

BE-Safe || SOS Emergency App

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Abstract: Nowadays women are molested without any age limit. So directly coming to the point Preventing Molestation against Women should be a crucial concept of the current time. An Android app to detect emergencies and send SOS alerts to selected contacts and calls to Police Control Room (100) and share the location coordinates using text to speech. It has Volume Button SOS, Fingerprint Sensor, and Scream-based detection models. This app is capable of sensor click calling with recorded voice along with GPS coordinates, Records 2MIN Video Recording as soon as SOS is activated. To overcome this issue, we have taken an initiative to create an app that can be used in times of emergency. so basically, we created an android app that requires user permissions like location, background usage access, internet, etc. by using all these permissions our app can send a text message containing the location of the victim on an action like shake and tap on SOS button..

Keywords: Emergency App, SOS, Women Safety.

I. INTRODUCTION

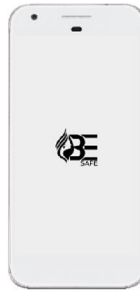
Protecting Women in the First and Primary Duty of Every Person. There is no explanation for rapes and harassment that happens in this world. Precaution is better than cure and this needs to STOP! Every year women suffer from this shameful act with no mercy. Nowadays non-human female is also raped. To stop this, we will build an SOS Emergency App which will connect to Police in no time. As soon as the innocent triggers the specified activity, a recording containing exact location coordinates and name will be sent to Police Emergency Helpline. A Recording will be short and impactful and if possible, servers will collect the recording and send it to police and selected contacts even when the phones are switched off. The following example shows need of this app:

The 32-year women was sexually assaulted. She was on the way for home, a man suddenly attacked her and injured her severely. She was screaming for help but that didn't work because no one was present to help her. Police as well as her parents also did not know her location, because of not knowing her location no-one could save her life. If her location was known to police, they could save her life. Considering this problem, we are inspired to make this app that will send current location to police by doing some specified actions like tapping on the back of mobile, pressing the power button 3 times, or screaming for help. Our app will detect any of these activities using sensor reading and voice recognition and will send current location to police and specified contact numbers. We cannot punish the culprit but at least we can help the victim

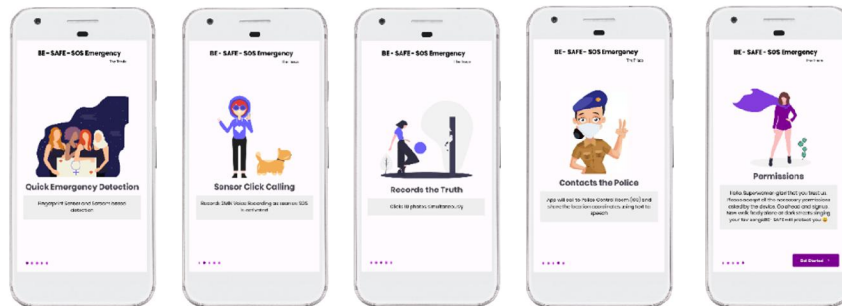


II. FEATURES

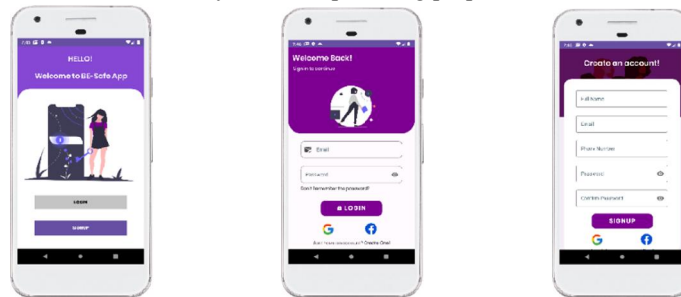
A. Splash Screen: Users will see the app logo for 3 sec on opening the app. This concept is called Splash Screen



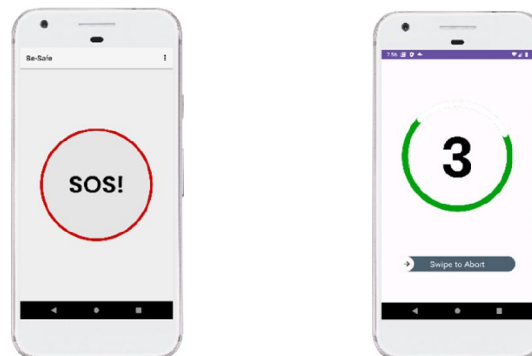
B. Slider: Ours app will show slideshow of features in a nutshell on opening app for first time. This concept is known as Onboarding



