REPORT

**SOS** – AN ANDROID APPLICATION FOR PANIC SITUATIONS.

BY

TEAM CRUSADERS

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY

KOTTAYAM

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

**PROJECT: SAVE OUR SOULS**

**TEAM MEMBERS AND ROLES:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Name | Role | Backup role | Email |
| 1 | Saarun P Nair | Leader | General Programmer | saarun18bcs@iiitkottayam.ac.in |
| 2 | Sumana Bushireddy | Technical Writer | General Programmer | sumanabushireddy18bcs@iiitkottayam.ac.in |
| 3 | M. Nirupama Chowdary | General Programmer |  | mnirupama18bcs@iiitkottayam.ac.in |
| 4 | Muhammed Nihal  K V | General Programmer |  | mnihal18bcs@iiitkottayam.ac.in |
| 5 | Tijo thomas | Test Leader | General Programmer | tijothomas18bcs@iiitkottayam.ac.in |
| 6 | Sarfaraz Ahmed K L | Test Programmer | General Programmer | sarfarazahmed18bcs@iiitkottayam.ac.in |

**ABSTRACT:**

Though we would like to get rid of panic or emergency situations, they are unavoidable and in worst case they might be life threatening. So, we as a team thought it would be really nice to provide a mechanism by which we can notify people about such situations and thereby increase the chances of receiving help as soon as possible.

The aim of the project is to develop an Android application that lets the users to send notifications in case of an emergency. The users can send multiple text messages on the press of a single button. The phone numbers and the contents of the text can be set within the application. The text messages sent, along with the content, also have the last location of the user. This is very helpful in tracking the whereabouts of the person. The user can also call 112 directly from the application.

Additionally, the user of the application may allow the app to track their location. If this option is selected, the application fetches the device’s location at about every 15 minutes and stores it in a database.

**PROJECT DESCRIPTION:**

SOS is an application that is meant to run on Android devices mainly smartphones. The main features of this application are:

* The user has to login by entering a username and password when he opens the app on his device. He then remains logged into the application until he logs out manually.
* If the user doesn’t have an account, he can register on the login screen and create an account.

On filling the details in register section and proceeding further, he’ll get a dialogue box asking whether the sim with which he registered is inserted in his mobile or no.

If yes, an OTP will be sent to that number and it will be automatically verified.

If no, an OTP will be sent to that number and it should be entered manually.

* The user can reset his password using ‘reset password’ in case he doesn’t remember his password. On entering the mobile number, an OTP containing a unique code will be sent to the user on his number.
* Once logged in, the user is directed to the main screen of the application where he can see 3 buttons ‘PANIC’, ‘OK’ and ‘112’. The user can press the panic button to send text messages to the contacts set up and he can also send an ‘I am OK’ message to these contacts by clicking on the OK button. The user can also call ‘112’ directly from the application by pressing the 112 button.
* The user will also see his current location on the main screen. In this way he would know his exact location and refer to it in case he makes a call to 112. This location can also be sent as a part of the text messages to the contacts he set.
* The user can find settings option where he can set the contacts to send the text messages within the app. He can either select the contact from his contacts or can enter them manually.

Under the profile option he can give his personal information like his name, alternate number and so on.

He can change the password or logout by clicking on the respective options.

* The user can enable the option to start location tracking. If this option is selected, the application fetches the location of the device (for every 15 minutes) and stores it in a database.

**TECHNICAL SPECIFICATIONS & TOOLS:**

* Operating System: Windows XP or higher/Mac OS X 10.14 or later/Linux.
* Platform: Android SDK Framework 10 or higher.
* Tools: Android Studio 3.2
* Technologies used: Java, SQLite, Android, Google maps v2 API.

**GITHUB REPOSITORY LINK:**

* https://github.com/Sumana-264/SaveOurSouls.git