

CA400 Final Year Project - User Manual

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1. Introduction

1.1 Overview

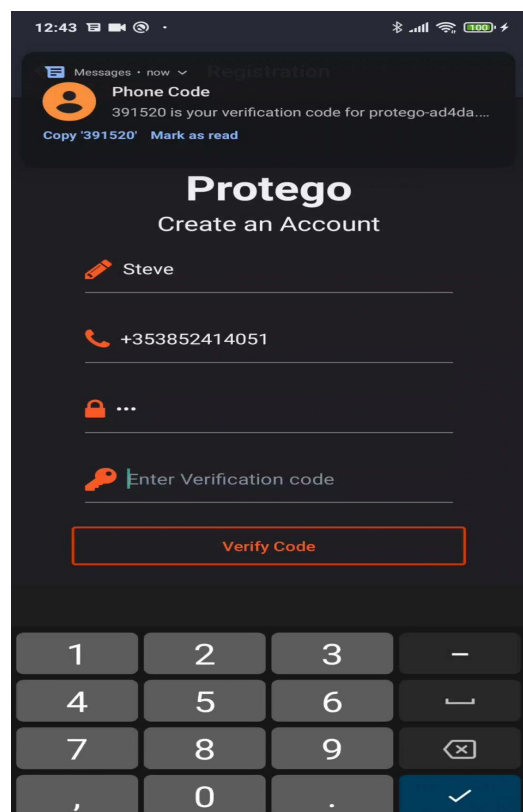
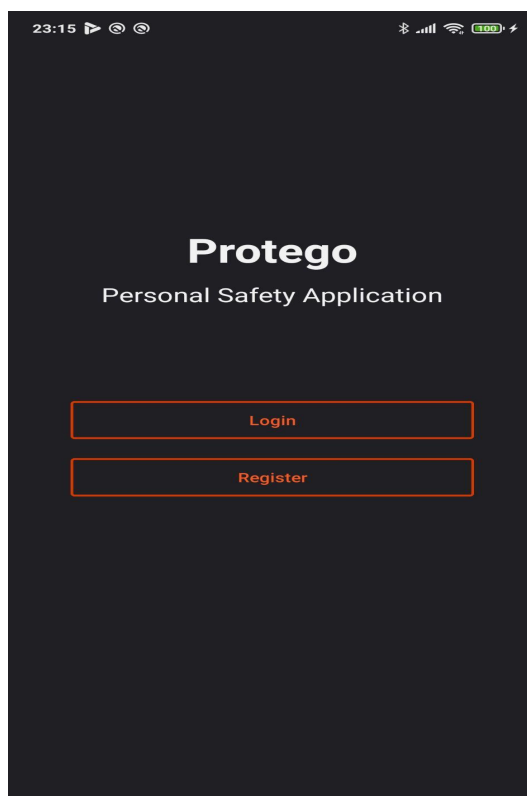
Protego is an easy to use cross platform personal safety application, which is available to anyone with a mobile device. Protego provides you with a variety of functions, designed with your safety in mind. The main goal of Protego is to supply the user with reassurance that help is only a click of a button away, this reassurance is spread to family and friends of the user as well.

Through Protego you can notify friends and family that you're in a stressful or dangerous situation. By activating SOS mode, your selected guardians will be notified and your real-time location will be sent to them immediately. Additionally, if you feel like you are in an uncomfortable situation and would like a swift exit, you can use the fake call function.

2. User Guide

2.1 Registration

After downloading the application, you will be asked whether to wish to login to the application, or register if you are a first time user. When you choose to register for the application, you will be prompted to enter your personal information as shown below.

