can send our location to our family members and to any police stations..So once we click on button it continuously send updated locations messages to all authorized persons and we can stop using password. So this application is having both safety and security which needs the engineering code of conduct which is essential in the today's world. The system is based advanced sensors, Microcontroller and GSM service

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Kavita Sharma is M.tech Student

in School Of Computer Science & Information Technology (SCS&IT) ,DAVV since July 2012.she received her M.Sc. from School Of Computer Science & Information Technology (SCS&IT) 2014. She research for Android Technology, stuff of internet, and always creative for New Idea's.