TapToSafety

A women safety app to assure the safety of women in every place

Mid Evaluation Report

By

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Abstract:

We are aware of the safety of women. When faced with a crisis, women are less physically Strong than men and require assistance to be relieved. Women are increasingly becoming victims of violent crimes such robberies, sexual assaults, rapes, and domestic violence nowadays. Some women venture out alone at night and end up victims of violent crimes. Identifying and contacting resources that assist women in dangerous situations is the best Method to reduce the likelihood of being a victim of a violent crime. To safeguard women's safety, we introduce an app that will be called TapToSafety. The aim is to provide safety to women.

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CHAPTER: 1

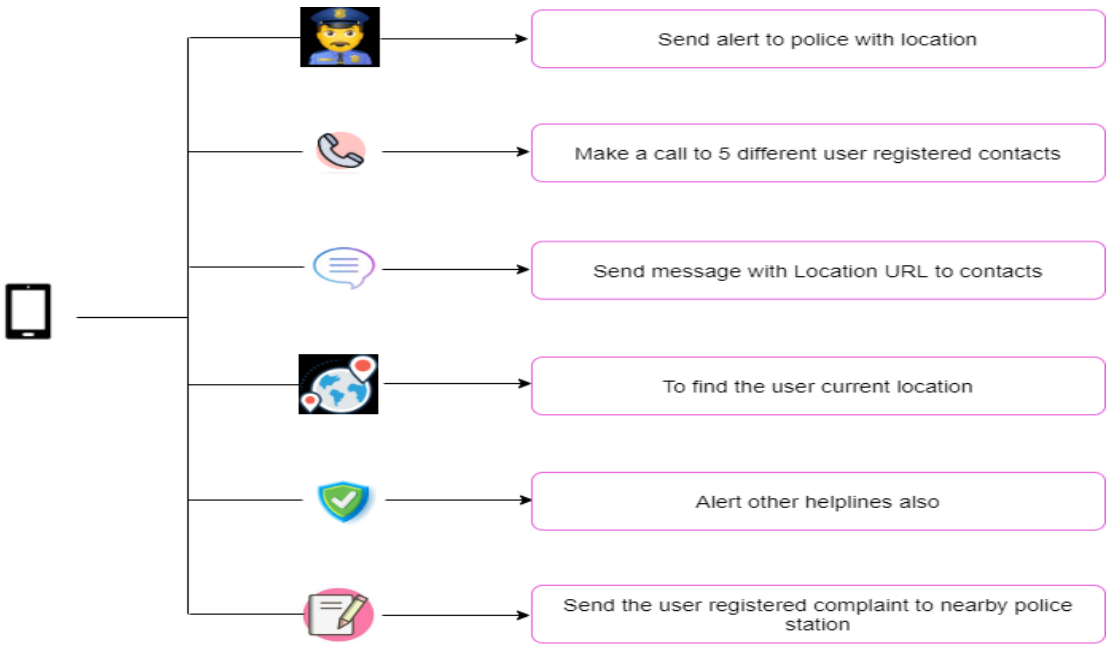
1.1 INTRODUCTION:

In most of the women safety application Victim has to press start button given on screen and send her location to police and selected contacts It is difficult in unsafe / dangerous situation to activate app by pressing start button given on screen, location is send with help of internet connection but in some places internet is not working .In our application we are developing a Safety applications that lets victim to activate application by tapping fingerprint sensor. Additionally, this app offers access to rescue and police helplines .When internet is not working this application send message with location URL and also calls the registered contacts. This Application continuously sends messages with location URL to registered numbers every three minutes. So the application can continuously track the victim's location. In our application there is also a complaint section , where women can file complaints about relatively minor incidents and this complaint directly send to nearest police station.

1.2 PROPOSED SOLUTION:

We are going to develop a Women Safety application that provide the victim to better security Instead of pressing start button on screen victim easily activate the app by just tap fingerprint sensor and alert selected contact and police and rescue helpline if she has no internet connection or GPS .System will send the continuous location of victim after every three minutes ,it provide better location if she is moving from one location to another .Also in this application we provide a complaint section for the women .

1.3 OVERVIEW OF PROPOSED SYSTEM:



1.4 OBJECTIVES:

The objective of our system is:

1-To form portable system that provides better security.

2- To send location without internet connection.

3- To activate the app without pressing button on application.

4- To provide an accurate and user–friendly interface.

5-To empower the women.

1.5 MOTIVATION:

As the safety of women is the prime concern in today situations. Daily we watch and listen the horrible incidents that happen to women. Women are not safe in any place. This thing motivates us to develop such an app that ensures the safety of women.

1.7 CHALLENGES:

1. A big challenge is to send the location of women in trouble without internet.

2. To activate app with fingerprint.

3. Continuously track the women location.

CHAPTER: 2

BACKGROUND / LITRATURE

1: Abhaya

Since more and more people in the modern world are utilizing smartphones, these devices can be effectively employed for personal security and other types of protection. A number of new apps have been created to give women security systems via their phones in response to the horrible tragedy that shocked the entire nation and made us more aware of safety issues. This essay introduces Abhaya, an Android app for women's safety that may be launched with a single click whenever the situation calls for it. With just one click, this app uses GPS to pinpoint a location, sends a message with the location URL to the contacts you've added, and calls the first one you've added for assistance.[1]

2: Women Safety

The greatest app to alert and update your loved ones if you are in a dangerous situation is Women Safety. The quickest and simplest way to inform your loved ones of your whereabouts and other information is through an app.The program sends an email with your location and alink to Google Map to one or more predefined email IDs with the simple push of a button. The program also records a video or audio clip, two photos—one with the front camera and the other with the back camera—and sends them to our server. A pre-configured email address receives a link to the image, audio, or video (s).[2]

3: I’m Safe

An simple and cryptographically secure women's safety app called I'm Safe was created to guarantee women's protection at all times. The app is simple to use, dependable, secure, and battery-friendly. I’m Safe comes with a number of functions that can be utilized both regularly and in life-threatening situations. The attributes are detailed below: dependable contacts on the app, you can add up to five trusted contacts with whom you can disclose your whereabouts and who you can promptly notify if you are in danger. You can decide whether to constantly disclose your whereabouts or only sometimes. You can change between the choices whenever you like.

The objective of this system mention in research work is to create a safety system in form of safety device for women that do following tasks:

1-victim has to press start button given on screen when she is in unsafe condition.

2-Alerts family and police and give location coordinate of women being victim when there is internet Connectivity.[3]

CHAPTER: 3

REQUIREMENTSANALYSIS

3.1 Requirements Gathering:

We are gathering requirements by studying existing Women safety application .Daily we watch and listen the horrible incidents that happens to women .All these help us to gather requirements to provide better safety to women and we tried to develop an application with modified features and better security.

3.2 Requirements Specification:

3.2.1 Functional Requirements:

Functional Requirement 1:

Function	Registration of User /Signup
Area	Functional(User)
Description	A female user must register herself after installation of application in order to use it

Functional Requirement 2:

Function	Login
Area	Functional(User)
Description	User login into application by entering username and password.

Functional Requirement 3:

Function	Registered Contacts
Area	Functional(User)
Description	User must add the 5 contacts from friends or family.

Functional Requirements 4:

Function	View contacts
Area	Functional(User)
Description	User views the list of contacts and if she wants to edit contacts then changes the contacts.

Functional Requirement 5:

Function	See Safety Tips
Area	Functional(User)
Description	User also sees safety tips that help to defense herself when she is in danger.

Functional Requirement 6:

Function	Registered complaint
Area	Functional(User)
Description	User registered a complaint about minor incident and complaint by entering the Name, CNIC, Phone number and Address.

3.3.2 Non-Functional Requirements:

Non-Functional Requirements 1:

Non- Function	Performance
Area	Non- Functional
Description	The response time of system should be very small for efficient working.

Non-Functional Requirement 2:

Non-Function	User Interface Design
Area	Non- Functional
Description	The Interface design should be simple and easily understood by user.

Non-Functional Requirements 3:

Non-Function	Security
Area	Non- Functional
Description	Only authorized user should be allowed to access the system.

Non-Functional Requirement 4:

Non-Function	Operational
Area	Non- Functional
Description	This application will run on smartphone.

3.3 Constraints:

1-Android device must have fingerprint sensor

2-Android device must support text messaging

3-Android devise must have GPS location.

3.4 Modules:

1-Registeration:

In this user create an account and enter the details and is headed the home screen.

2- Login:-

If user already has an account then he can login.

3- Registered Contacts:-

In this user registered the contacts name and number of family members or friends.

4- View contacts:-

In this module user view the registered contacts.

5- Women safety tips section:-

In this section, user see the important and necessary tips about the safety what women should do when they are in danger.

6-Complaint Section:-

In this section woman register the complaint about minor incident and the complaint directly send to nearest police station.

CHAPTER: 4

DESIGN AND ANALYSIS

4.1 INTRODUCTION:-

The 2nd phase of SDLC is Design phase. In this phase we are making arrangements for the creation of our idea. In this phase the overall project idea is clarified requirements are made understandable so the chance of getting major issues in later stages is reduced. As a minor fault in understanding the requirements or making any wrong interpretation will lead us to incorrect design.

In our project we created an early design of our proposed system. We tried to define all the modules of our system and tried to show their interaction with each other. We have seen different design interfaces and analyzed different goals of our software to check how different features are going to work when user is interacting with system and tried to develop a better user interface.

4.2 OBJECTIVES:-

- To provide better security.
- To provide user friendly interface.

