

Women Security Based On Speech Recognition

Akshay Dhamankar¹, Sagar Borsa², Ajay Kokare³, Sanjeev Dwivedi⁴

^{1,2,3,4} Dept of Computer

^{1,2} Vidyalkar Institute of Technology, Mumbai, India.

Abstract- *The patriarchal nature of Indian society, which despite the fact that gives admire to women as they are our mothers and sisters, has extensively hampered both the independence as well as the safety of women. The 'Women Safety' application mainly emphasizes on women security and sanctuary for them to feel safe in every environment irrespective of the time, area or any matter of concern. This application, running in the background at all times, is mainly based on speech recognition, keeping in mind the gravity of situations that may arise where in the user might not be in a position to interact manually with the device, but would also provide an alternative of clicking a button. Recognition of the user selected keyword would activate the safety measures, sending alert messages, including the location of the device, to the contacts set by the user, and placing phone calls to its contacts, set according to its order of preference. We also provide gesture oriented approach for triggering or sending alert message to selected user. Safety of women is not only a concern for the individual but also their family members. It's time to move on, make every women feel safe, by not just giving them precautionary guides but also defensive measures.*

Keywords- Android, GPS, Registered Contacts, Speech Recognition.

I. INTRODUCTION

Women are entirely at mobilizing various agencies for general explanations. They ordinarily work throughout racial, sacred, opinionated, and mental divides to inspire tranquillity. We're conscious of value of ladies security, but we have to respect that they must be well secured. A woman is now not strong when compared to guys bodily, in a hindrance quandary and wants a helping hand to relieve them. The great way to reduce chances in fitting a sufferer of violent crime (robbery, sexual assault, rape, home violence) is to establish and call on resources to support you out of dangerous instances. Whether you are in immediate situation or bought separated from pals for the duration of night and do not be aware of how to get home, having these apps on your mobile can slash your hazard and carry help when you require it. In the light of up to date outrage in Delhi which shook the nation and woke us to the safeguard disorders for our daughters, public are gearing upbeat in unique ways to combat again.

A swarm of latest apps have been developed to provide security programs to females on their telephones. Right here, we introduce an android app that ensures the security of women. It reduces the danger and helps us in need through settling on the region of person who is in danger.

The Key features of our app that makes us different from other apps designed till now are as follows:

1. Initially, we have to enter the contact number of family members or friends in to the application and save it.
2. While travelling, run the application in background choose any mode (speech or gesture) and whenever need arises speak keyword if speech mode is chosen or shake mobile if gesture mode is chosen.
3. This action makes a call to the registered contact number and also sends the message containing location of the victim to all provided contact numbers.

Unique feature of this app is you don't have to unlock phone and run application again. It runs in background continuously until "stop" button is clicked.

II. EXISTING SYSTEM

As a part of literature survey, we investigated some applications that offer the same or an identical services for android and other platforms. The intention is to see how these purposes work and to see how they can be improved. The cases of atrociousness on women are increasing. In these types of circumstances, a shrewd mobile plays an foremost role for protection of ladies. Now android is budding on some apps for ladies protection cause.

FIGHTBACK: - This app is developed with the aid of Mahindra faction. In previous days, this app was once not complimentary, customer have to compensate for this app. But after Delhi gang rape incident, this app is on hand at no price. This app sends a message to your pal or contacts that any person is in concern through email, SMS and GPRS. This app works on these mobiles that help Android Java Programming.

SECUREME BETA: - This app is developed with the aid of suppose MPI Consulting private limited. It helps us to elevate alert and we are able to get aid in case of lifestyles threatening emergencies. After putting in the app, at first now we have to supply a pin number for protection motive after which after emergency contacts have got to be registered in the app. By way of pressing a tap on secure button, it notifies the contacts with area co-ordinates.

VANITHA ALERT: - This app is developed through ABC cellular learning communication click on "Help" button on our cellular's home screen in an emergency difficulty can deliver a misery text message to the registered mobile number ,email identification, face booklet identity searching for support and indicating the person's location.

RAKSHA -females security ALERT: - This app is launched through BJP on could 15, 2014. Through clicking on this app, it sends area of the user to the contacts registered and the user can additionally get the main points of the place of the contacts. A distress signal just via urgent a single key sends out a loud buzzer to our near and pricey ones. We can add multiple contacts to this app and when there is no knowledge connection, this app indicators the contacts by means of sending SMS.

