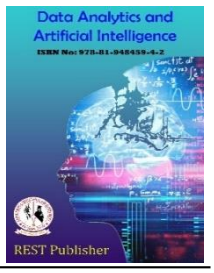
Data Analytics and Artificial Intelligence

Vol: 3(3), 2023

REST Publisher; ISBN: 978-81-948459-4-2

Website: http://restpublisher.com/book-series/daai/



Emergy Alert App Using Android

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Abstract: *The usage of smart phones equipped with GPS navigation unit have increased rapidly from 3% to more than 20% in the past five years. Hence, a smart phone can be used efficiently for personal safety or various other protection purposes, especially for women. This app can be activated by a single click when the user feels she is in danger. This application communiqué the user's location to the registered contacts for every few seconds in the form of message. Thus, it acts like a sentinel following behind the person till the user feels she is safe. This paper presents analysis a unique feature of this application to send the message to the registered contacts continuously till they are pressing 'HELP' button. Continuous location tracking information via SMS helps to find the location of the victim quickly and can be rescued safely. This application aims to ensure women's safety. This is achieved by addressing the circumstances that compromise the safety of women in today's day and age. This app ensures women are not put into such situations through various features offered by our system.*

Keywords: *Smart Phone, Android, Registered Contacts, GPS location, database, URL.*

1. INTRODUCTION

In today's world, it is not safe for a person to travel alone at night especially for women; it will be high time to travel alone because a woman is not highly strong as men to protect herself from them. The good way to reduce chances in becoming a victim of violent crime (robbery, sexual assault, rape, domestic violence) is to identify and call on resources to help you out of unsafe situations. Whether you are in instant trouble or got separated from friends during night and do not know to reach home, having these apps on your phone can diminish hour risk and bring assistance when we require it. In this paper, we present Security Alert an application for smart phones working over android platform. National Crime Records Bureau of India, reported incidents of crime against women increased 6.4% during 2012, and a crime against a woman is committed every three minutes. The message contains the user's current geographical location, and a statement that "I Am in Trouble". This portable application is fundamentally utilized for women's well-being. It can be utilized to discover and help women's in crisis circumstance. It demonstrates the correct area where the individual is found and send the point of Women Safety Device with GPS Tracking System Using Arduino, 2022 interest through Short Message Service (SMS) to her relatives, guardian and friends. Spark Women app will inform and update your dear ones if you are stuck in an unsafe place. It will send all the details related to your location with just a tap of a button. The app will send an SMS to a pre-configured number along with your location and a link of Google Maps. This app also has a section of self-defence where women can learn different techniques so that they will be prepared for protecting themselves in a way. It also has a section of some basic laws to make a women aware about her rights.

2. RELATED WORK

The application has been divided into two components: a front end user interface and a back-end functional unit. The user interface was developed using JavaScript, with native platform code in Java waiting for the user to engage the alert mechanism. The backend was implemented using JavaScript, alongside firebase database. Below is the Flow Diagram of our Spark Women app the user interface of the application is designed by keeping in mind that it should be simpler to use. The use of the application is intended to be straightforward, as it would be accessed primarily in times of crisis, apart from the adding of emergency contacts. The starting interface of the app is the Get Started Page in which there is a button named Get started which will be clicked by the user and next will be the home screen of the app. The home page of the application has following sections: Firstly, contacts icon is there in which user can add the emergency contacts so that those contacts can get the alerts. Then there are other icons like Self Defence, Settings and Basic laws. The main one is PANIC Button which is used for all alerts to be sent

to respective contacts. When the user opens the application for the first time, she is asked to enter her emergency contacts so the same can be stored. The emergency contacts can be entered by adding name and phone number. Thereafter, the application will run as a background service which can be triggered in case of an emergency.

3. EXISTING SYSTEM

This safety app is designed to enhance the safety for women, kids and everyone. At any time and anywhere Our intention is to provide with the fastest and simple way to contact your nearest and dearest and emergency centre. When there is an emergency, it will be difficult to get ideas and we will be in fear, however it is important that our parents and friends ae to be notified that we are in danger, so can find the exact location come and help them. Existing system does not have a feature to send messages to 3 members at a same time and to the near police station and a siren sound. These features will be helpful to the women who are in need of help.