4.3 ACTIVITIES FOR BETTER DESIGN DEVELOPMENT:-

We construct following diagrams for better and effective interface

1-Use Case Diagram

2-Activity Diagram

3-Sequence Diagram

4-DFD

5-ERD

6-Architecture Diagram

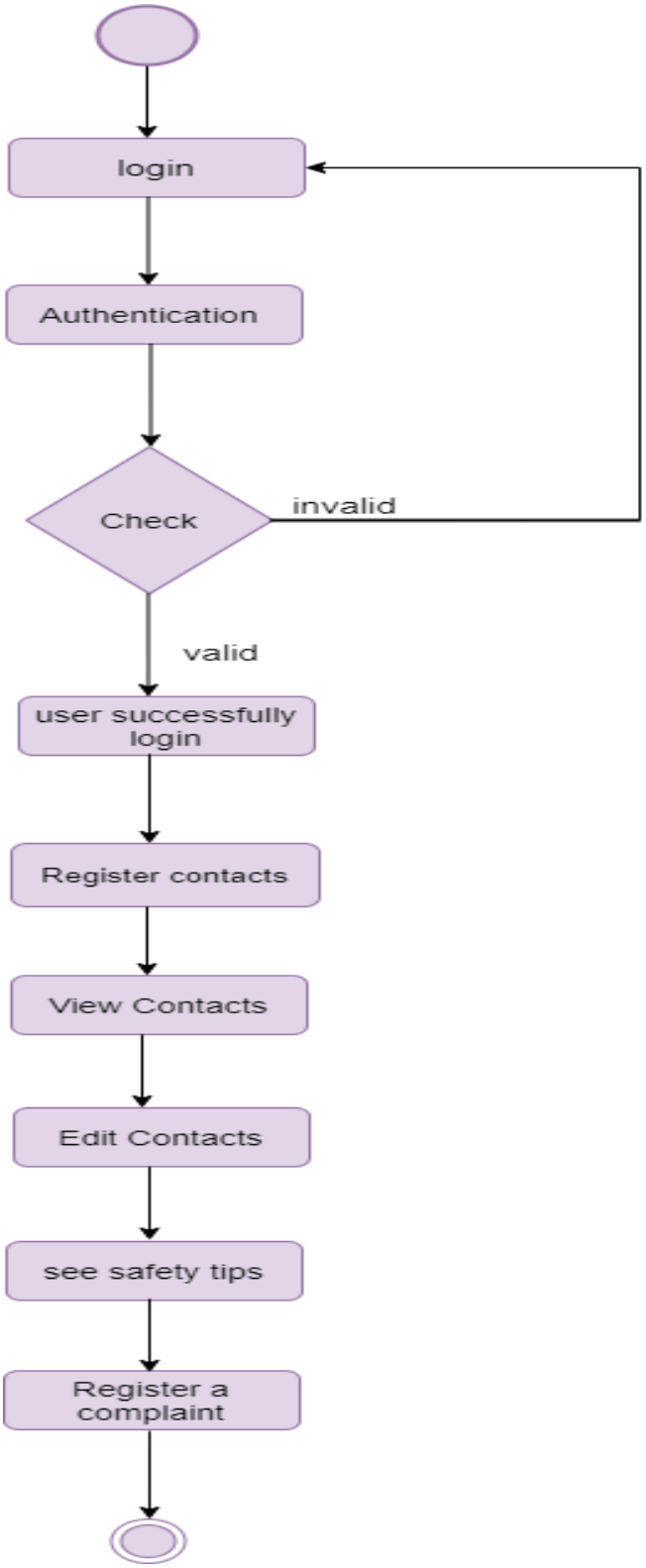
7-Mockups

Use-case:

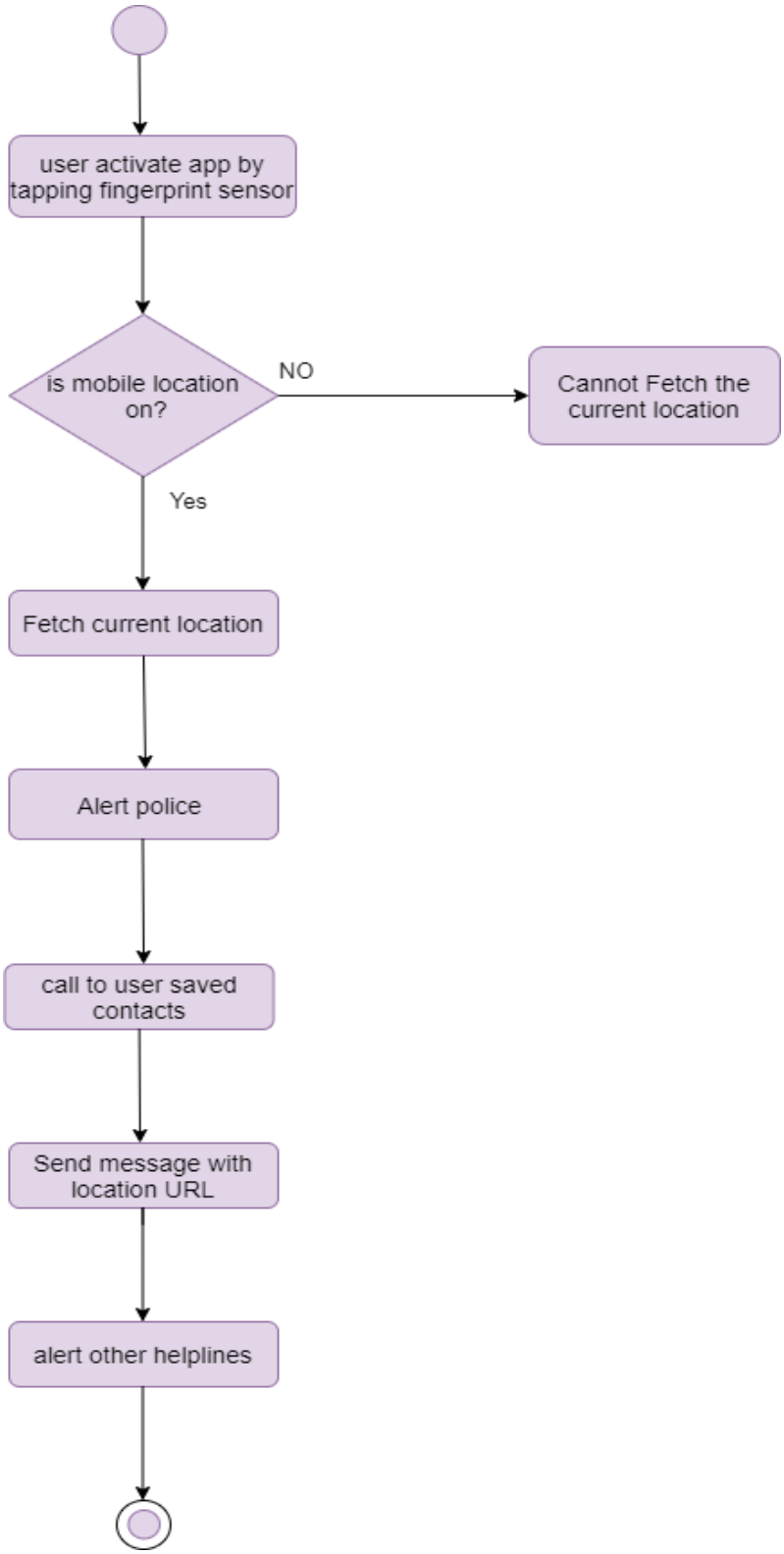

TapToSafety
sign up
login
add contacts
View contacts
Edit contacts
see safety tips
calling & messaging
send location
register a complaint
alert police
alert other helplines
User
system

ACTIVITY DIAGRAM :

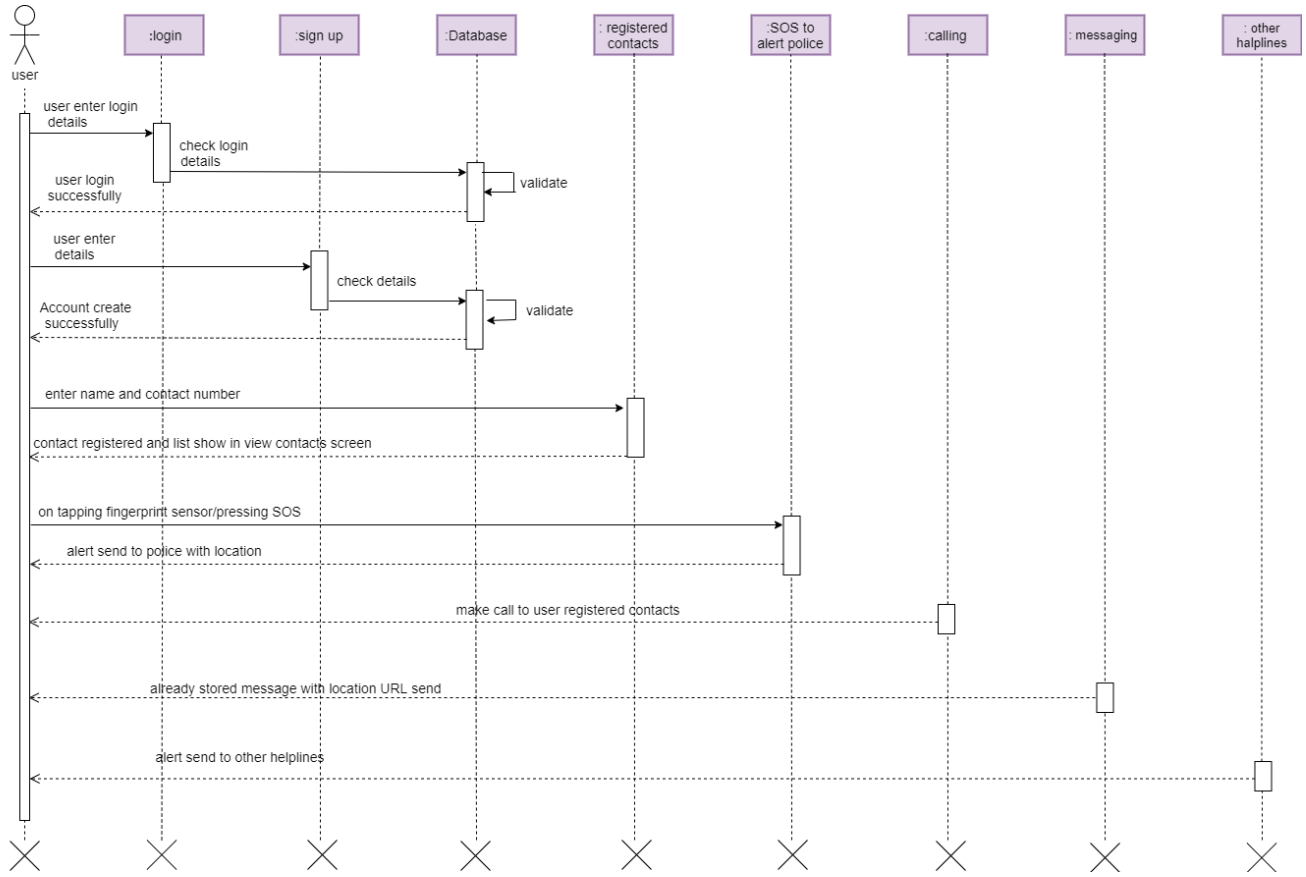
In safe condition/First time use :