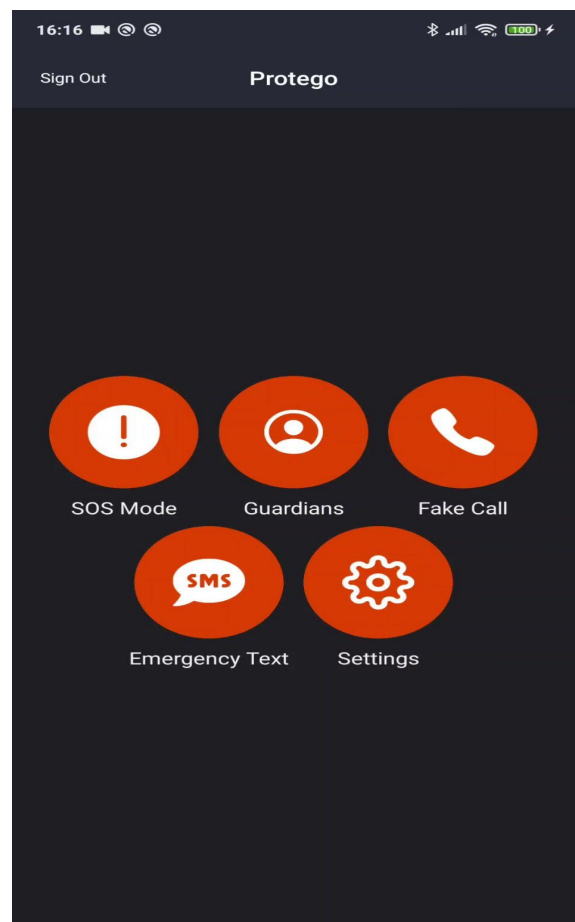
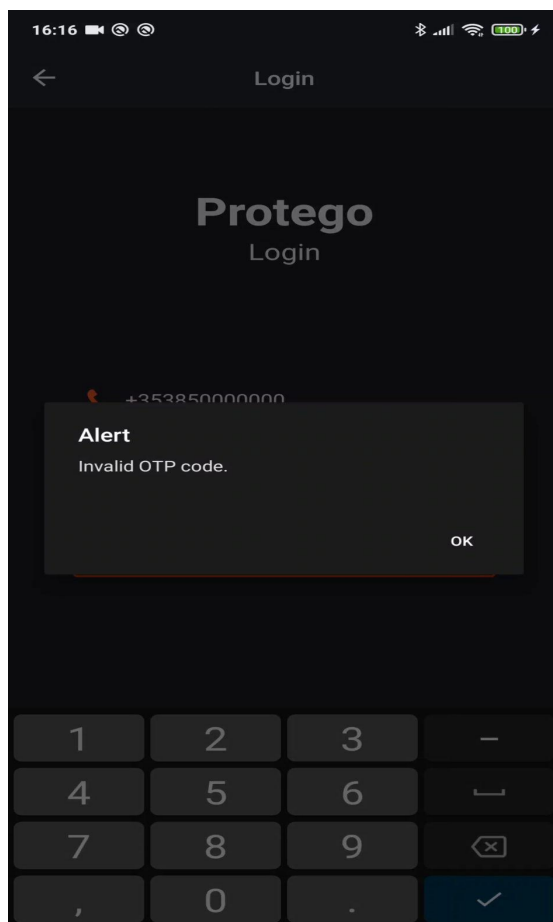


This information includes your name, your phone number and a SOS password. The SOS password will be used when a user wishes to end SOS mode services.

Once you have entered these details, press the “Send Code” button at the bottom of the screen. After pressing this button, you will receive an SMS with a verification code. Enter this verification code to complete the process.

2.2 Login

If you have already registered for the application previously, you can simply log straight into the application. To do so, enter your phone number. You will be required to generate a One Time Passcode to provide verification when logging into the application. This password must be entered correctly in order to login successfully. If this password is entered incorrectly the user will be informed as shown in the image below.



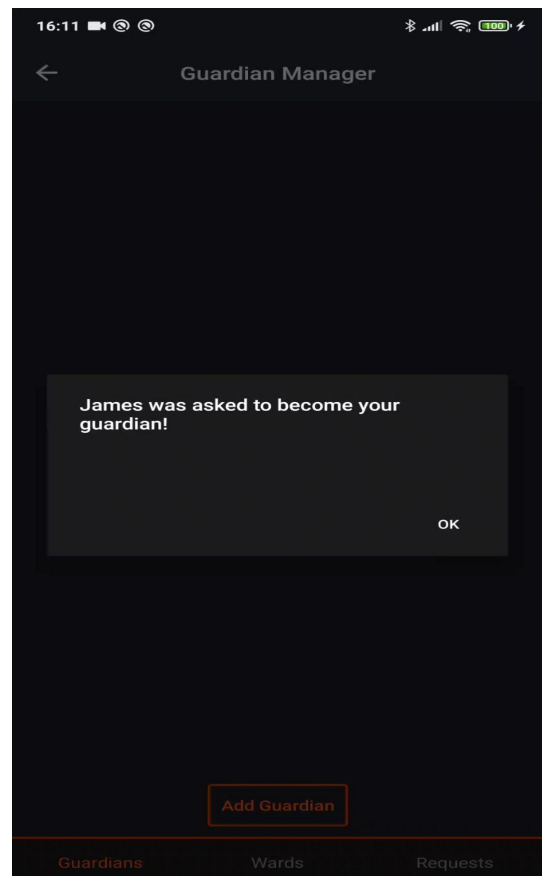
Once you have successfully logged into the application, you will be brought to the home screen. From the home screen, shown above, you can access all of the services Protego provides.

