

## SOS Implementation With Camera Facilities

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### ABSTRACT

The system defines the task SOS (Save Our Souls) means it is a system which will manage the emergency situations and provide solution using android application. The goal of the project is to develop an android application that lets its users to send notification through mail in case of an emergency or a panic situation. The users can send emails on the press of single button. The phone number, mail id and camera set from within the application. The notification will be send with person's image. The app can capture the human face in real time and send to the emergency contacts. This is very helpful in tracking the whereabouts of the person. Women's safety is a big concern which has been the most important topic till date. As ladies ought to travel late night generally, it's necessary to remain alert and safe. Most of the females these days carry their Smartphone with them, so it is necessary to have at least one the personal safety apps installed. Here we introduce an app which ensures the safety of people. This helps to identify and call on resources to help the one out of dangerous situations. This is a common app for using all kind of people especially women for their safety. In this application user need to feed five contacts these are the people who will receive notifications via email in case of an emergency or any dangerous situations. In case they are in dangerous situation or attacked by any person, user will click one button and the message will pass on fiver users' mail id and the attacker face captured and send to emergency contact's mail ID. The system designs the android application as emergency app in mobile phones

### 1.INTRODUCTION

Android is a mobile operating system developed by Google, based on the Linux kernel and designed primarily for touch screen mobile devices such as smart phones and tablets. Android's user interface is mainly based on direct manipulation, using touch gestures that loosely correspond to real-world actions, such as swiping, tapping and pinching, to manipulate on-screen objects, along with a virtual keyboard for text input. The basic aim of the system is to develop a low cost solution for SOS System which can apply to various domains of the industrial and personal use just by using the very common mean i.e. mobile with android enabled.

### 2.EXPERIMENTAL METHODS OR METHODOLOGY

The aim of the project is to develop an Android application that lets its users to send notifications in case of an emergency or a panic situation. The users can send emergency alert messages with image on the press of a single button. This is very helpful in tracking the where about of the person. Women's safety is a big concern which has been the most important topic till date. As ladies ought to travel late night generally, it's necessary to remain alert and safe. Most of the females these days carry their Smartphone with them, so it is necessary to have at least one the personal safety apps installed. Here we introduce an app which ensures the safety of people. This helps to identify and call on resources to help the one out of dangerous situations. This is a common app for using all kind of people especially women for their safety. The users can send emergency alert messages with image on the press of a single button. This is very helpful in tracking the where about of the person

Security is a critical issue in today's world and it's very much needed for every individual to be acting over such an issue. This project describes a security system that provides the combination of camera facilities as well as provides alerts and messages with an emergency button trigger. Whenever somebody is in trouble they might not have so much time, all that they have to do is pressing the volume key. Our system provides a realizable, cost effective solution to problem detection. The proposed system is developed for the user safety and overcomes the disadvantages of existing system. An emergency button is fixed on the device at a particular position. Whenever user in any kind of trouble she will press the emergency button and an alert will be immediately sent to the parents or friends or others. In this application user need to feed five contacts these are the people who will receive notifications via email in case of an emergency or any dangerous situations. In case they are in dangerous situation or attacked by any person, user will click one button and the message will pass on fiver users' mail id and the attacker face captured and send to emergency contact's mail ID. The system designs the android application as emergency app in mobile phones.

### **ADVANTAGES**

This project presents an alert system for safety detection.

- 1) The system provides a realizable and efficient.
- 2) The application is easier to use the entire user.
- 3) The application is normal budget.
- 4) For user there is no need of external hardware or software to use this application.

This application is free for user, which does not affect user's cost

- 5) User only need a Smartphone or tablet which has Android OS to the work.

