UX/UI Case Study



REDESIGN FOR THE 112 INDIA APP



Elevating User Experience, Accelerating Emergency Response & Ensuring Accessibility for All

## 112 OBJECTIVE

The objective of this project is to enhance the user experience and visual appeal of the 112 India mobile application. The redesign aims to streamline the application, improve accessibility, and ensure a user-friendly experience during emergency situations.

- User Research
- Find Pain Points
- Information architecture
- Wireframing
- Prototyping

## WORKFLOW OF THE PROJECT

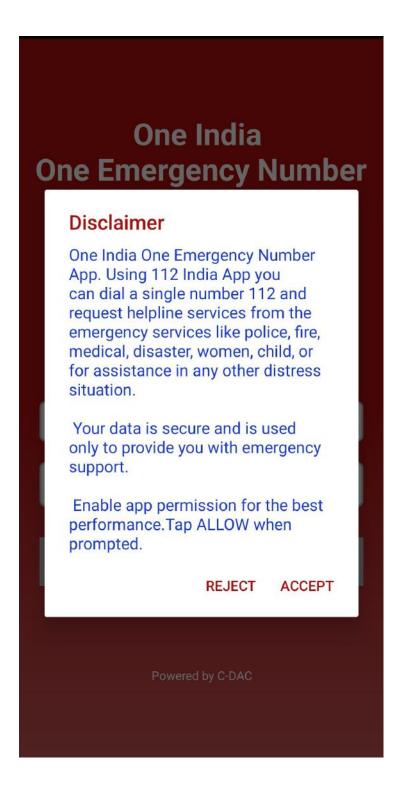
## 112 ABOUT

Emergencies can strike at any time, leaving individuals vulnerable and in need of immediate assistance. To address this critical concern, the Government of India has introduced the 112 India app, a mobile application designed to provide citizens with a quick and easy way to access emergency services in times of distress.

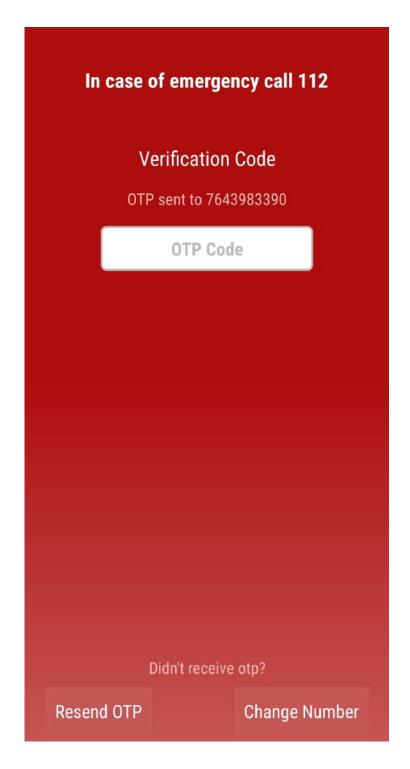
The app's functionality is pretty simple and straightforward. It automatically sends a user's details such as name, age, emergency contact and location to the local emergency service delivery departments and to nearby volunteers. Along with this, it also generates an automated call to 112 — the State Emergency Control Room — and also notifies the person's emergency contact.

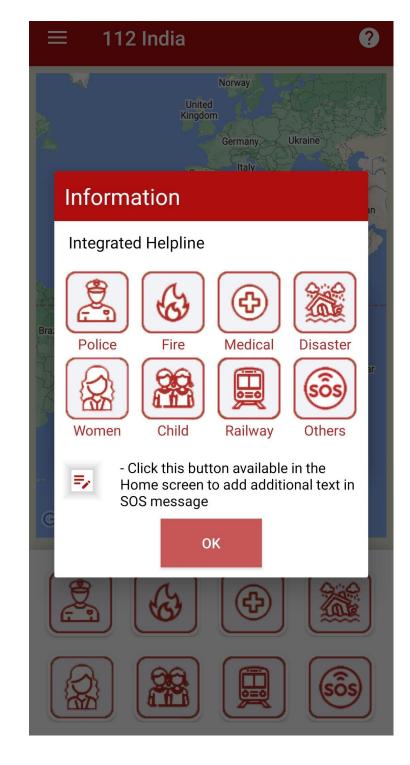
# HOWIT WORKS?