2.3 Guardian Manager

From the home screen, enter the section labelled “Guardians”. From here you will be able to add new guardians, view existing guardians and delete any unnecessary ones. If you have been registered as a guardian to another user, this user becomes your “Ward”. You are able to view all of your Wards from the Guardian Manager also. If a Ward has activated SOS Mode, it can be seen in the Guardian Manager.

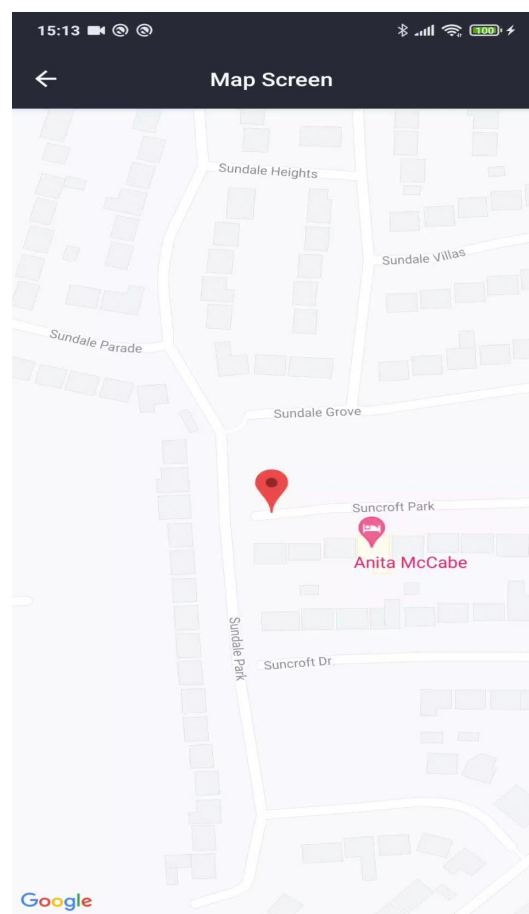
2.3.1 Adding a Guardian

To add a new Guardian to your list, navigate to the Guardian Manager from the home screen. From here, press the “Add Guardian” button at the bottom of the screen. Enter the user’s phone number. If the user is registered to the application, their name will be displayed and they will be added and displayed in your list of Guardians, once they accept the request.



2.3.2 Check Ward Location

If a user has named you as their Guardian and that user enters SOS Mode, you are able to track their location. When a Ward enters SOS Mode, you will be sent a notification. In the application, a Ward is in SOS Mode if their details are displayed in red writing and a warning sign has appeared next to their name in the Guardian Manager. By simply tapping the user's name in the Guardian Manager, you are shown a map with their live location. This feature will no longer be available when the user exits SOS Mode.



2.3.3 Deleting a Guardian

If there is a Guardian within your list that you no longer wish to have, you can delete them from your account. To do this, navigate to the Guardian Manager. Hold down the name of the Guardian you wish to

