Android Based Safety Triggering Application

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Abstract- Android is a java based operating system which runs on the Linux 2.6 kernel. It’s lightweight and full featured. Android applications are developed using Java and can be ported to new platform easily thereby fostering huge number of useful mobile applications. This paper describes about a Safety Triggering application being developed and its successful implementation with tested results. The application has target users those sections of the people who surprisingly fall into a situation where instant communication of their whereabouts becomes indispensable to be informed to certain authorized persons at remote end. This application main purpose is for women’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 continuously until we stop with password based button.

Key words: Android, Safety, emergency

INTRODUCTION

The security of women at night and at times even in day when travelling alone is a concern. On 16th December, 2012 New Delhi, capital of India witnessed a heinous crime. A female physiotherapy intern was beaten and gang raped by six persons. The ambulance and other service had reached the spot late hindering emergency medical treatment. It has been observed that at times the instant communication of message of one’s whereabouts becomes a problem. This paper describes about a safety triggering application developed in android platform. The uniqueness of this application apart from other Safety application available is that the user need not spend time navigating inside the phone menu; unlock the screen, to trigger the service. He instead, can directly press the power button and inside the phone menu; unlock the screen, to trigger the available service. He instead, can directly press the power button and inside the phone menu; unlock the screen, to trigger the availability of this application apart from other Safety application is that the user need not spend time navigating to the application stored somewhere else for the triggering of the application. Many applications available in the market send location messages to the nearest service. It has been observed that at times the instant communication of message of one’s whereabouts becomes a problem but also will help the police to trace the location of the person in problem at latter time easily.

EXISTING MODEL

There are lot many android applications available in the web today. Some are free and many need to be procured. Some of the SOS based Android Applications are listed below. This application provides step-by-step instructions on dealing with a variety of emergencies, including choking, broken Bones, strokes, allergic reactions and many more. It is a free application. It provides dozens of videos to coach a person through emergency protocols. Easy access to 9-1-1. If a person is not from the US, the application will determine what country the person is in and dial the appropriate number.[6]

PROPOSED MODEL

The proposed model is designed and implement with the objective that it has to be user friendly and triggering of the application should take least time. The location of the user in problem should also be precisely known to all those persons whom message has been sent. Automatically to the registered emergency phone numbers in the application. The application for full functioning demands GPS service to be available in the handset. If the handset don’t have GPS service, attempt to trigger this application will show an error message, but still sending an message to the registered phone numbers. This feature is very useful talking those users who don’t have GPS enabled handset. If the user is not triggering the alert button then the default home screen of the mobile continuous to be displayed. Another Extension of our application is that the location traces continuously and sends text messages on updated locations when once the user clicks on the safety triggering button. The user can only stop message on clicking password based stop button in the mobile to avoid waste of time navigation to the application stored somewhere else, pressing the safety triggering button triggers the application in the background and immediately the location of the user in terms of latitude. The proposed model is show in the figure 1 below. The Safety triggering button is displayed in the home screen of the mobile continuous to be displayed.
Some of the packages used to accomplish retrieving the location using GPS services are android.location.Location, android. Location. Location Listener, android. Location. Location Manager etc. The package used for sending SMS to the emergency numbers is android.telephony.SmsManager. The custom class AppPreferences.java imports preference. Preference Activity to save the numbers and add Preferences From Resource is used for calling the emergency numbers and retrieving them from the stored directory. Meant another custom BroadcastSetter.java imports the android.content.BroadcastReceiver. The file Displays the Safety screen above the mobile home screen.

**Testing and Output**

- **Design Process**
  - Mobile Screen on → Display Button Screen → Alert Button Pressed
  - Retrieve Automatically Emergency Phonenumbers Saved
  - Retrieve Automatic Location Using GPS
  - GPS Service Available?
  - APPend location with sms custom message
  - Send SMS continuously
  - SMS will be stopped by using the password

**Packages Used**

- **Testing and Output**
  - Dashboard
  - **ALERT!**

**Conclusion**

This is the “Android based Safety Triggering Application” 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.

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