#### **EXISTING UI OF THE APP**

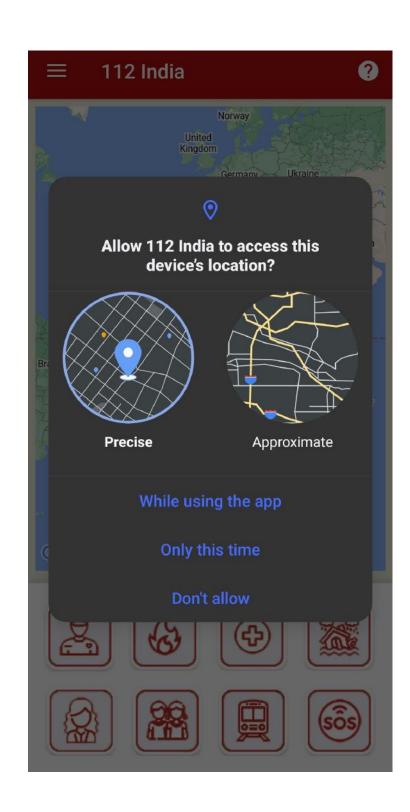


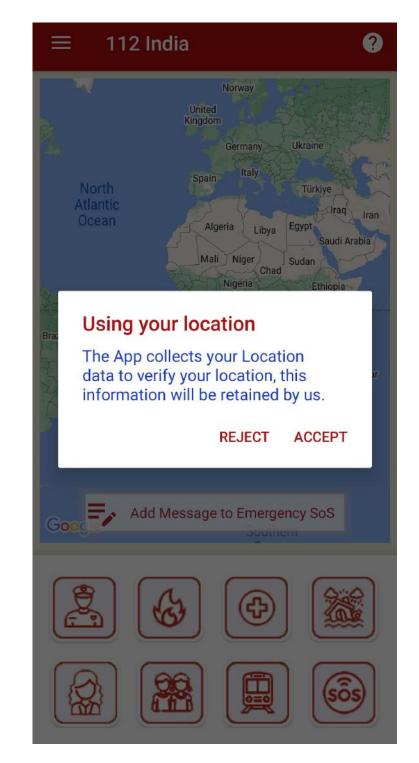


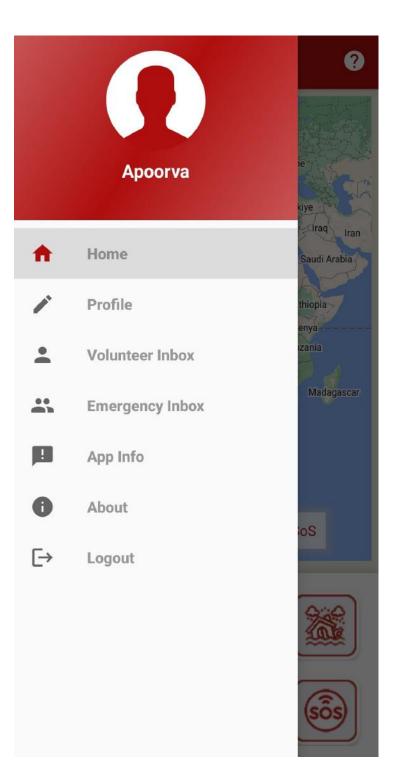




#### **EXISTING UI OF THE APP**



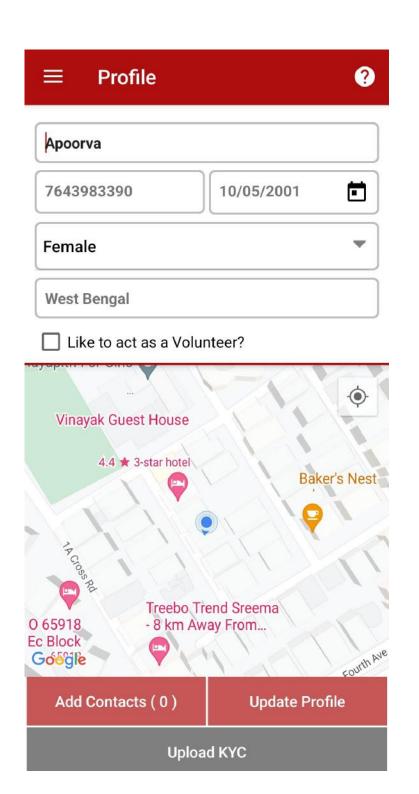






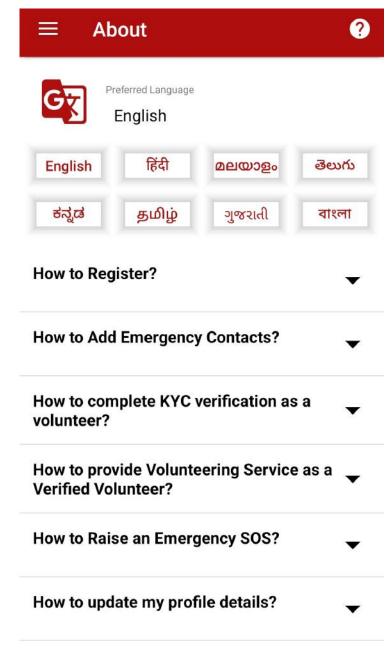
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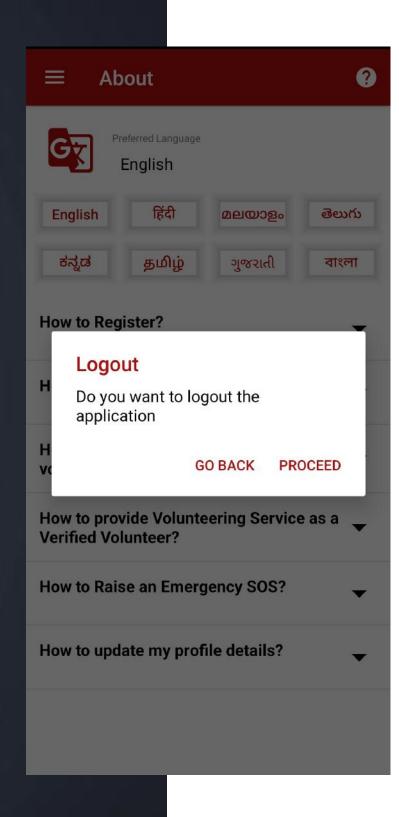
#### **EXISTING UI OF THE APP**











#### ANALYSIS OF THE EXISTING UI OF THE APP

- The Profile icon of both user man and woman are same, that is of a man.
- The map is default at world map, but if the app is for India, it should be set to India.
- The app should be available offline also.
- The icons are very confusing and less clearer.
- Colour palette lacks contrast and highlight, which makes all the information look similar.
- The person in danger may be specially abled, but there is no such feature for them.
- The whole layout is chaotic and lacks consistent identity of app.

## 112 FEATURES

Multiple Ways to Request Assistance: Call, SMS, email, web request, or panic buttons.

#### **Single Emergency Number:**

Dial 112 from anywhere in India for prompt help.

#### **Nearest Emergency Response:**

Police, fire, medical, volunteers and disaster teams dispatched promptly.

#### **Automatic Location Tracking:**

Your location is pinpointed for rapid response.