In unsafe Condition:



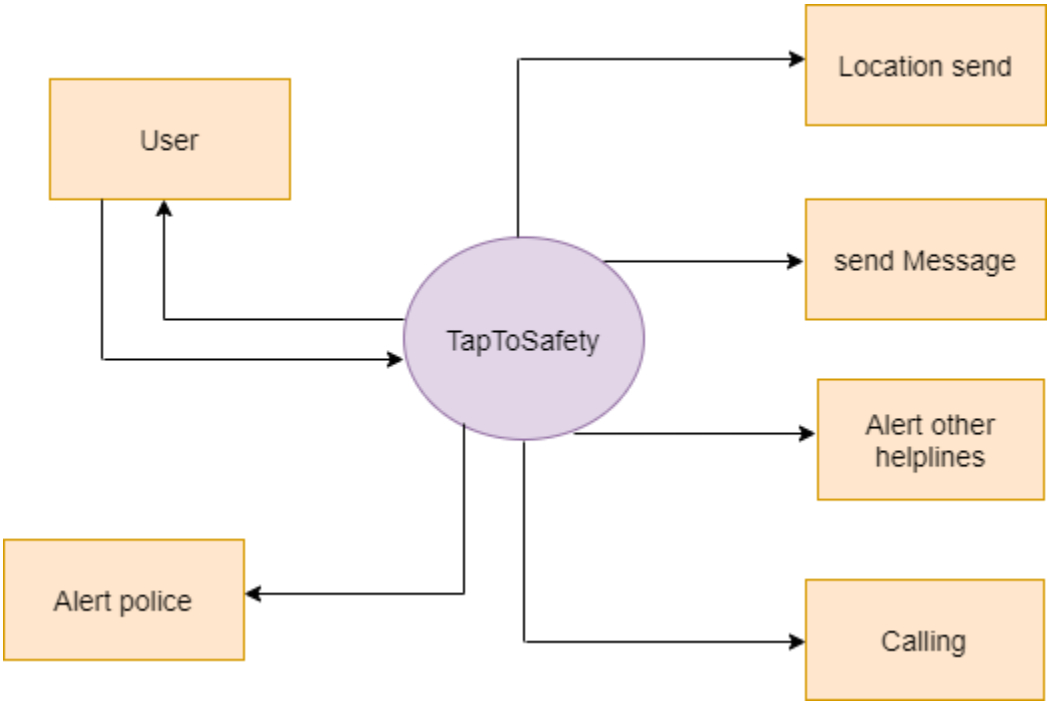
Sequence Diagram:



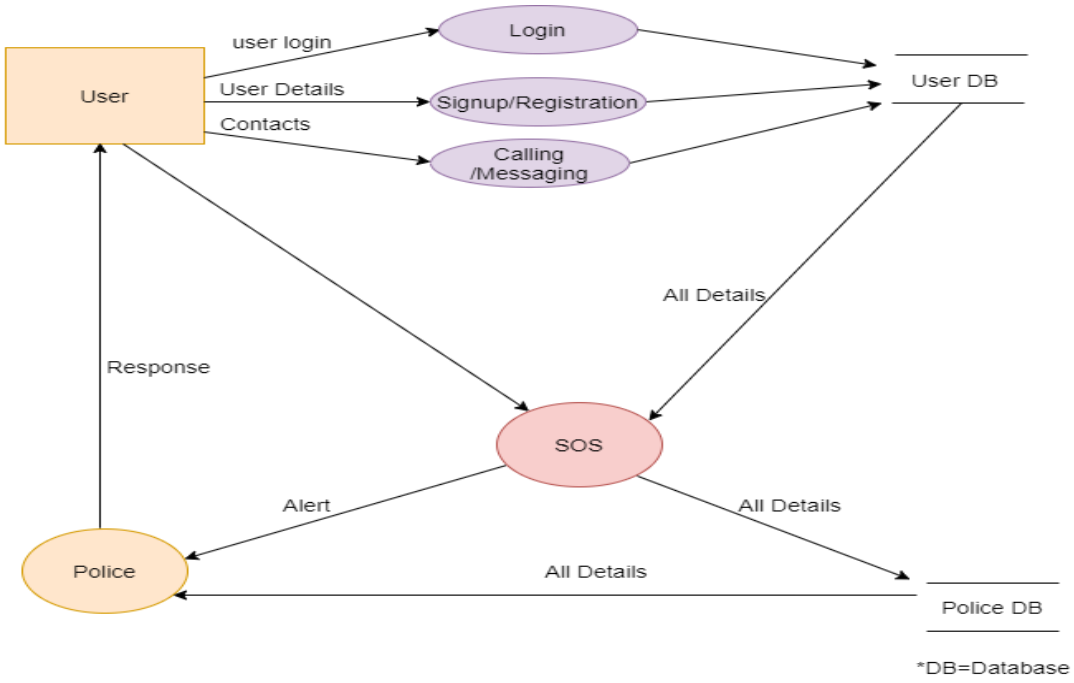
DFD(Data Flow Diagram):

Level Zero:

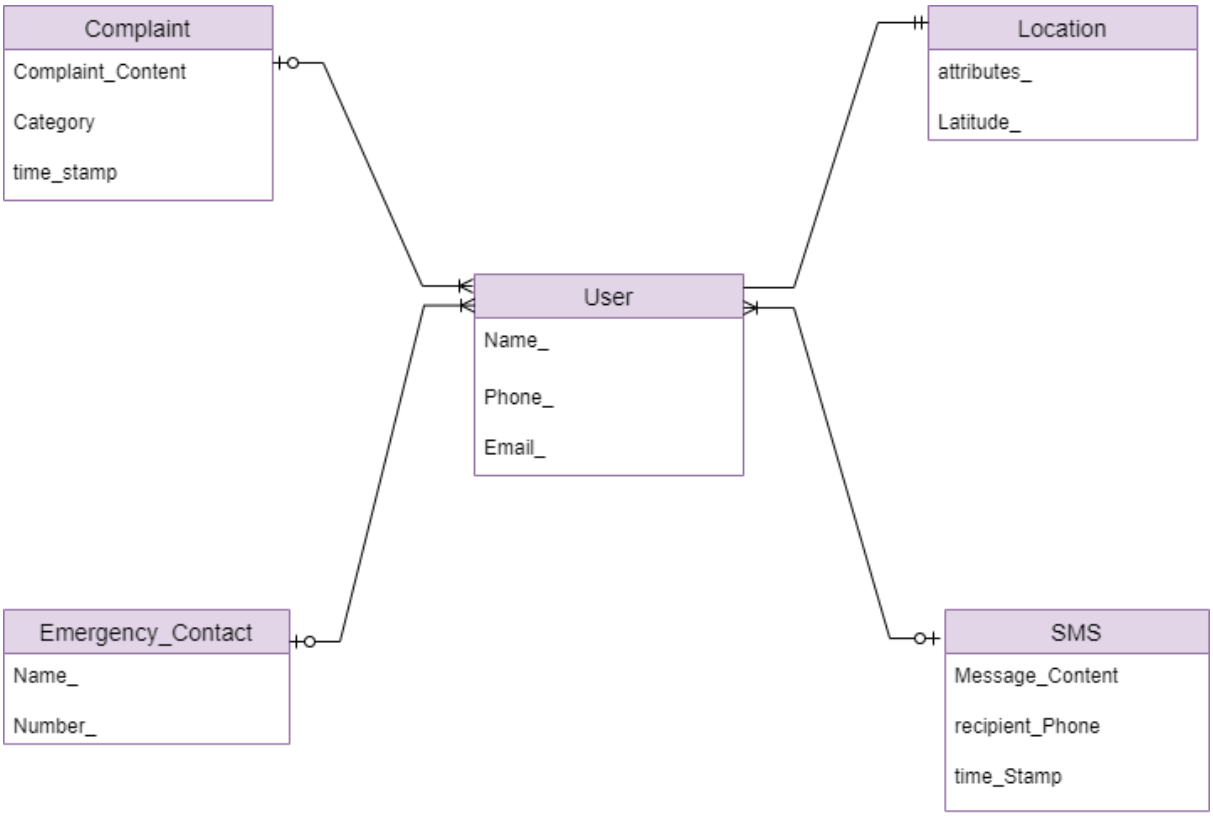
Level One:



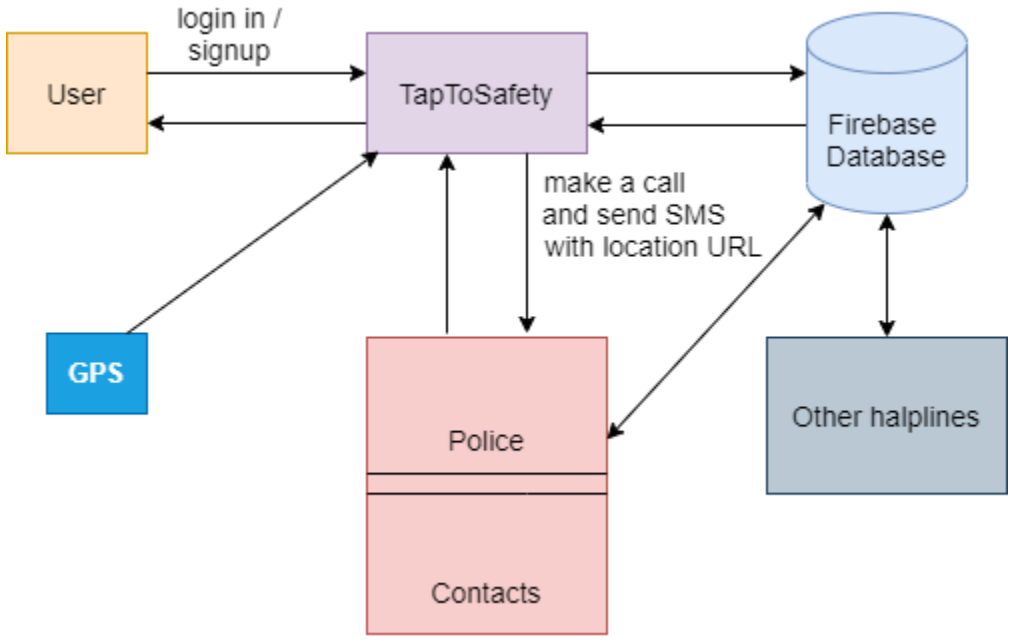
Level 2:

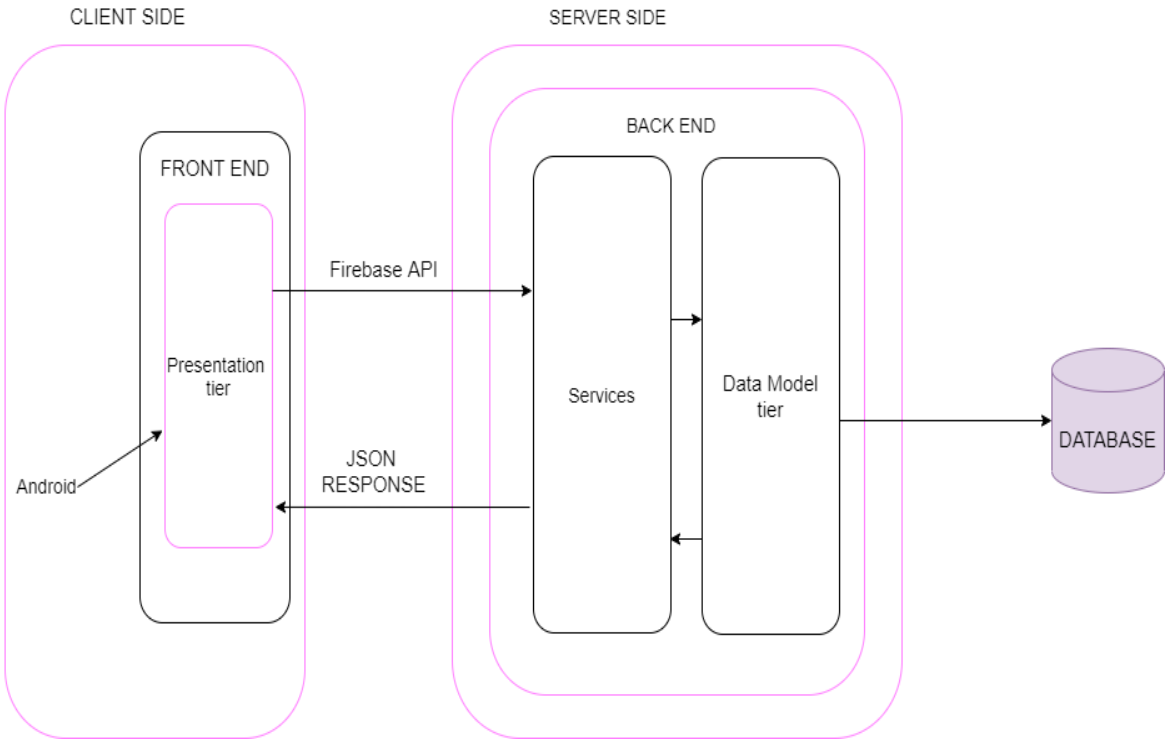


ERD (Entity Relationship Diagram):



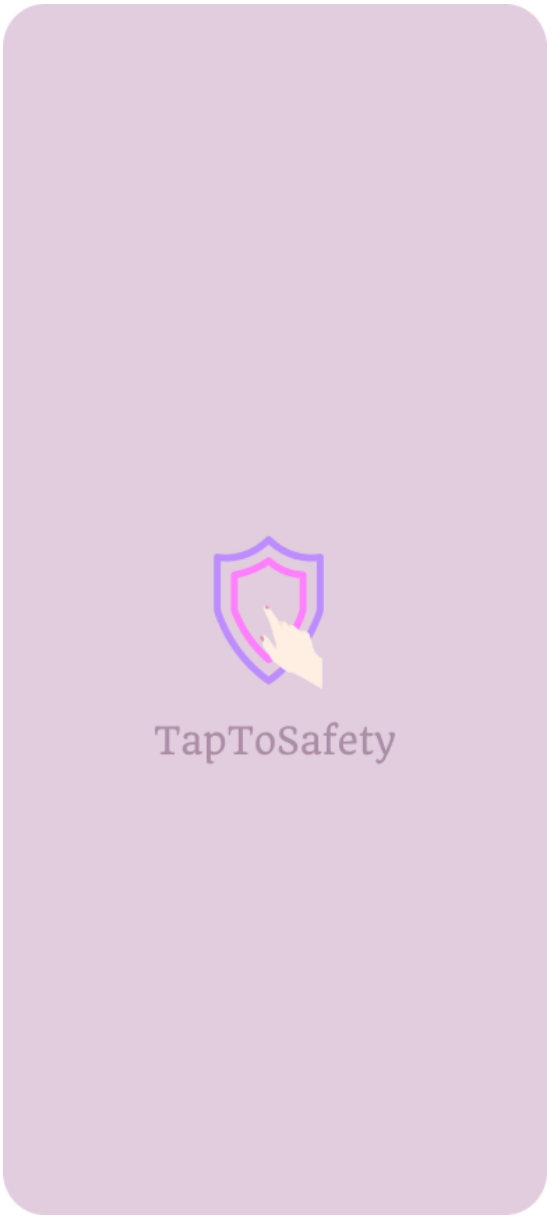
Architecture Diagram:



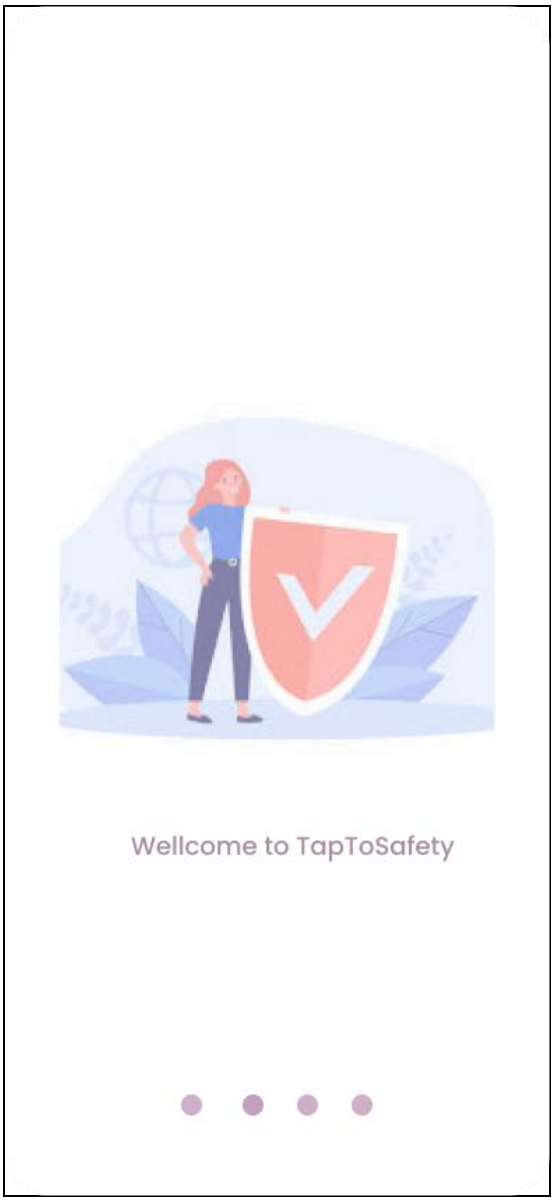


Mockups:

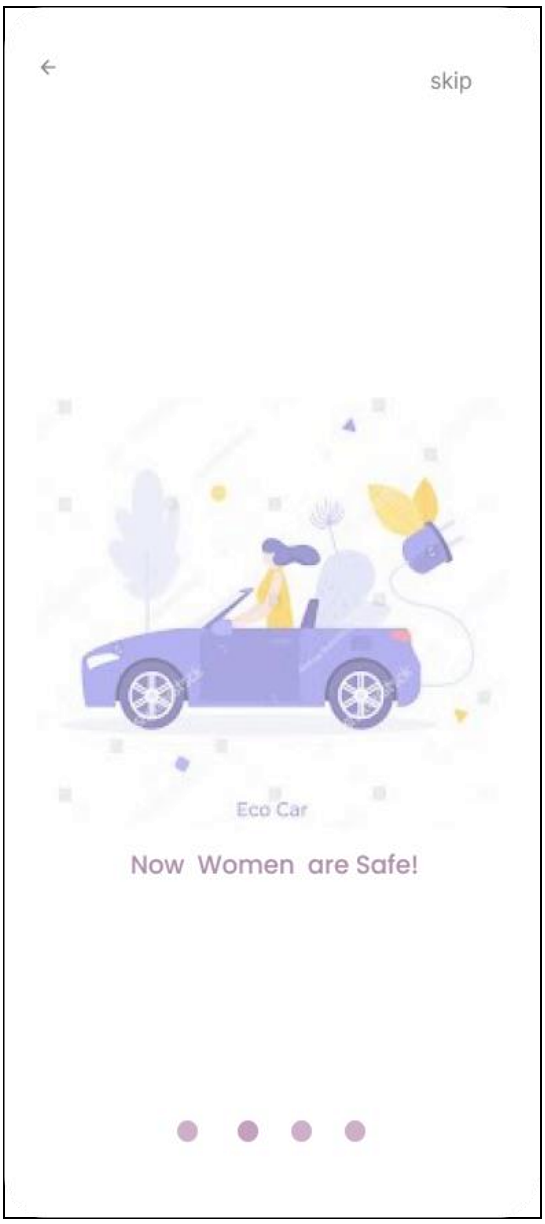
Splash screen



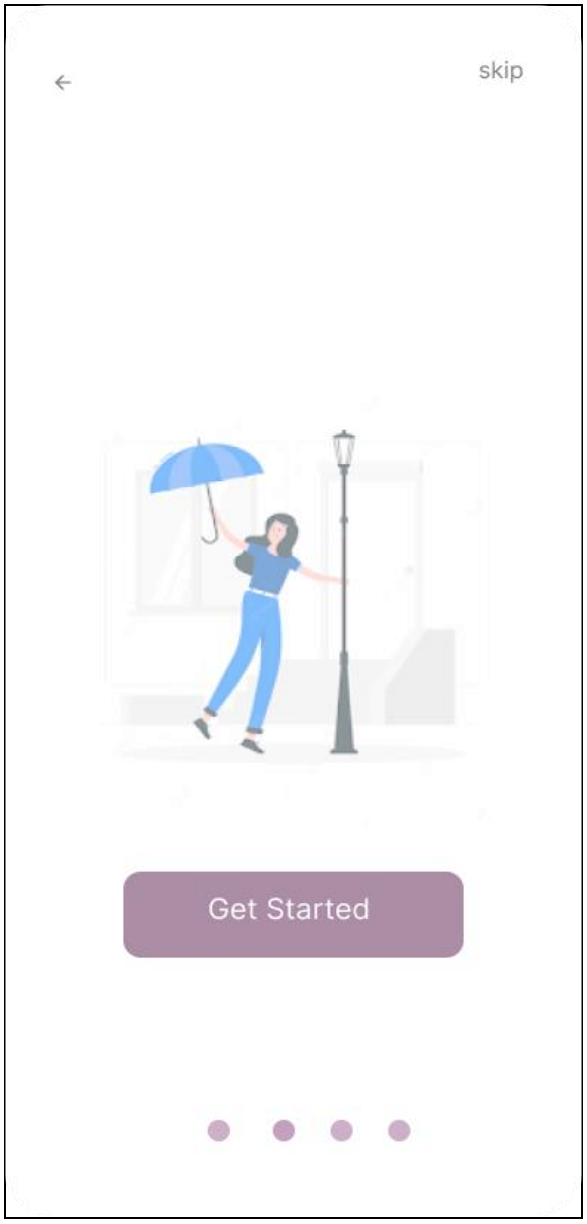
Onboarding screen 1



Onboarding screen 2



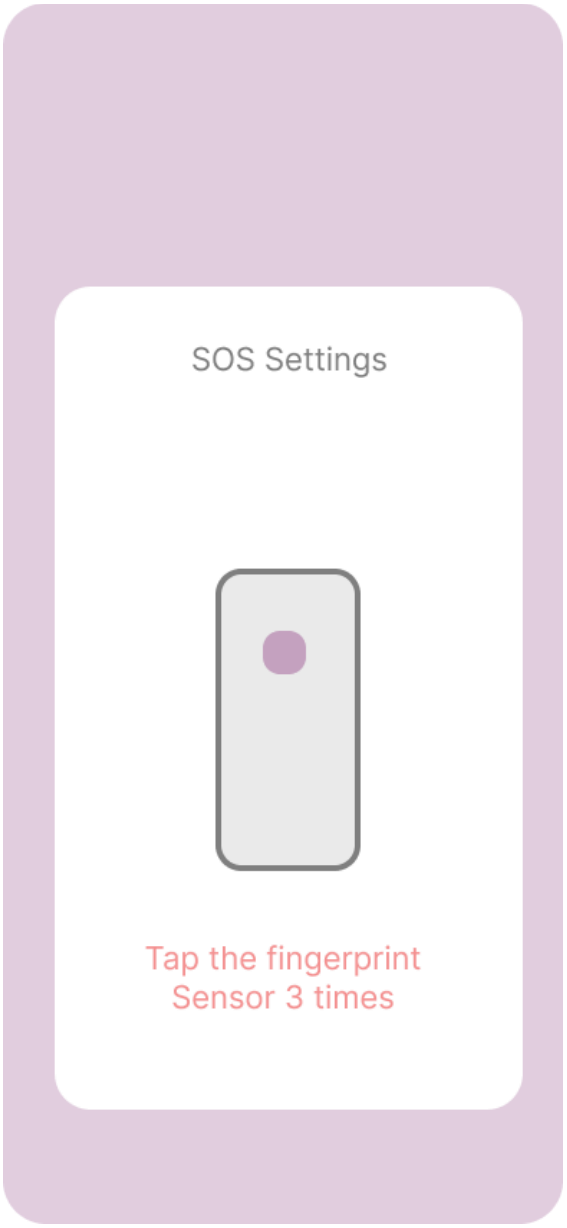
Onboarding screen 3



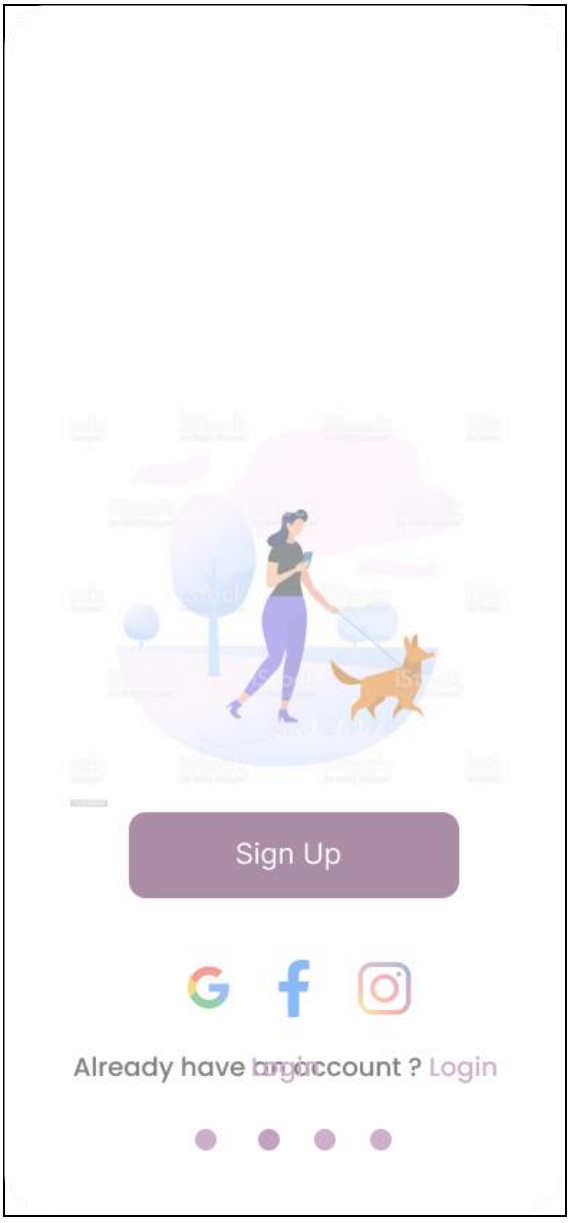
Permission screen

permission screen (1)