### **OVERVIEW**

As much as we would like to get rid of them, panic or emergency situations are unavoidable and usually unexpected. The nature and consequences of these situations can vary significantly and in worst cases also be life threatening. Therefore it would be really nice to have some mechanism by which we can notify certain people about such circumstances and increase the chances of receiving help as soon as possible. The need for such a mechanism increases even more as in this era of technology, platforms exist to support them. One such platform and a very common one in that is a Smartphone. Almost everyone today carry a Smartphone with them as they become more and more affordable and easily available. Also within the Smartphone market Android is the clear leader in terms of market share. According to one report, 78.1 % of the total Smart phones sold in 2013 were the Smart phones that run on Android Operating System. Women's safety is a big concern which has been the most important topic till date. As ladies ought to travel late night generally, it's necessary to remain alert and safe. Most of the females these days carry their Smartphone with them, so it is necessary to have at least one the personal safety apps installed. This is a common app for using all kind of people especially women for their safety. The users can send emergency alert messages with image on the press of a single button. This is very helpful in tracking the where about of the person. Here we introduce an app which ensures the safety of people. This helps to identify and call on resources to help the one out of dangerous situations. This is a common app for using all kind of people especially women for their safety. In this application user need to feed five contacts these are the people who will receive notifications via email in case of an emergency or any dangerous situations. In case they are in dangerous situation or attacked by any person, user will click one button and the message will pass on fiver users' mail id and the attacker face captured and send to emergency contact's mail ID. The system designs the android application as emergency app in mobile phones.

### 3. MODULES DESCRIPTION

#### User Register:



There is registration form available where new user can create their account by providing required information to the system. The registration form details are like name, email, gender, mobile number, address, and etc. These details are stored in the database. And then can getting to the username and password in the system.

#### User Login

In this module, user can login in the app using username and password. The user should log in to SOS app using the above interface. If the user is registered, he should enter the email id and password to log in. The user can also click on the Register button to register for the SOS app. The user also click on Forgot password if he does not remember his password and wants to reset it. If the user is not already registered, he can register for an account on the SOS app using the above interface. The user should provide a first name, last name, Email id, and a desired username and should create a password. If the email id is already registered with the SOS app a notification is shown to the user and he is not registered Once the user has successfully registered he sees the above screen as a confirmation. The screen shows the various details the user registered with. In case the user has forgotten his password, he can reset it by clicking on the forgot password button on the Login screen. He is then send to reset password page as above. The user can provide his email id and click on the reset button. A recovery email containing a temporary password is sent to the user on his email id. Once the user has logged in successfully, every time he opens the SOS app, this is the first screen presented to him. The screen contains a slider switch to enable/disable the buttons. The user can send panic text message and email by clicking on the panic button. The user also sees his current location at the bottom of this screen. The user can click on the settings icon on the action bar to open the tabbed interface for settings. On the personal setting he can enter his phone number, start location tracking by clicking on the check box for location logging. The user can also change his password and logout by clicking on the respective buttons. The user can change his password from the above screen. An email notification is sent on the registered email id regarding the change of password.

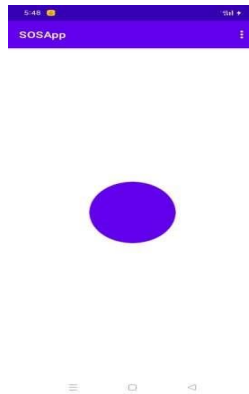
#### Add Emergency Contacts



In this module user can add maximum five emergency contacts in the app. The emergency contacts contain name of the contact, gender, id and Email id. If the user in emergency situation then sent alert to five emergency contacts through email. The user can set various contacts to send the text message and the emails to from the above screen. He can also set the message that must be sent in these text and email messages separately. The user can set two contacts to will receive the SMS using the above dialog box. The user can either enter a name and a corresponding number or he can click on the number text box to open the contacts app. On the contacts app he can click on a particular contact to add that contact as the name and his primary phone number as the number to send the SMS to. The user is presented with the above dialog box to enter the message that he would like to send as a part of the SMS messages sent in case the panic button is pressed. The user can set three contacts that receive the emails when he presses the panic button. He can either enter the name and the email id of the contacts or he can click on the email text box to show the contacts list. When the user clicks on a particular contact in the list there name and the primary email id is set in the dialog box. The user is presented with the above dialog box to enter the message that he would like to send as a part of the emails sent in case the panic button is pressed. The user can set two contacts to will receive the SMS using the above dialog box. The user can either enter a name and a corresponding number or he can click on the number text box to open the contacts app.

#### Click SOS Button

SOS Button is also called as emergency button. When user click the button immediately the camera will be start and capturing the criminal/unknown person face and send alert message for emergency contacts. In this application user need to feed five contacts these are the people who will receive notifications via email in case of an emergency or any dangerous situations. In case they are in dangerous situation or attacked by any person, user will click one button and the message will pass on fiver users' mail id and the attacker face captured and send to emergency contact's mail ID.