#### **Centralized Coordination:**

State-level control centers ensure efficient response.

#### TASK 1

#### Ask for help through panic buttons

- Open the app.
- Single Tap on the panic button.
- The user will recieve a call on their phone number by the nearest control room for confirmation.

- If call is not attended then the help reaches directly to the location.
- The person will also be notified about the volunteer who will help them with their location and mobile number.

## USER JOURNEY

#### TASK 1

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## USER JOURNEY

Feature	112 India App	Red SOS App	My SOS App	SafeSOS App	Himmat App
Emergency Number	11	2 181	108	-	112
Availability	Pan-India	Pan-India	Pan-India	Pan-India	Pan-India
Emergency Response Options	Police, Fire, Medical, Disaster Management	Police, Fire, Medical	Police, Ambulance	Police, Ambulance, Fire, SOS, Panic Button	Police, Fire, Medical, SOS, Panic Button
Location Sharing	Yes	Yes	Yes	Yes	Yes
SOS Alert	Single-tap SOS	Panic button	Panic button	Panic button, SOS Button	Panic Button, Location Sharing
Multi-lingual Support	Yes	Yes	No	Yes	No
Real-time Vehicle Tracking	Yes	Yes	No	Yes	Yes
Integration with Existing Emerge	nc Yes	Yes	No	Yes	Yes
Citizen Profile Management	Yes	No	No	Yes	No
Feedback Mechanism	Yes	Yes	No	Yes	No
Developer	C-DAC	Red SOS Tech Pvt. Ltd.	My SOS App	SafeHouse Labs	Himmat App