4. PROPOSED SYSTEM

The proposed system overcomes the disadvantages of the existing systems where the existing system not have a feature to send messages to more than 3 members at a time. The proposed system is based on gaps, It consists of GPS device i.e. any Android Phone. The device will provide the location information to the contacts The system which is proposed is based on advanced sensors. Whenever the user shakes the phone, a distress signal will be send to the contacts which are added in the emergency contacts list and call to the main person in the contact.

5. IMPLEMENTATION

This android application is useful when the user is in some problem or needs any help. When the user opens this application, can see a HELP button. Also, they can store a message and 3 contact numbers. When the user is in some difficulty or needs any help, they simply need to open the app and click on the “HELP” button. This application sends the message to those contact numbers which he has stored. The total evaluation can be done in three major steps which are described individually. Evaluation describes the whole implementation of the application in three major steps. The first major step is to enter the contact details in the application created. Those contacts can be our relatives, friends and chief cop of the particular city the person we live in. When the application is installed in the smart phone for the first time the above contact details should be provided.

6. METHODOLOGY

The user interface of the application is designed by keeping in mind that it should be simpler to use. The use of the application is intended to be straightforward, as it would be accessed primarily in times of crisis, apart from the adding of emergency contacts. The starting interface of the app is the Get Started Page in which there is a button named Get started which will be clicked by the user and next will be the home screen of the app. [2] The home page of the application has following sections: Firstly, contacts icon is there in which user can add the emergency contacts so that those contacts can get the alerts. Then there are other icons like Self Defence, Settings and Basic laws. The main one is PANIC Button which is used for all alerts to be sent to respective contacts. [7]

Settings: In setting we will be having one user icon and one button to reset the password We have used firebase method send password reset email and the email is sent by firebase through Google to user to reset the password. [3]

Laws: In law activity we have one image view, one label and here is a list view that will list all the laws we have declared, one back button to go back. This is the array of strings where we have declared all the acts. This law we have sent to this adapter. Adapter is required by list view it will map those laws to this list view. When we click any law from this list we open Law Displayer activity with its position.

