

PINK : One Step Closer to A Safer World

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ABSTRACT

The graph of the number of smart phones users in our country is increasing rapidly. We all know that smart phones can be used for personal as well as other purposes related to security. Safety of women is a major matter of concern in our country. The primary issue while handling these is that the people as well as the police are not able to respond to calls of distress quickly. Another such issue is that the location of the victim is not known which makes it even more difficult. To overcome these issues, this paper presents Pink, an Android Application for the Safety of Women in our county. A single click helps the victim reach out to their emergency contacts .An additional and unique feature of this application is to send an alert message and a loud buzzer sound to their emergency contacts as well as the people within 1km reach of the victim. This would increase the chances of saving the victim even more.

Keywords: PINK, Android Application, Buzzer Sound, GPS, API

I. INTRODUCTION

Over the years, it has been observed that the percentage of women safety in India is decreasing day by day .No women in our country is safe at any time of the day. Statistics say that around 92 women are raped in India every day. The police are not able to help the victim during the crime since the location is not known to them. With the increasing number of heinous crimes on women day by day, it is evident that a method is required to focus and solve this issue.

Pink is an attempt to provide safety to the women in our country .It enables the women to place an emergency call to her friends and relatives .The one different feature in this app would be that the victim can even contact with the people within 1km range from her location .This additional feature would help her reach out the people as much as possible to get help. We have added a very distinguishing feature that is the Buzzer which would ring when there is a call for help. This would help in gaining attention of the user immediately. With the buzzer, an emergency alert message is sent to the emergency contacts of the victim as well as the people in the 1km radius with the victim's location address and the URL of the location which would help you get the precise location. One unique feature in this

app would be that the buzzer keeps ringing on a high volume in the phones even when it is in meeting mode and it keeps on ringing for about two minutes until and unless the user manually doesn't click on the "dismiss" button.

ARCHITECTURE DIAGRAM

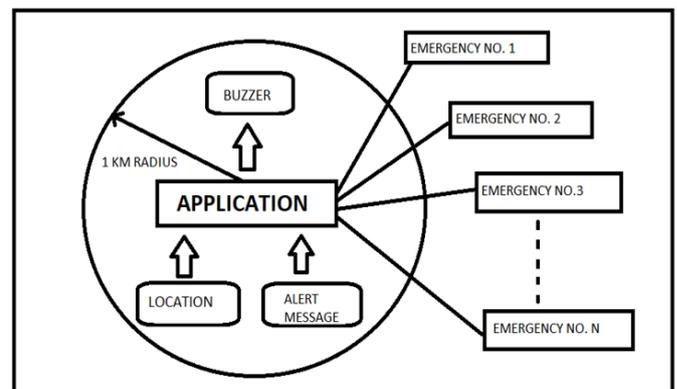


Figure 1. Architecture Diagram for PINK

Description of the architecture diagram : The above figure shows the architectural view of the application. The diagram covers the full functionality of the application which includes the GPS location, alert message and the buzzer functionality. The application sends the above mentioned services to the emergency

contacts plus the app users in the radius of 1 km. This helps to reach the victim as soon as possible.

II. Technical Background

Platform used: In this paper, we are using the software platform named Android Studio .This platform helps us create applications which are usually android based .We create apps here which are compatible to all android versions.

API's: We are using three different API's

- 1) Google maps API
- 2) Aadhaar API
- 3) Serve hosting API

Google maps API- this API helps us detect the location of the user and then further send the location to the victims.

Aadhaar API-this API is used to identify the user .Aadhaar number is unique for every person, so no other person can use it.

Server Hosting API-this API is used to host the database globally so that it becomes dynamic.

Database: My SQL language is used for controlling the back end of the application.

III. Existing System

These are the following features which are present in the existing women safety applications.

- 1) The existing women safety apps provide location of the victim to the emergency contacts.
- 2) Sending emergency message with the location on the click of a button or any other gesture possible on the phone.
- 3) Placing fake calls to the emergency contacts as a sign of alert.
- 4) High-pitched voice is sent to the emergency contacts on shaking their phone.

IV. Proposed System

We are proposing the system by enhancing the features of the existing applications:

- 1) On the press of a button, buzzer rings in the victim's phone as well as in the emergency contacts phones.
- 2) Buzzer also rings in the phones of the users within the vicinity of 1km from the victim.
- 3) GPS location with the address is also sent to the same.

This feature enhances the existing features and increases the credibility of the app making it different from the existing ones.

V. Our Works / Research

To improve quality of the services provided by this application, we did a survey related to the work and we found some applications having same purpose as our app.

- A. Abhaya : (An android app for safety of women)
On a single click on this application an SMS containing location of the victim will be sent on the emergency contacts provided by the user at the time of registration. Also the messages sent on this number will be continuously sent for 5 minutes until one presses a stop button on it. Another feature is that the application will automatically place a call to the first emergency contact provided by the user.
- B. WoSAp : (A Mobile Application for Women's Safety)
With the help of this application any women who are in danger can directly call to the police. A message containing location of the user and contact details which will be already provided by the user while registrations are automatically sent to the police. A woman can place the call by either shaking her phone or by pressing a PANIC button on the screen.

Although, these are some of the applications having same aim as ours but our application has some addition features which are:

- A. Buzzer facility: On pressing an alert button a buzzer will start beeping in the phone of the victim as well as in the phones of the people whose number is mentioned in the emergency contact list while registering on the app.
- B. Location URL: Even if internet facility is not available on your mobile, this application is able to send a message which will contain URL of the victim's location.
- C. Alert nearby people: This is one of the most important features of our application. The people who are in 1 km radius vicinity will be sent a message containing a location URL and buzzer will –start beeping in their phones as well.

Level of risk: The level of risk is very low for our application. This application cannot be used when no network is available. If GPS of the user is not enabled

the location of the victim will not be sent to the emergency contacts.

VI. Conclusion

In this paper, we have described 'Pink', a women safety Android application. This application allows the user to send an alert to the pre-selected emergency contacts. The Alert can be sent by pressing the button provided in the app. As soon as the user presses the button, the buzzer will start ringing in the cell phones of emergency contacts and the GPS location will be sent to the contacts. An important feature of this application is that the people within a radius of 1 km using this application will also get alerted. Also, the application interface is easy to use. Thus, the victim can be rescued as quickly as possible from unsafe conditions.

VII. Future Scope

The future scope of this project is as high as maintaining safety and will always be advisable. Since mobile applications are being used most frequently, the women safety app will be surely be a choice of people. Moreover, the services provided in the app add up to the popularity and usage. This project can even predict the safe locations and unsafe locations in the later stages of implementation.

VIII. REFERENCES

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