## 112 COMPETITOR ANALYSIS

## SURVEY QUESTIONAIRE

Q. Have you used the 112 App before?

Ans: a. Yes b. No

Q. Which among the below icons of the buttons are you able to identify and understand the purpose it will serve? Ans.



Q. Do you like the existing buttons or want to change it to be more clear and defined?

Ans. a. Change

b. No Change

Q. How satisfied are you with the colour palette of the app?

Ans. a. 1

b. 2

c. 3

d. 4

e. 5

### Q. How satisfied are you with the font of the app?

- Ans. a. 1
  - b. 2
  - c. 3
  - d. 4
  - e. 5

## Q. How would you describe the current design of the 112 India app interface?

- Ans. a. Modern and visually appealing
  - b. Functional but could be improved
  - c. Outdated
  - d. Confusing

### Q. What features would you like to see added to the app?

Ans. Short Answer

Q. What changes would you like to see made to the 112 India app UI?

Ans. Long Answer

## SURVEY QUESTIONAIRE

- A large number of people have not used the app before.
- Talking about the UI, majority of user found it functional but needs to be improved, others found it outdated and confusing.
- The users were somewhat satisfied by the font but it lacked contrast within vaious information.
- The buttons were not looking like buttons but more of an informative icon.
- The user wanted a change colour palette.

## ANALYSIS OF RESPONSES

- The icons of women, child, disaster were unable to signify the purpose it serves.
- There are many icons, so, it creates a state of confusion in panic situation.
- Icons should be more bold.
- Some user suggested the feature of voice note to be added.
- Some suggested a feature of loud noise to catch the attention of other people towards the person in need.
- Phone side buttons can be used to contact the control room while offline.
- The app should be more accessible to specially abled users.

## CARD SORTING OF APP FEEDBACKS

### Confirmation before sendingany signal to police

Please add confirmation before sending any signal to police. While I checking the app the app send stress signal to police just after a touch to button.

It would have been better if you could add a warning note above the panic buttons. That will avoid accidental/experimental calls to the Police. Today after installing the app I touched the other button thinking it will popup some other menu. But panic call gone to police and they called me back. Now I am afraid to keep the app, children may open the app and touch any button to see whats the app. More over since it is an emergency app more controls or locks canot be added. Nice App. 112 India.

It's a great app though, I didn't knew about the alert system that it directly go to the HQ, so I end up getting calls and calls and they were little rude as because I may have done some chaos unknowingly, but please make sure you show the alert ON and Off option and how to stop it.

#### **UI** is very confusing

I need to update my kyc,but it doesn't have an option to do so(keeps showing kyc verify pending)also in the new update button layout is bad,previous version button order was good.

UI/UX is horrible. I was disappointed by this considering the recent strides the government has made with some of the newer govt websites and apps. This unfortunately is your typical "sarkari" app. Made with a microscopic budget with no updates, no investment, no focus on UI. Needs a complete interface refresh, more reliability, and a massive marketing budget to make this more mainstream, if these things aren't done, it's a waste of taxpayers money.

Totally confusing at times. When you click any of the 4 buttons, it just sents the alert without any confirmation. It causes too much false alarms. There should be atleast a warning or a timer before sending alerts to the Emergency Response Team, like the ones used in default emergency system in Android Phones..

#### Secure access for kids

Suggestion to the Devoloper: From the reviews I had read. Nice app to give sos alert to police by geo location directly. Without having the burden to explain where you are if you are in any neihbourhood you don't know. But it would be more better if we can give SOS signal without opening the app, by a pattern like clicking on ""volume up, volume down, volume up, volume down, volume up up." Or some other complicated but a simple pattern. It would save so many lifes.

Sir, kindly enable some secured access I am afraid that accidentally opening the app/when my kids do it it will cause some inconvenience to the service initiative. Enable outdoor mode/finger scanner or triple tap something like that. It's helpful but afraid to use and I am hoping you will update the app quickly.

#### Buttons can be more simplified

Useful app.. But there is a problem.. For instance, when i opened the app it shows the map and my location on it, below that there are 4 icons, ambulance, fire, police and others.. i was curious to know what "others" icon contained, i dint knew it will go directly to emergency alert.. Got an option to cancel the emergency, but i think it don't work, coz i got a call in the end.. please see to it that after pressing the icon you provide a alert msg be provided to carry out it not..