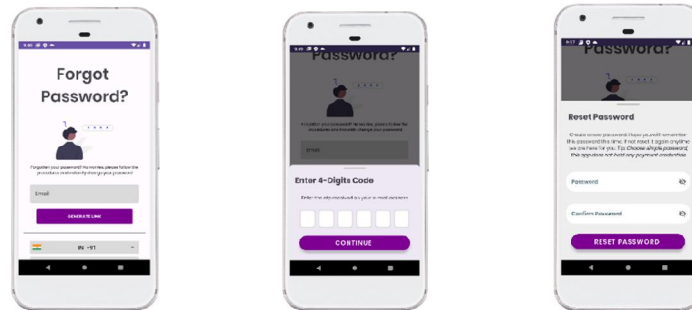
C. Login/Signup: User can Login or Create a brand-new account which holds Full Name, Email Id, Password. Without login/signup user cannot use our sos, for security and anti-spamming purpose.



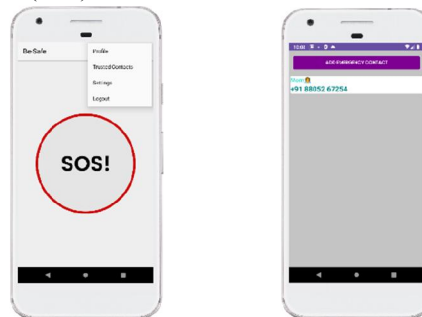
D. Main Content: Finally, here is what this app is made for. An SOS button which will trigger 5 sec timer and cancel swipe. You can cancel the SOS if you want or else after 5 sec SOS will be sent



E. Forgot Password: If user forgets the password, we have handled the situation, user can either reset using email or using phone (otp method).



F. Trusted Contacts: User have to add 5 (max) Trusted Contacts for which SOS have to be sent



III. LITERATURE REVIEW

For providing the security, various smart devices and applications were developed. Many smart devices and applications are also available in the market; but, it doesn't provide an effective solution. [1]

Women suffering violation are even denied of the basic human rights. Gender based violence has become a national as well as international agenda because of decades long struggles by civil society accompanied by women's movements. [2] This generates a signal which is transmitted to the smart phone. The software or application has access to GPS and Messaging services which is pre-programmed in such a way that whenever it receives emergency signal, it can send help request along with the location co-ordinates to the nearest Police station, relatives and the people in the near radius who have application. [3]

This paper suggests a new perspective to use technology for women safety. "848 Indian Women Are Harassed, Raped, Killed Every Day!!" [3]

In this paper the devices are customized to learn the individual pattern of temperature and heartbeat and then it finds out the threshold for generating alarm. [4]

In order to stop these crimes, we designed an embedded system for women safety based on Arduino and GSM module with GPS to send an emergency message with location and generate an alarm.[5]

IV. FUNCTIONALITIES

1. Add trusted contact numbers: User can add trusted/close people's contact number in order to send emergency message to them. User can add multiple contacts, there is no limit.
2. Send emergency text message: Using this app, trusted contacts should get emergency text message when they activate the SOS. This message will show that given person is in danger.
3. Send location in emergency: Using this app, trusted contacts should get live location of person in danger.
4. Engage SOS on action: This app should engage SOS by clicking on SOS button given in app and by shaking mobile 3 times.

V. CONCLUSION

The Be-Safe app is one of the most fantastic and useful apps for the people those who faces himself in danger or if they don't find themselves safe in any situation then this app is very helpful for those. They don't need to afraid of any emergency situation. This app allows you to add trusted people contacts in the application so this app can inform to those contacts immediately. This app records person actions and gestures. If app finds that the particular person in danger our app will send a person live location to trusted contacts. This app is also too much user friendly anyone can interact with this app. People want this type of apps in today's world, where there is safety is more important. The objective of this app is to provide live location of person and we are going to update this regularly as per project progresses.

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