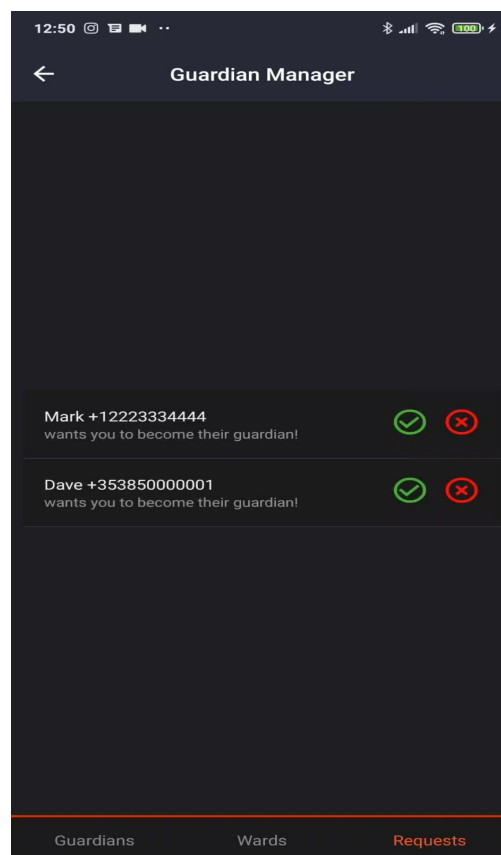
remove. When prompted with a confirmation to remove the Guardian, select “Yes” and they will no longer be within your list of Guardians. If you hold down the Guardian’s name and then change your mind, press “Cancel”.

2.3.4 Deleting a Ward

The process of removing yourself as another user’s Guardian is similar to the process of removing your own Guardian’s. Navigate to the Guardian Manager. At the bottom of the screen, toggle to the list of Wards. Hold firmly the name of the Ward you no longer wish to be a Guardian of. You will be asked to confirm your decision, press “Yes”. If you reach the point of confirmation and change your mind, press “Cancel”.

2.3.5 Confirming Requests

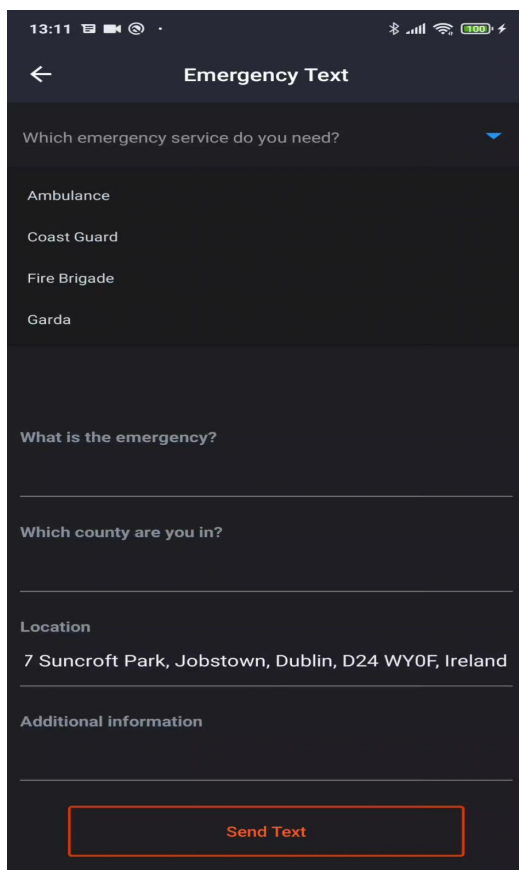
If another user wishes for you to be one of their Guardian’s, they will attempt to add you to their list. When this happens, you will receive a notification informing you which user has asked you to become their Guardian. If you wish to accept the request, press the green tick button. If you do not wish to become the user’s guardian, press the red “x” button. You can find your outstanding requests by toggling the Guardian Manager to the “Requests” option as shown below.