The concept is good but a lot has to be improved. I used it to get medical help for an accident victim by pressing the Medical button on app. The app has access to my location and showed that it was captured. But the control room didn't have access to my location and I had to narrate the location as we do if we call a normal helpline. An accident victim won't normally be able to narrate the location to the caller due to injury, shock, disturbances by locals, lack of awareness of location, etc.

The app is not support you in emergency the feature is there but there is no response from there side since new update. IN SHORT IF PERSON IN A EMERGENCY SO HE NEED HELP AS FAST AS POSSIBLE BUT YOUR APP TAKING LONG TIME AND CONFUSING THE PEOPLE TOO

## CARD SORTING OF APP FEEDBACKS

#### **Demo Tutorials for UI**

It's a really useful and a must have app. You receive an immediate response on pressing one of the sos buttons. But changes have to be made in the user interface as it is a little confusing of what the options do. Please provide a tutorial to know what each button does and also a demo or dummy version to learn about the app so that false alerts aren't triggered first time users.

There should be demo option available for this app so that the users get familiar with the app. Lot of issues were faced as I was not aware with the app. As soon as the registration was done on the app. Alert was send to the up police which was not needed that time.

#### Can also access when offline

Definitely a must app for all men and women in their mobiles. Would be better if we have a short like triple tap on screen as panic button for emergency. At this tap, GPS should also be auto enabled: because at times of emergency it might not be possible to unlock the app, dial etc based on time availability...



#### **BUSHRA ALAM**

Bushra Alam is a techsavvy student who lost her father in COVID-19 and she had to move away from he family for further studies. She is concerned about her safety and the safety of her loved ones back there as she has younger brothers.

#### **PROBLEMS:**

The recent increase in crime rates and the stories of people not getting timely assistance during emergencies have pushedher to actively seek a solution.

She wants to be proactive and prepared in case of any unfortunate event.

#### PAIN:

She is constantly worried about the lack of immediate access to emergency services in critical situations.

She feels vulnerable and helpless, knowing that he might not be able to reach out for help quickly enough when needed the most.

#### TRIGGER:

- Feeling powerless and helpless during emergencies
- Anxiety and fear of not getting timely assistance
- Lack of a proper emergency response system

#### **GOALS:**

Her ultimate goal is to have a trustworthy and efficient emergency response system that ensures quick access to help during critical situations.

She wants to feel secure and confident knowing that help is just a tap away for her and her family.

#### **BENEFITS:**

- Immediate access to emergency services at the touch of a button
- Enhanced personal safety and peace of mind for her and her loved ones
- Faster response times and efficient handling of emergency situations.

#### **BARRIERS:**

- Doubts regarding the reliability and effectiveness of existing SOS apps
- Concerns about the accuracy and responsiveness of emergency service providers
- Fear of wasting time and effort on a solution that doesn't deliver the desired results.



#### **PROBLEMS:**

Praful struggles with the limited accessibility of technology for people with disabilities.

He understands the challenges they face and wants to bridge the gap by creating inclusive solutions.

#### **PAIN:**

- Feeling excluded and left out due to inaccessible technology.
- Limitations in communication and information access.
- Dependence on others for basic tasks.

#### TRIGGER:

• The last straw for Praful was witnessing the struggles faced by a close friend with a disability, who was unable to access a technology-driven opportunity due to lack of accessibility.

This incident motivated Praful to take action and find a solution for an inclusive future.

#### **PRAFUL RUDRA**

Praful Rudra is a techsavvy professional and pioneer in the AR/VR field. Despite losing his hearing ability in childhood due to a medical condition, Praful's dedication to finding ways to make the lives of people with disabilities easier is commendable.

#### **GOALS:**

Praful's ultimate goal is to develop and promote technology solutions that empower people with disabilities, enabling them to lead independent and fulfilling lives.

He wants to create a world where accessibility is a norm and not a luxury.

#### **BENEFITS:**

- ••Increased independence for people with disabilities.
- Improved communication and information access.
- Enhanced quality of life through inclusive technology.

#### **BARRIERS:**

- Concerns about the feasibility and effectiveness of inclusive technology solutions.
- Limited awareness and adoption of inclusive technology by businesses and organizations.
- Budget constraints for developing and scaling inclusive technology solutions.



#### SANYUKTA NANDY

Sanyukta Nandy is a sixty-something lady who owns a girls' PG (paying guest) accommodation. Her children live abroad, and she manages the business on her own.

#### **PROBLEMS:**

Sanyukta struggles with managing her girls' PG accommodation efficiently. She finds it challenging to attract and retain the right tenants, leading to high turnover rates and increased workload.