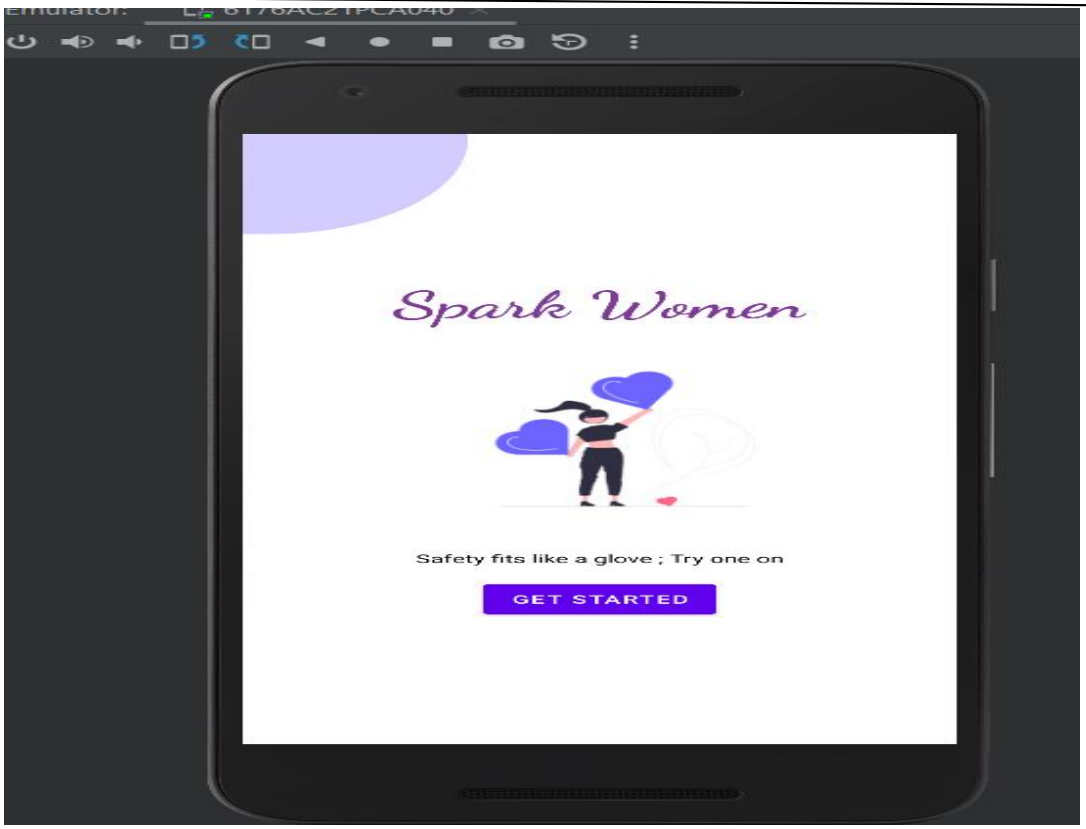

FIGURE 1. Starting Interface of Women App

FIGURE 2. Home page interface of the App

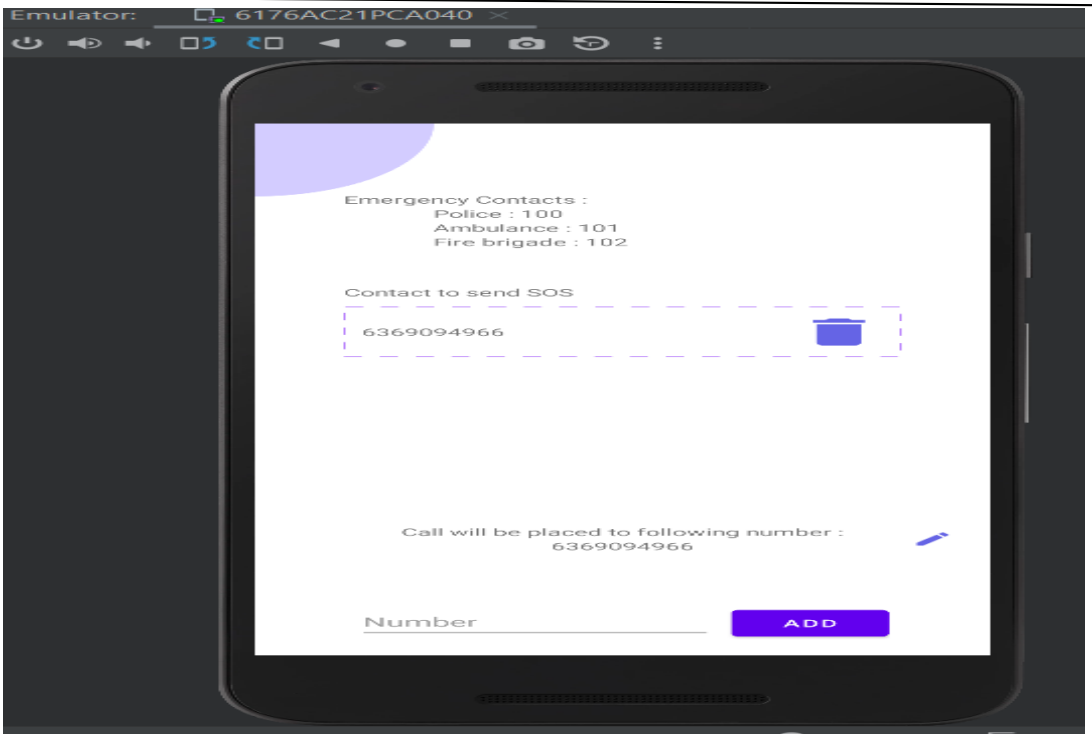

FIGURE 3. Adding contact form

RESULT PAGE

FIGURE 4. output

7. CONCLUSION

In this paper we have described spark women an android application for the safety of women. This application helps in live tracking of the location of the victim through GPS along with one of the registered contacts receiving a call from the root device. The advantage of this application is even when the location of the root device is changing rapidly; we can identify the exact location. As a future scope, this application can be integrated with the law enforcement database, which includes all the phone numbers of regional cops. Some use cases such as rescuing victims, when the mobile network is not available, after initial alert or switch off condition. further, it can be developed for IOS and windows mobile platforms. this application can help women in a big way from unsafe conditions.

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