GLYMPSE -SHARE GPS place: - This is the contemporary software developed on January 28, 2015. This app is a speedy, free and a simple means to share our vicinity using GPS tracking in actual time with pals and family. This app does no longer need any sign up and don't have any contacts to control.

GUARDLY: - This app is developed clearly for females protection intention, to put a telephone name by way of your name, instantaneous area, and emergency hit to your chosen buddies. On this app you might have to provide your important points in profile sheet e.g. Birth date, tallness, weight, eye-colour, blood workforce, hair-colour, and many others. This app is also utilized in I-phone, I-Pad, BlackBerry, windows cell phone and so on.

STREET SAFE: - This software is developed on worldwide ladies day. It will name group to support girl in any drawback and has four aspects for hindrance which would be started by way of simply clicking on the button. These features are as first, it routinely updates on your Face booklet account along with your contemporary place. Second, SMS might be despatched to chosen neighbours with your locality. Third, an alarm is started with giant quantity on your cellular. Fourth, name is to be observed to your chosen emergency number.

III. PROPOSED SYSTEM

To develop a system which can help to know location of person in danger. This application uses GPS to get location of person. This system Consist of three modules:

1. First modules is button Oriented in which victim's location is sent through simply pressing button.
2. Second Modules is gesture oriented. In this module, victim is not in position to unlocked phone and press button then she can just shake phone three time will sent a location to intended numbers.
3. Third Module is Speech oriented. In this user has to select a keyword and start recognition before moving out of home or office. In an emergency situation she will speak a keyword which will be recognized by app and alert message and call will be send to registered contact list.

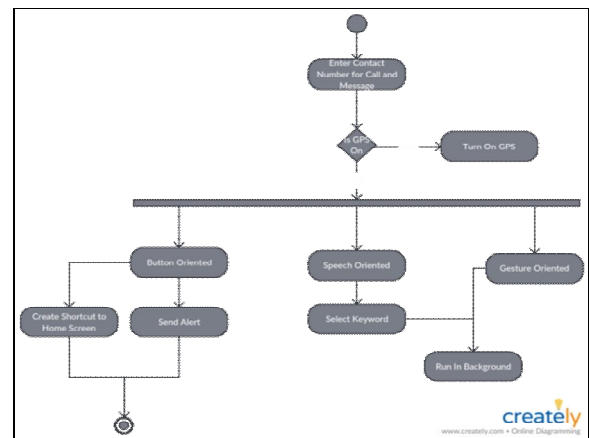


Fig 1: Activity Diagram of System

Fig 1 shows the activity diagram of our system. Initially when we start our app, it first take contact number of family member or friends. Then three Modes are appears user can choose any of them and use it. In emergency Situation alert message and call sent to registered contact. Here registered contact are one which are save in application. At received device, message will contain the location of victim if GPS is ON else if GPS is OFF then by default saved alert text will be sent when she is in danger.

IV. EVALUATION RESULTS & UNIQUENESS

The complete evaluation can be done in three major steps which are described individually. Evaluation describes the complete working of the application in three major steps.

The first major step is to enter the contact lists in the application created. These contact number can be of family,

relatives or friends. When the application installed in the smart phone for the first time, user has to provide contact details. The application will save the contact number information.

The second major step is to choose the mode i.e. button oriented, Gesture Oriented, Speech Oriented. If user wants to send the alert message with location then she will turn ON the GPS.

The third major step depends on the selected mode. User has to perform particular action to trigger sending alert call and messages. By selecting button oriented mode a button will appear on screen, by pressing it alert message and call will be sent to dear ones. In gesture Oriented mode, app will be in background and by shaking mobile message and call will be sent to registered contacts. In speech oriented mode, user has to select a keyword and press “Start Recognition”. When user speaks selected keyword which gets recognized then alert message and call will be sent to the registered contact.

A. Uniqueness

As we have mentioned there are many women security application available having similar features .But we introduced two more feature which make us different from them that is Speech oriented and gesture oriented. When user moves out of home or office she will turn on app in background. In an emergency situation she will speak selected Keyword which get recognize by app and message and call will sent to dear ones. Keywords which are used in app are generally not used in daily life like Bingo, Gladiator, Nirvana. We can ON three modules at a time. We can’t predict that what will happen so we can ON all modes. According to situation she will decide which can be useful in that situation.

B. Results

The following figures are the screen shots of our application initially from starting of it.

Fig 2(a) represents screen shots of application open immediately after installing in android device.

It contains one contact number to be filled for call and option for maximum 5 numbers for messaging (Alert message can be sent up to 5 number). On clicking next we can enter the number for messaging. Fig 2(b) represent numbers for messaging.