#### Constantly dealing with tenant turnover and the associated administrative

tasks.

**PAIN:** 

- Difficulty in finding reliable and responsible tenants.
- Overwhelming workload and stress from managing multiple aspects of the PG.

#### TRIGGER:

The recent abrupt departure of a long-term tenant who failed to pay rent and caused significant damage to the property has pushed Sanyukta to actively seek a solution to minimize such incidents in the future.

#### **GOALS:**

- Sanyukta aims to streamline the management of her girls' PG accommodation, minimize tenant turnover, and achieve stable occupancy rates.
- She wants to create a hassle-free living experience for her tenants while reducing her own workload and stress.

#### **BENEFITS:**

- Enhanced tenant retention and reduced turnover rates.
- Improved efficiency in managing administrative tasks and rental agreements.
- Peace of mind with reliable and responsible tenants.

#### **BARRIERS:**

- Lack of awareness about software or tools that can give her safety guarantee at all times.
- Concerns about the cost and complexity of implementing a new system.
- Resistance to change and hesitation in adopting technology.

- **Navigation**: Simplify the navigation structure to make it more intuitive and user-friendly, ensuring easy access to all essential features.
- **Visual Design**: Employ a consistent and appealing visual design that utilizes clear icons, high-contrast elements, and a color scheme that promotes calmness and clarity.
- Information Architecture: Reorganize the app's information architecture to enhance the user's ability to find relevant information quickly and easily.

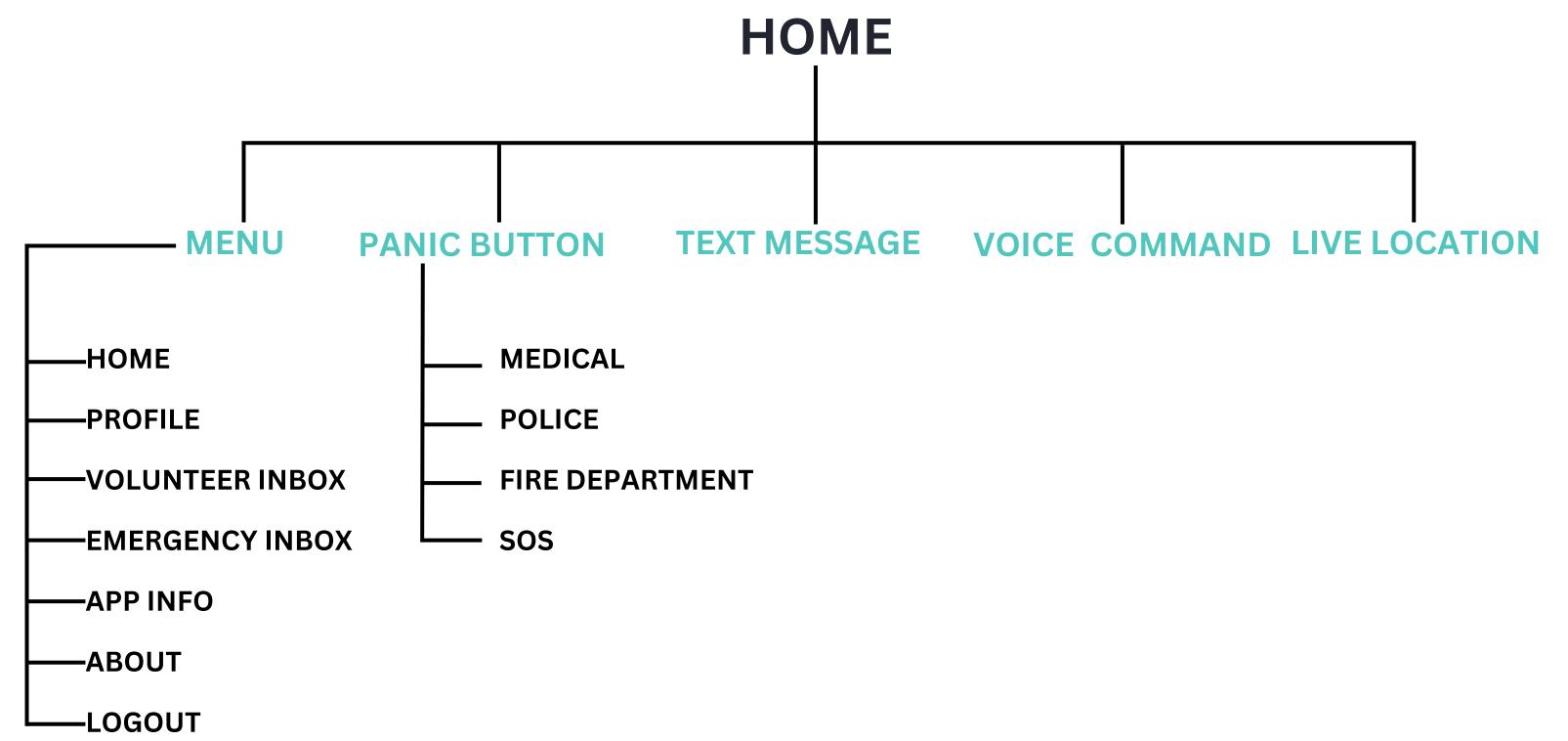
- Accessibility Features: Integrate accessibility features such as voice recognition, screen reader compatibility, and alternative text descriptions to make the app accessible to a wider range of users.
- Context-Aware Assistance: Introduce contextaware features that adapt the app's functionality based on the user's location, time of day, and past emergency requests, providing personalized and timely assistance.