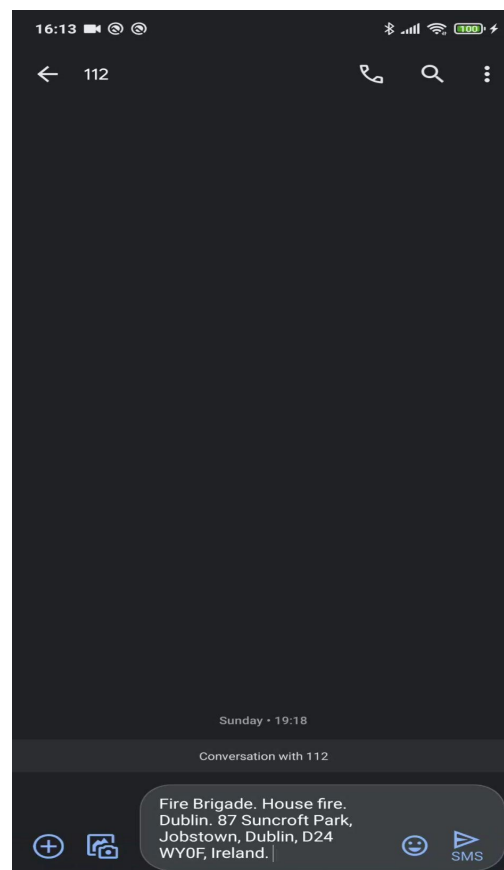
2.4 Emergency Text

If you find yourself in a situation where you would like to involve the authorities, you can avail of the emergency text option. The emergency text option makes use of the 112 SMS service. This service requires the user to complete a once off registration. To send an emergency text, click on the “Emergency Text” button on the home screen.

You will be asked to provide some details about the situation. These details include selecting which emergency service you wish to avail of. The options are An Garda Siochana, the Fire Brigade, the Coastguard or the Ambulance Service. You will be asked to enter what the emergency is, some examples of this include “House Fire”, “Heart Attack” or “Assault”. You will have to share which county you are currently in. Your exact location will automatically be provided by Protego. There is an option to write any additional information you wish to share with the emergency services. Once you have entered the information, press “Send Text”. This will bring you to your Messages application with “112” entered as the recipient and the information you provided as the text message. You can send this message from your device.



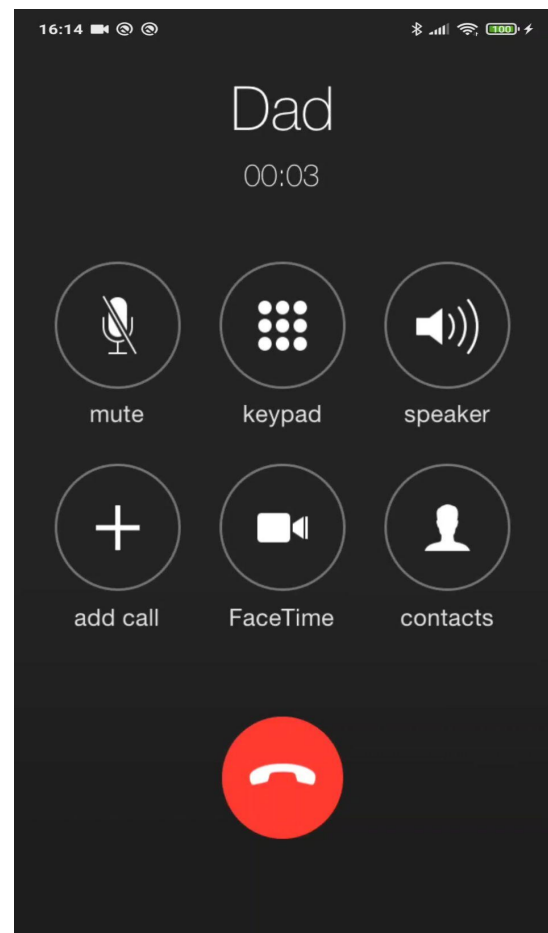
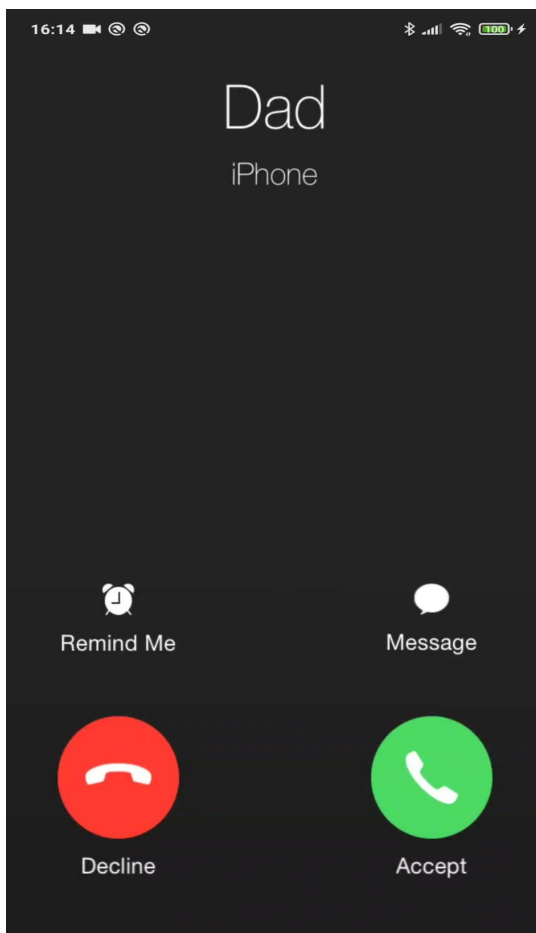
The screenshot shows a mobile app interface titled "Emergency Text". It features a dark theme with white text. At the top, there's a status bar with the time 13:11 and various icons. Below the title bar, there's a dropdown menu labeled "Which emergency service do you need?". The options listed are Ambulance, Coast Guard, Fire Brigade, and Garda. Below this is a text input field labeled "What is the emergency?". Underneath that is another text input field labeled "Which county are you in?". Below that is a section labeled "Location" with the text "7 Suncroft Park, Jobstown, Dublin, D24 WY0F, Ireland". At the bottom is a section labeled "Additional information" with a text input field. A red rectangular button labeled "Send Text" is at the very bottom.