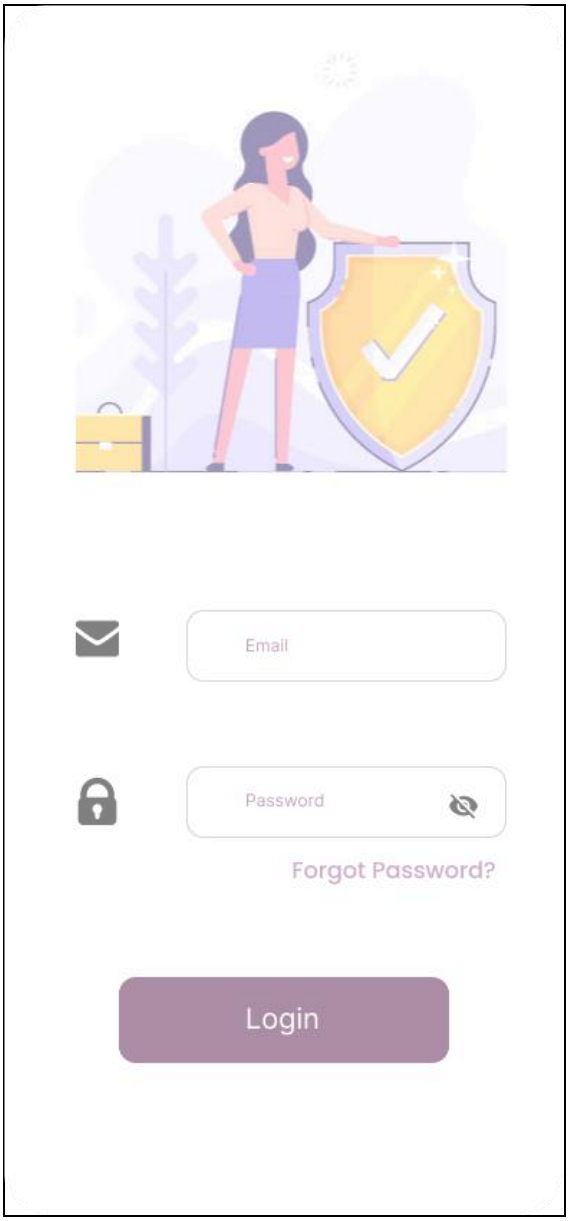
SOS settings



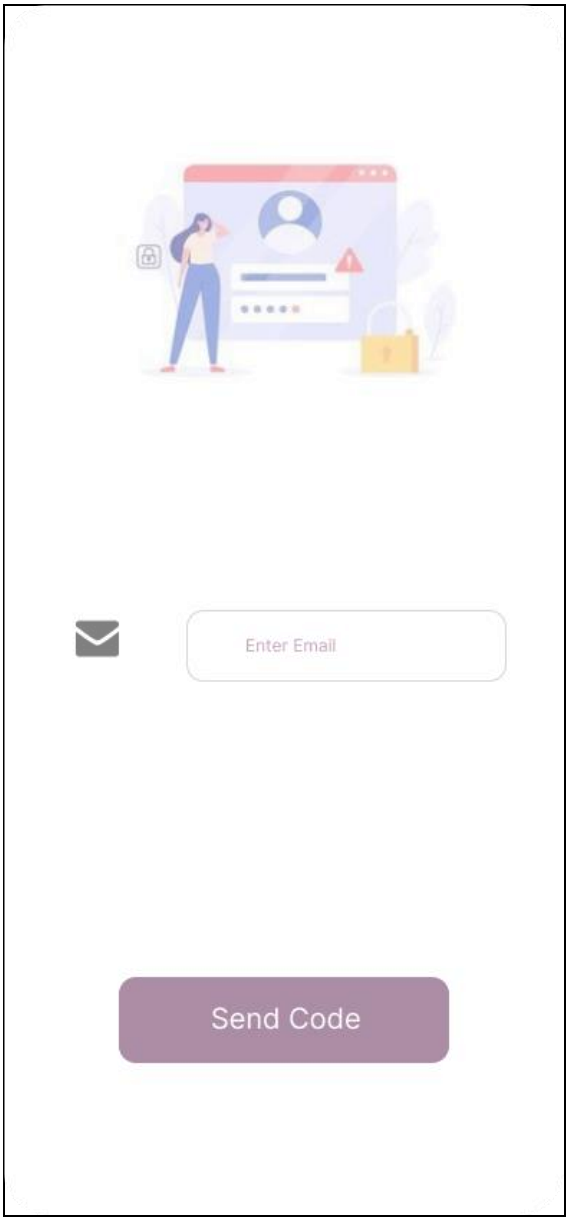
Onboarding screen 4



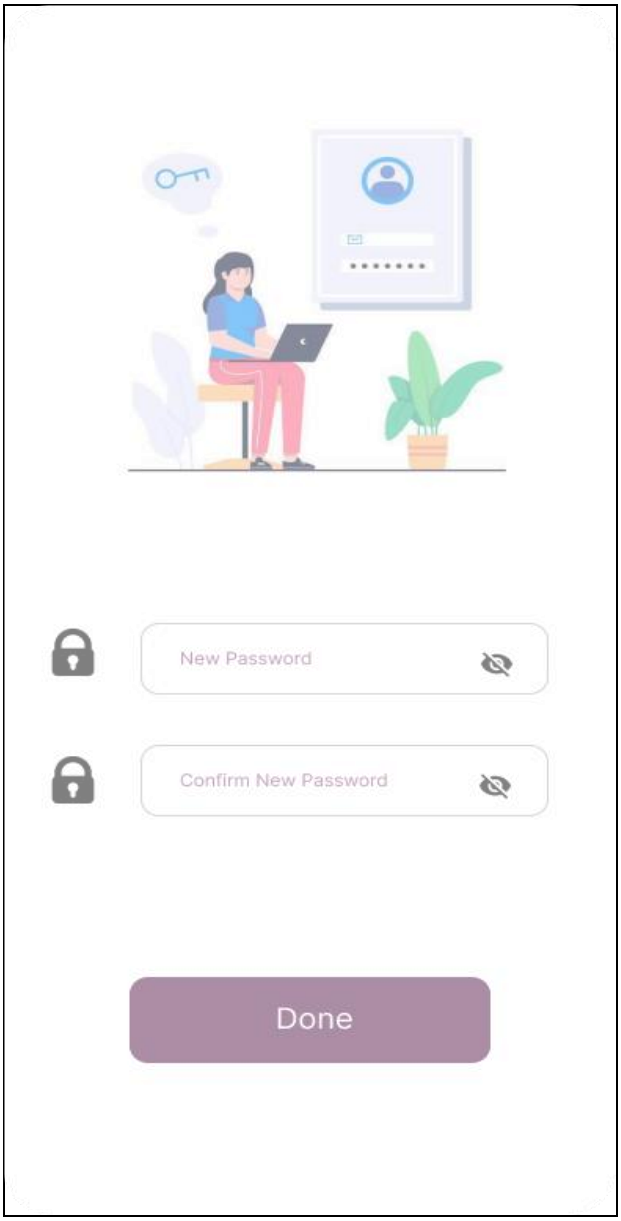
Login screen



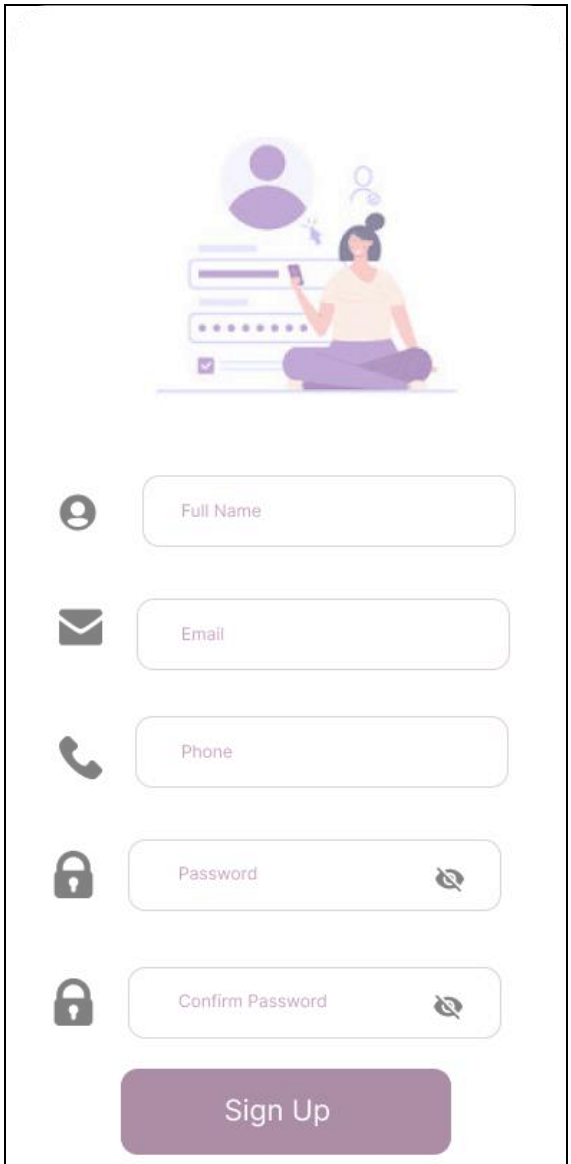
Forget password



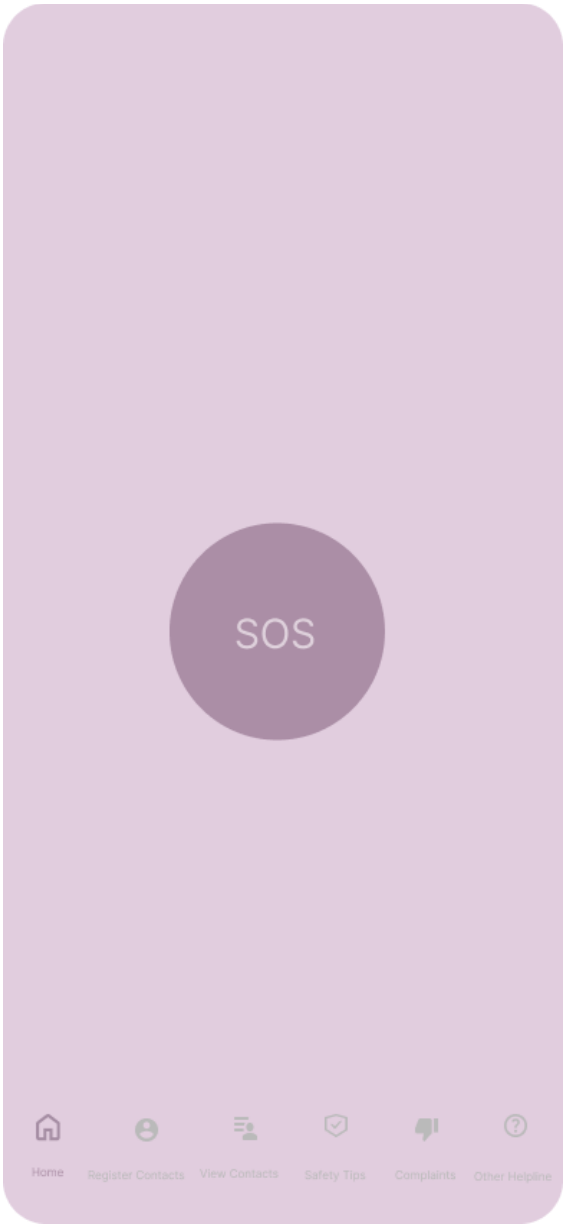
Reset password



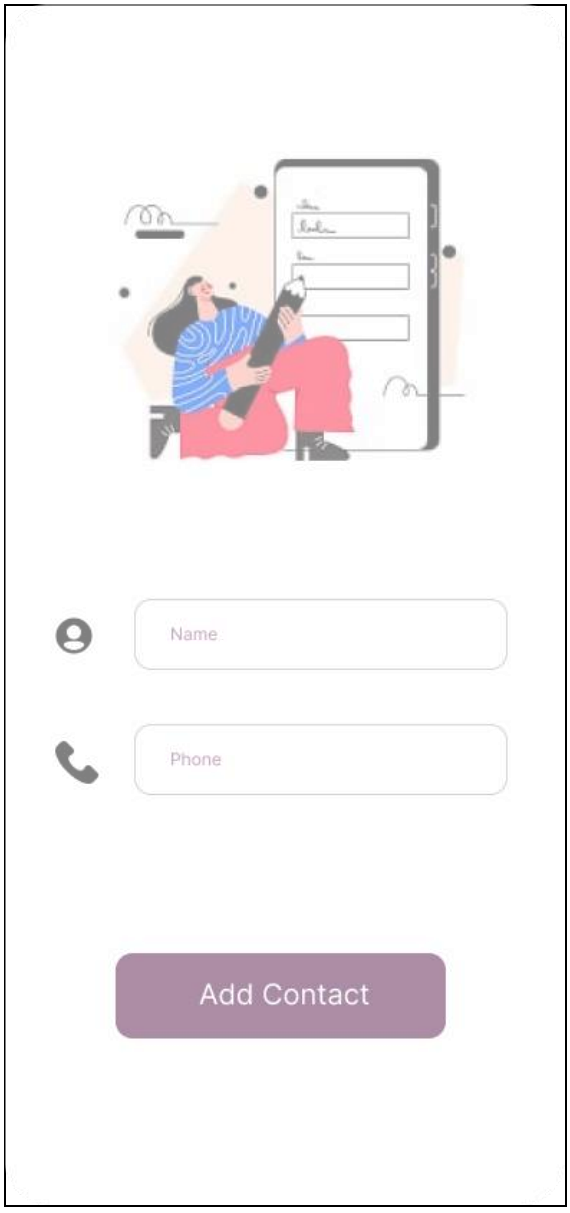
Sign up



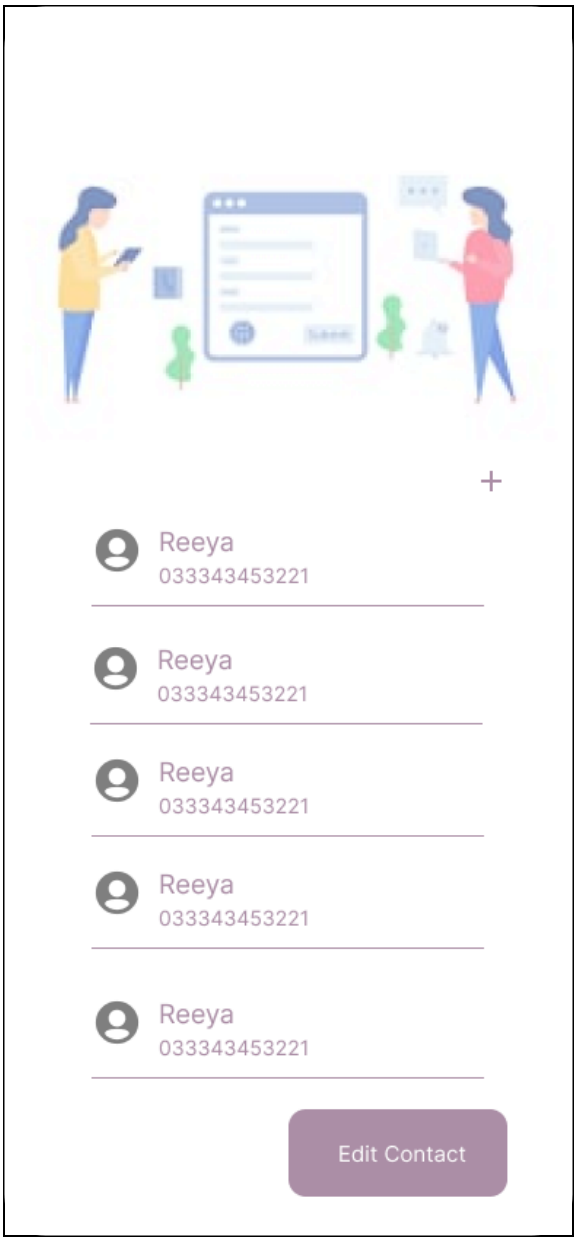
Home screen



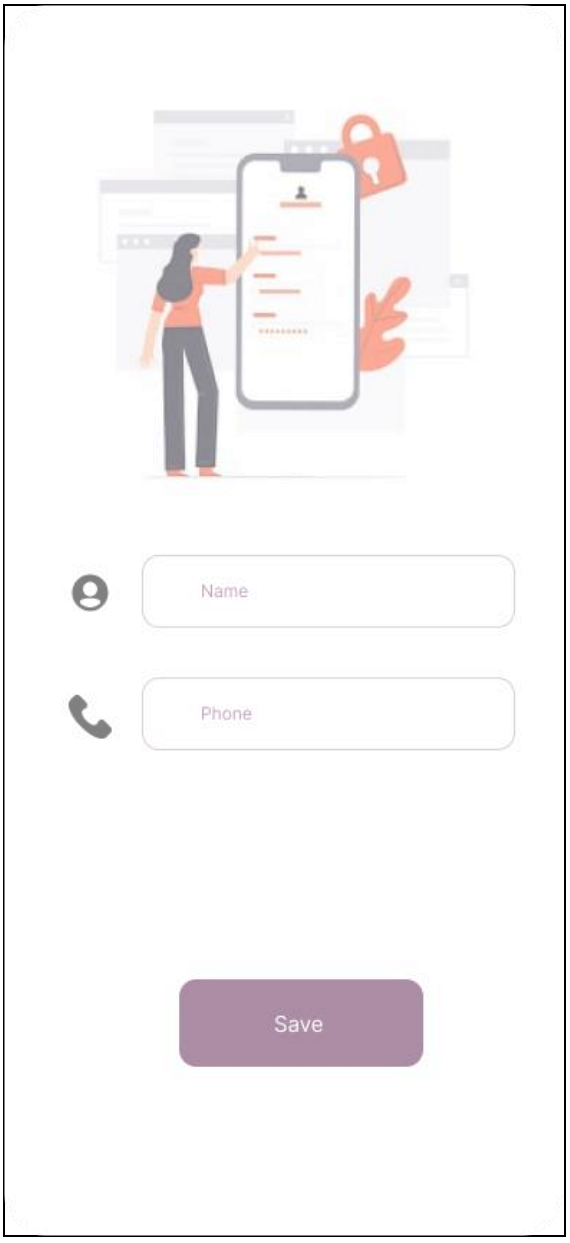
Registered contacts



View contacts



Edit contacts



Safety tips

1. Let girls' and women's voice be heard

Most importantly, #HearMeToo. Women and girls should be the at the centre of all design and delivery.

2. Connect to those who know, who care

When developing programmes, ensure local women's and youth organisations are consulted and build on their best practices and evidence. And for the many men and boys who are champions for an end to GBV, let's work together.

3. Light the way

All shelters, latrines, water points and pathways within camps must have ample lighting to reduce the risk of sexual violence.