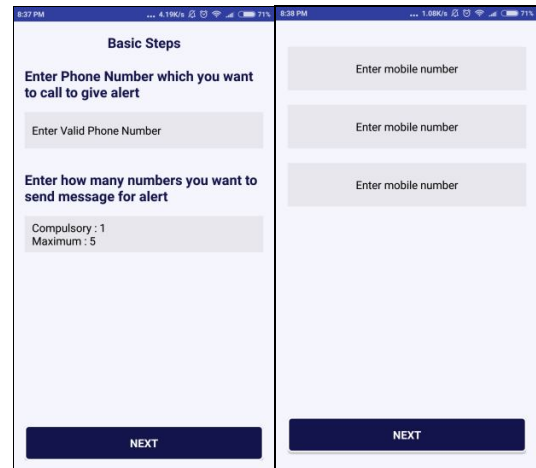


Fig 2(a)

Fig 2(b)

Fig 3 represent different modules of our application.

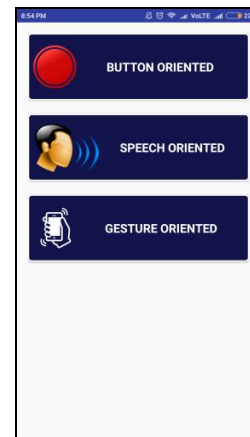


Fig 3: Screen shot after entering contact details

We can use any of them. On clicking Button oriented message and call sent to entered numbers. On clicking gesture oriented, app will go in background and after shaking message and call sent to entered numbers.

Fig 4(a) represents after selecting speech oriented next window opens in which we have to choose ‘keyword’. Fig 4(b) represents screen shot of button “Start Recognition”. Clicking on it, after 20 second app will go in background and continuously recognize word till app will get selected keyword.

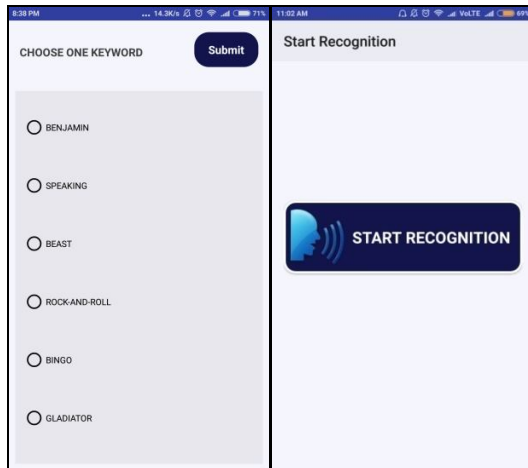


Fig 4(a)

Fig 4(b)

Fig 5 represent message received by one of numbered entered

in contact list. The message contain ‘I am in danger help me, help me’ with location address.

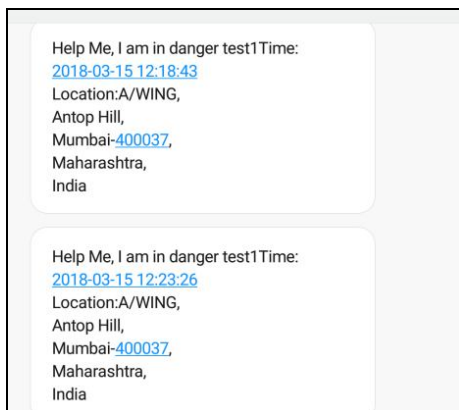


Fig 5: Screen shot of SMS received by one of contact number

V. CONCLUSION & FUTUTRE SCOPE

In this paper, we have described women security application, an android application for safety of women. This application helps in getting location of victim through GPS. Of course this can't make her safe but it would provide helping hand to them. As future scope, this application can be integrated with the law of enforcement database, which include all phone numbers of regional cops. In future, it can be developed for IOS and Windows mobile platforms. Thus, this application can help the women in big way from unsafe conditions.

REFERENCES

[1] <https://cmusphinx.github.io/wiki/tutorialandroid/>
 [2] <https://sourceforge.net/projects/cmusphinx/files/Acoustic%20and%20Language%20Models/>

[3] <https://cmusphinx.github.io/>
 [4] <https://cmusphinx.github.io/wiki/tutorialtuning>
 [5] https://www.researchgate.net/publication/287201587_Abhaya_An_Android_App_For_The_Safety_Of_Women
 [6] <http://www.fightbackmobile.com/welcome>
 [7] <https://play.google.com/store/details?id=app.raksha&hl=en>