2.5 Fake Call

For users who find themselves uncomfortable in a situation, Protego features a fake call option. This feature allows users to pretend they are receiving a phone call, to help them make a swift exit away from the uncomfortable situation.

To access this feature, choose the “Fake Call” option from the home screen. An image will appear on screen that ensures your phone appears like you are receiving a phone call. Your phone will also begin to vibrate. By tapping the screen once, it will be simulated that you have answered the call. To end the call, hold down on the screen. Alternatively, you can swipe backwards.

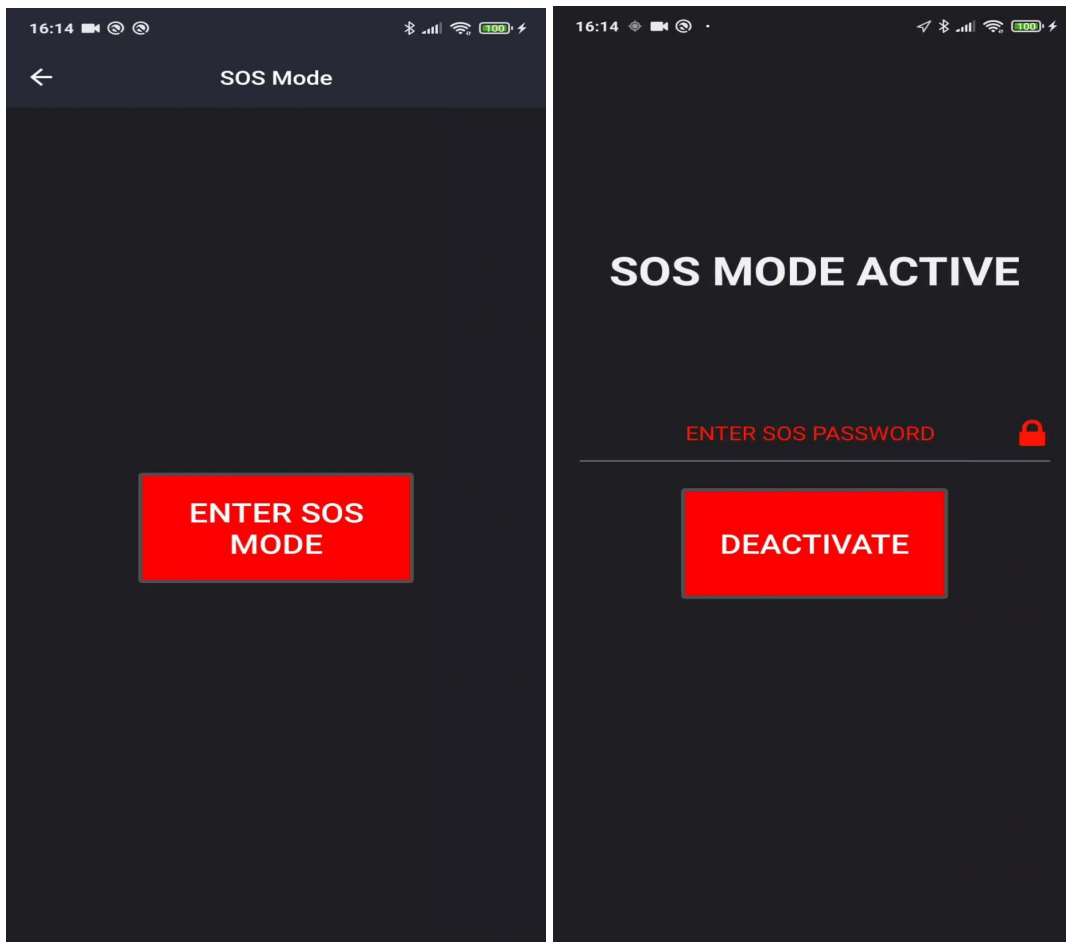


2.6 SOS Mode

To trigger SOS, navigate to the home screen and press “SOS Mode”. Immediately, your entire list of Guardians will receive a notification informing them you have triggered SOS Mode.

When your Guardians enter the application, they can track your live location.

To exit SOS Mode, enter the SOS password you chose when registering for the application.

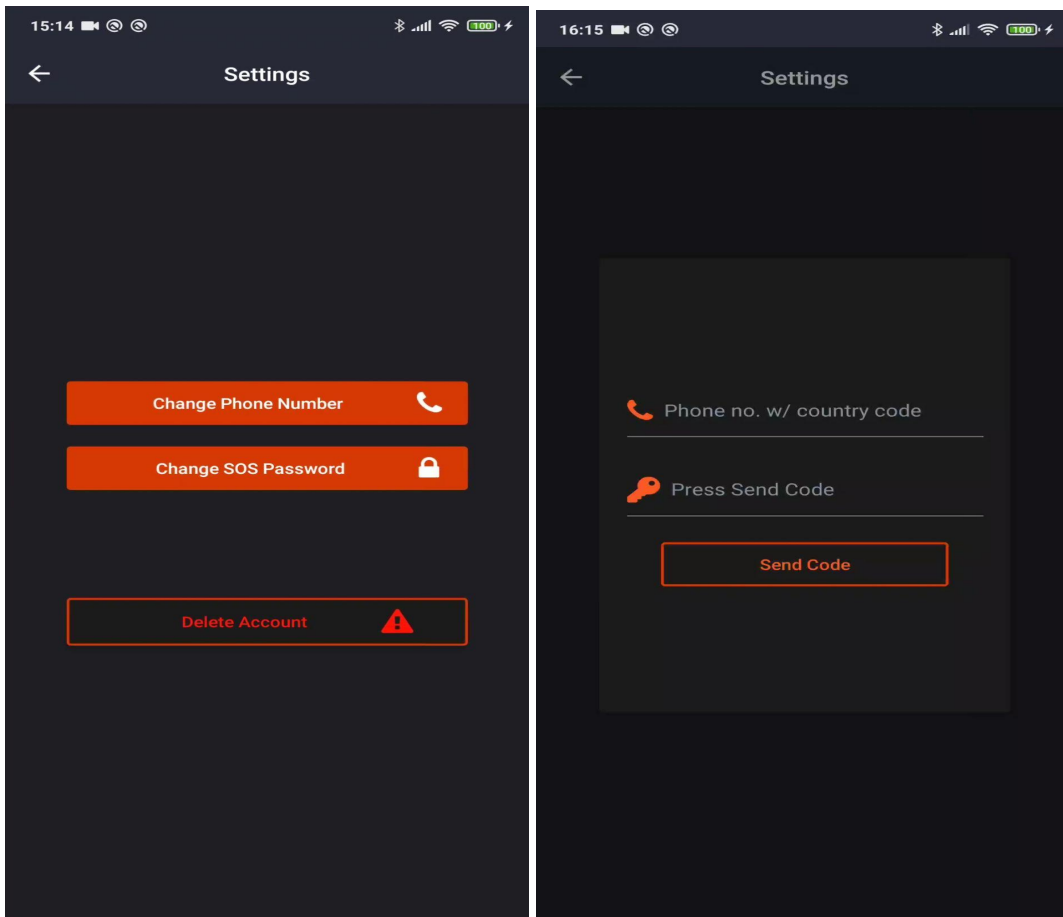


2.7 Settings

From the home screen, you can navigate to the applications settings. If you wish to change any of your personal details, the option is available within settings.