Register complaint

Name

CNIC

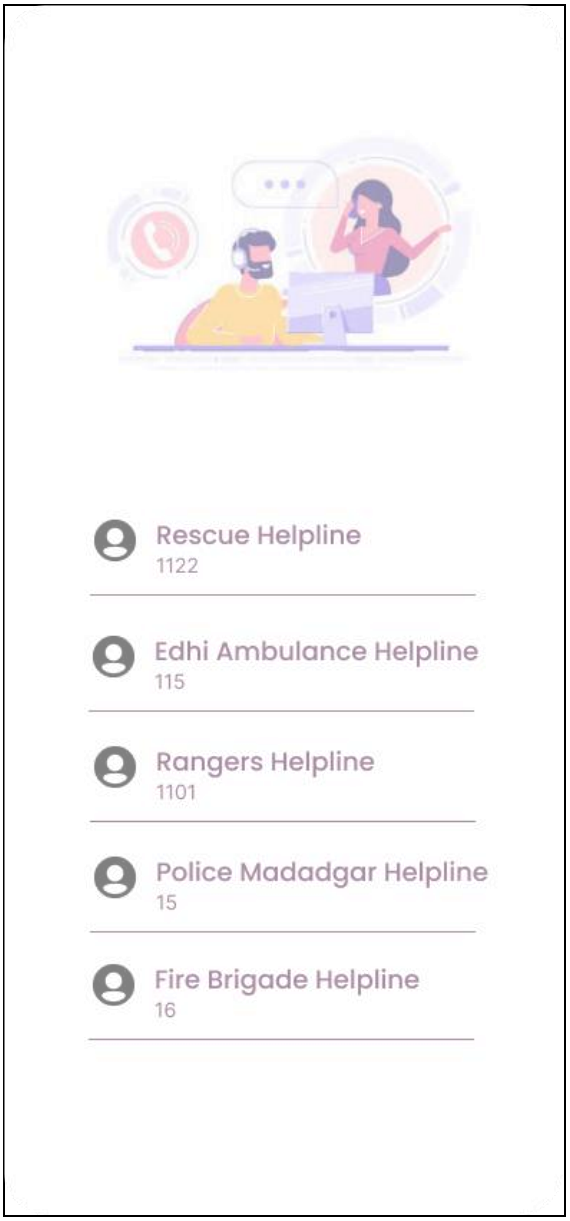
Phone

Address

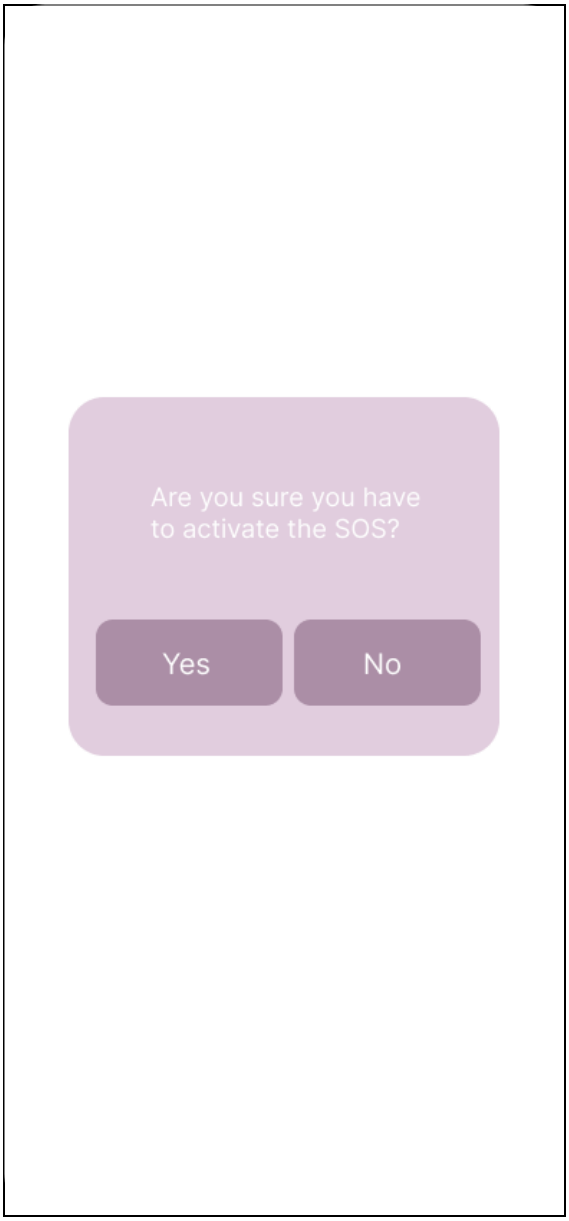
Complaint

Send

Other helplines

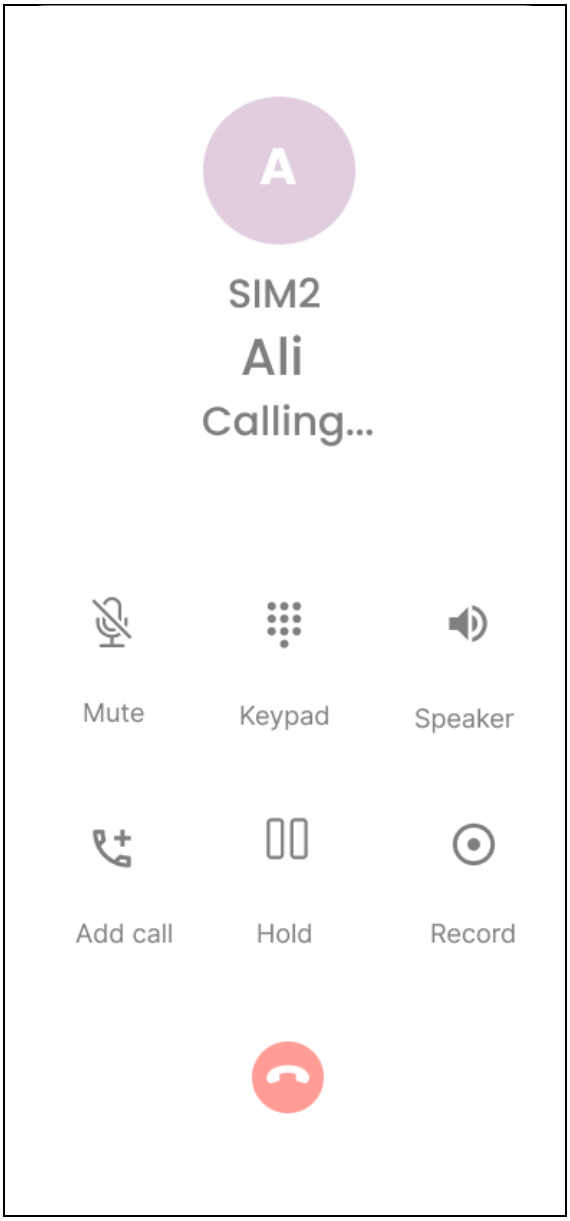


Confirmation for activating SOS

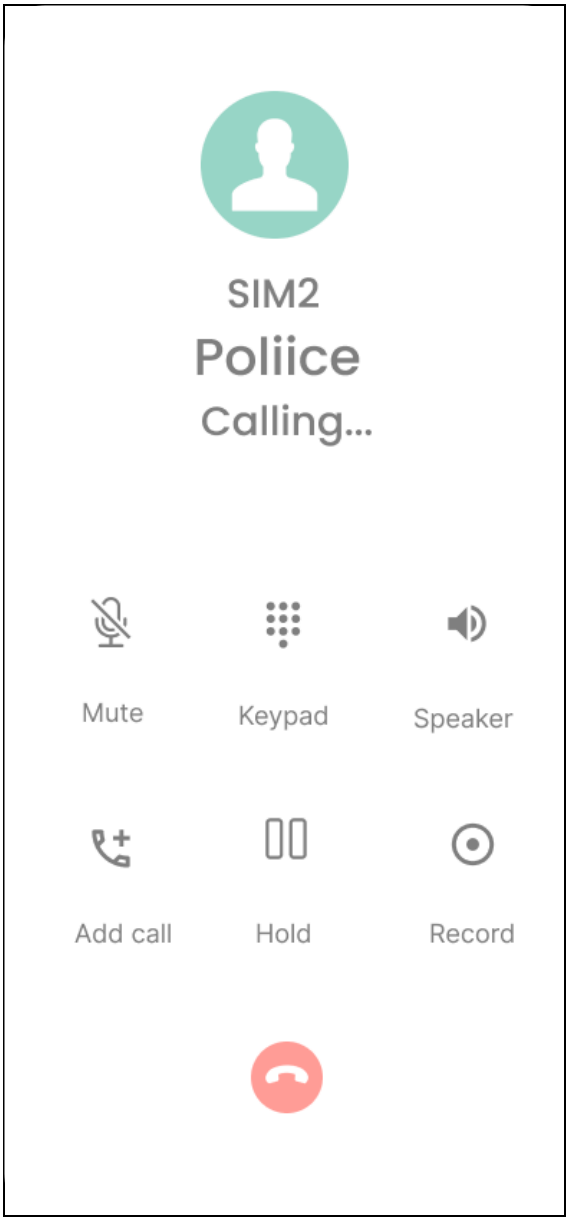


Location tracking

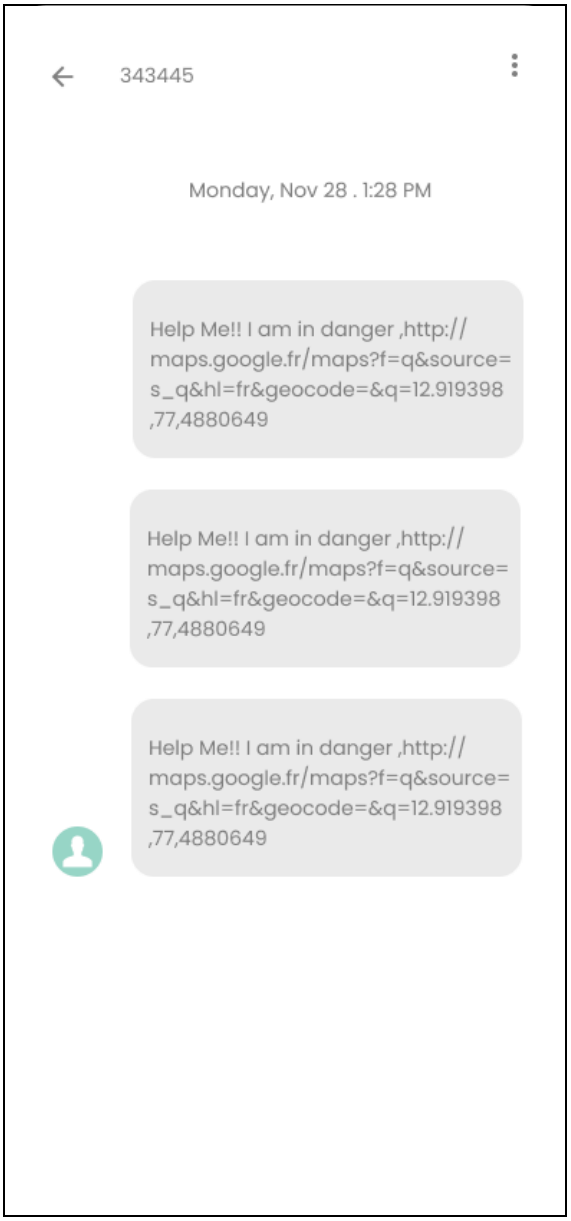
Calling register contact



Callin police



Message registered contacts



PERCENTAGE OF LEARNING:

FLUTTER :

1- Reeya Nadeen(SE120192103) **: Basic**
2- Vaneeza Mobin(SE120192110) **: Basic**

REFERENCES:

[1] **https://play.google.com/store/apps/details?id=com.abhay.priya**

[2] **https://play.google.com/store/apps/details?id=com.ruah.imsafev**

[3] **https://play.google.com/store/apps/details?id=com.awesome_apps.women_safety**