#### **Send Email:**

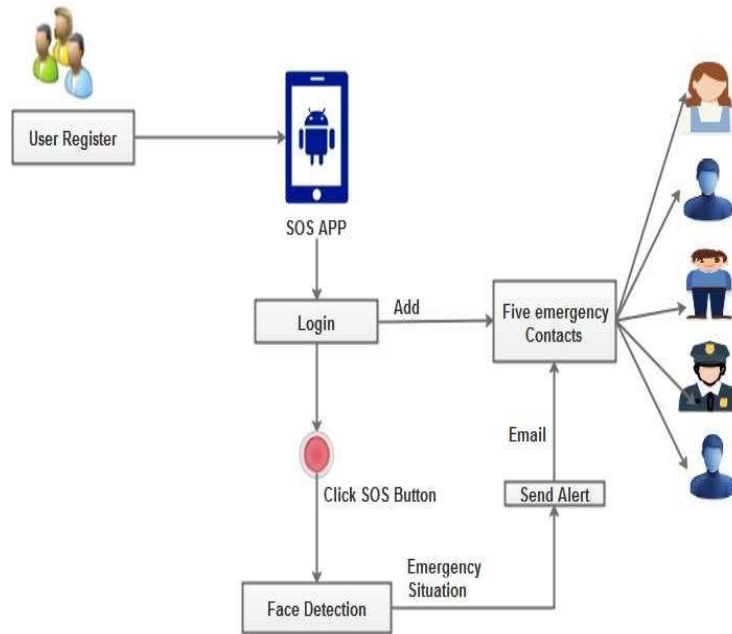
The email has sent only for those who added in the emergency contacts at the time of enrollment. The email id already stored in the system and immediately send alert when the user in trouble. The user is presented with the above dialog box to enter the message that he would like to send as a part of the emails sent in case the panic button is pressed. The user can see his location history by setting various fields in the above screen. He must provide a date, a start time and an end time to view his location history. In case the user has forgotten his password, he can reset it by clicking on the forgot password button on the Login screen. He is then send to reset password page as above. The user can provide his email id and click on the reset button. A recovery email containing a temporary password is sent to the user on his email id.

#### **HAAR CASCADE ALGORITHM:**

It is an Object Detection Algorithm used to identify faces in an image or a real time video. The algorithm uses edge or line detection features. The Algorithm has four stages:

1. Haar Feature Selection(Edge, Line, Four-rectangle features)

- 2. Creating Integral Images
- 3. Adaboost Training
- 4. Cascading Classifiers

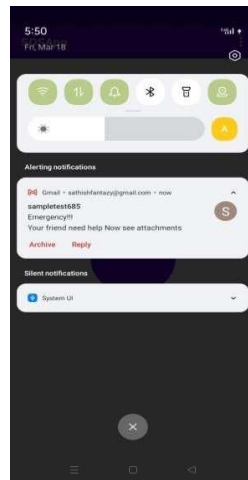


#### 4.RESULTS AND DISCUSSION HOMEPAGE:

In this screenshot display the home page for output of this project. It contains a single SOS button. User can press the single button at the panic situation. The camera will start to capture the suspect person image. Send that image to trusted registered peoples. When user click the button immediately the camera will be start and capturing the criminal/unknown person face and send alert message for emergency contacts.

#### NOTIFICATION:





In this screenshot display send the emergency notification when need the help to see attachments. SoS alters aim to make emergency information more accessible during a crisis. We bring together relevant and authoritative content. The user can set two contacts to will receive the SMS using the above dialog box. The user can either enter a name and a corresponding number or he can click on the number text box to open the contacts app. On the contacts app he can click on a particular contact to add that contact as the name and his primary phone number as the number to send the SMS to.

## CONCLUSION

This project entitled as “SOS Implementation with Camera Facilities” has been developed to satisfy all the proposed requirements. The process of recording details about sending emergency request is more simple and easy. The system reduces the possibility of errors to a great extent and maintains the data in an efficient manner. User friendliness is the unique feature of this system. The system generates the reports as and when required. The system is highly interactive and flexible for further enhancement. The coding is done in a simplified and easy to understandable manner so that other team trying to enhance the project can do so without facing much difficulty. The documentation will also assist in the process as it has also been carried out in a simplified and concise way.

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