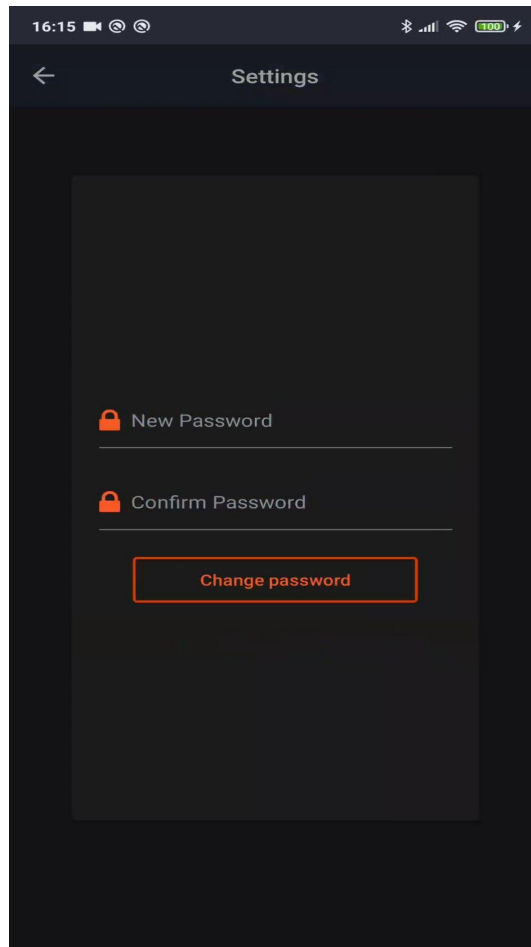
2.7.1 Change Phone Number

To change your phone number, within settings select the “Change Phone Number” option. Enter the new phone number you wish to associate with your account. You will be asked to provide an authentication code as when you registered your account. Once this code has been successfully entered, your phone number will be updated in the database.



2.7.2 Change Password

If you would like to change your SOS password, from settings click on the “Change Password” button. Enter your new password in both boxes. A verification code will be required to ensure your identity is correct. Once this verification code has been correctly entered, your password will be updated in the database.



2.7.3 Delete Account

A user who no longer wants to have an account with Protego, can delete their account in the applications Setting section. From Settings, choose the “Delete Account” button at the bottom of the screen. Users will have to provide a verification code in order to confirm their decision to delete their account. Once this code has been provided, your account will be deactivated and you will be redirected to the login/registration page.

2.7.4 Sign Out

A user who wishes to sign out temporarily from their account, can do so from the home screen. The button to sign out is located at the top left corner of the home screen. Click this button to be redirected to the login/registration page.

5. Installation Guide

Users can access the source code and download the application from the following Git repository:

<https://gitlab.computing.dcu.ie/ablitte2/2021-ca400-ablitte2-adamskm2>

5.1 Minimum Requirements

5.1.1 Android

- Android mobile device
- Android Lollipop 5.1

5.1.2 iOS

- iOS mobile device
- MacOS Catalina 10.15.7
- XCode 10

5.2 Instructions for Download

1. Firstly, visit the following Gitlab repository:

<https://gitlab.computing.dcu.ie/ablitte2/2021-ca400-ablitte2-adamskm2>

2. Click the download button (cloud emoticon). Choose preferred download option from zip file, tar.gz, tar.bz2 or tar.

Alternatively, you can clone the Gitlab repo using the following command:
`git clone https://gitlab.computing.dcu.ie/ablitte2/2021-ca400-ablitte2-adamskm2.git`

3. In your Downloads folder, you will find your chosen download format. Extract these files into a folder of your choice. A folder labelled 2020-ca400-ablitte2-adamsk2 will contain the application.

4. Navigate to the folder at command line and run these commands:

```
cd 2021-ca400-ablitte2-adamskm2/src/Protego/  
npm install
```

4.1 Additional step if you're on Mac OS

```
cd ios/ && pod install  
cd ../
```

5.1 To run the app on an Android device or emulator

```
npx react-native run-android
```

5.2 To run the app on an iOS device or emulator (Mac only)

```
npx react-native run-ios
```