### SCOPE OF IMPROVEMENT

- **FONT**: The font will be changed to Gotham Pro and the texts will be in contrast.
- ICONS: The icons will be made more clear and visible with a highlight option while tapping the panic button. Sound buttons for instant assistance from near public.
- **COLOURS**: Colours used will be a tone of red, green and black. Colour consistency will be maintained.
- **BUTTONS**: Buttons will be reduced and kept on the top for not calling any help by mistakely.
- VOICE COMMAND: Voice command will be used for better accessibility by specially able person.
- **CHAT**: Chat option introduced for any queries.

## CHANGES OFFERED

## INFORMATION ARCHITECTURE



## STYLE GUIDE

#### **GOTHAM PRO**

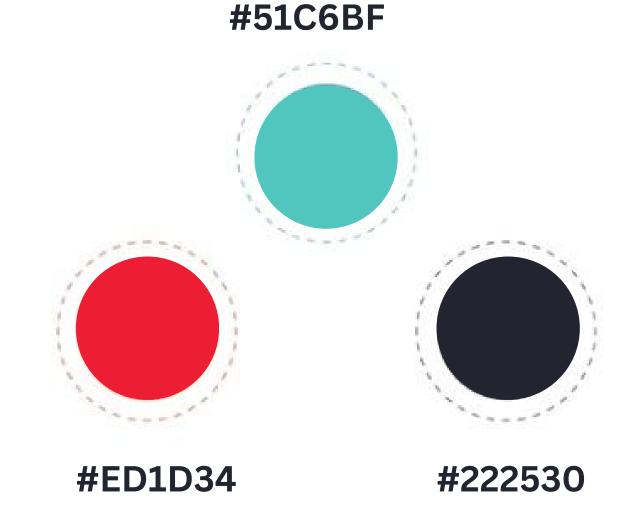


Medium

Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz

Regular

Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk LI Mm
Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz



## CURRENT ICONS





Women



Fire



Child



Medical



Railway



Disaster



Others

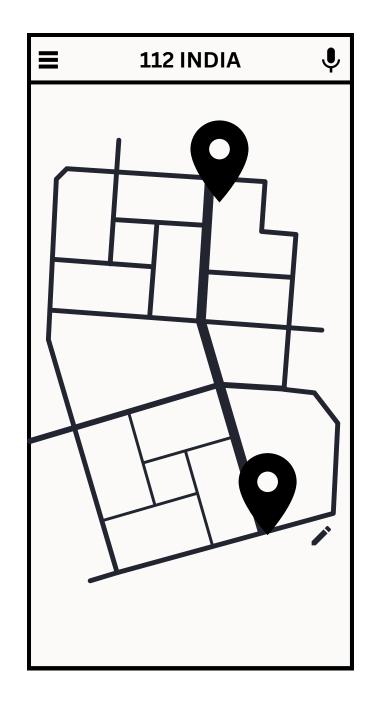


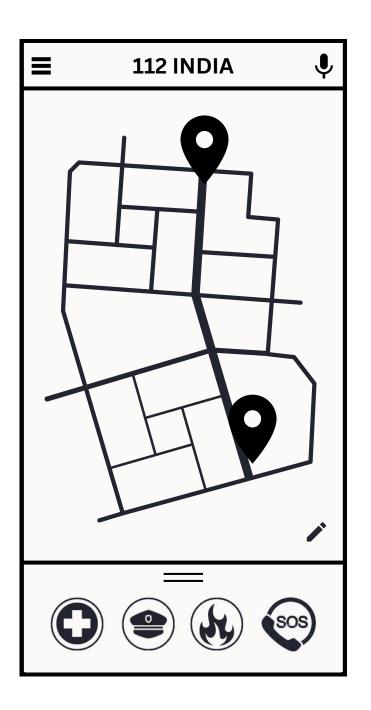


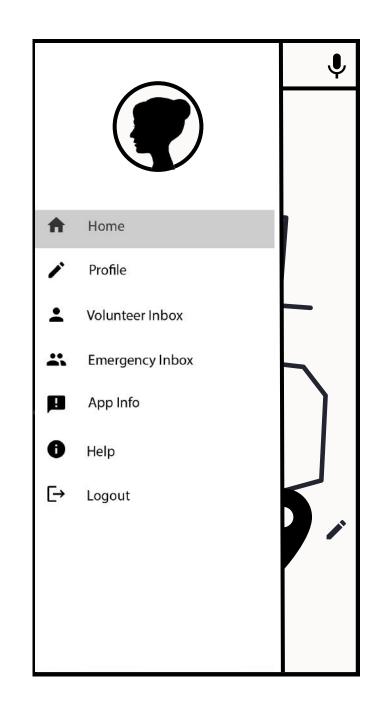




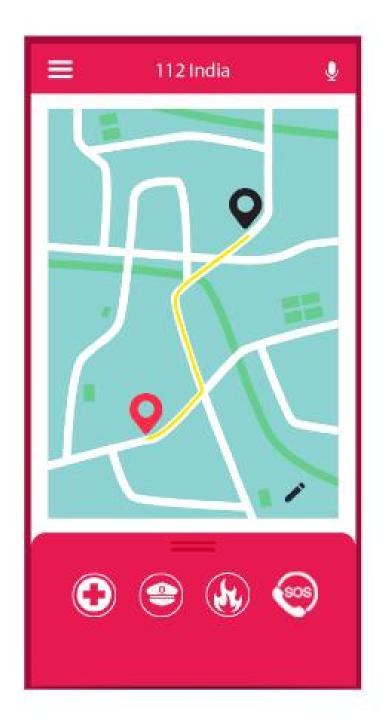


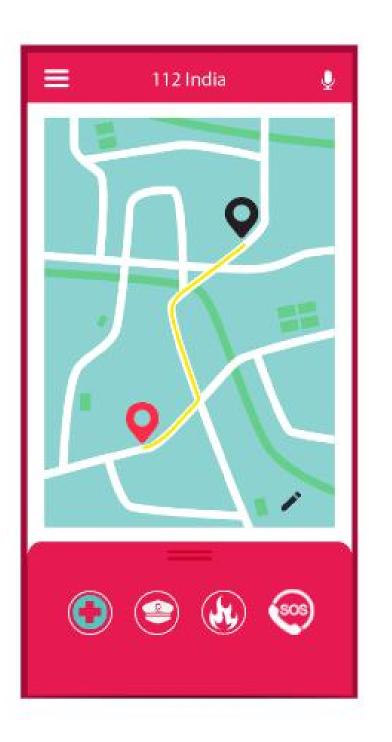


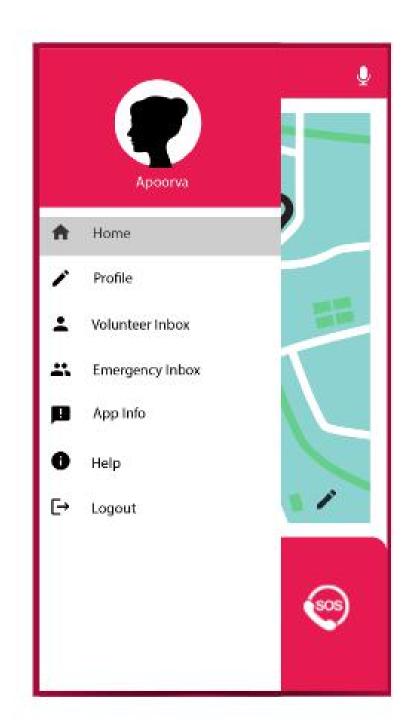


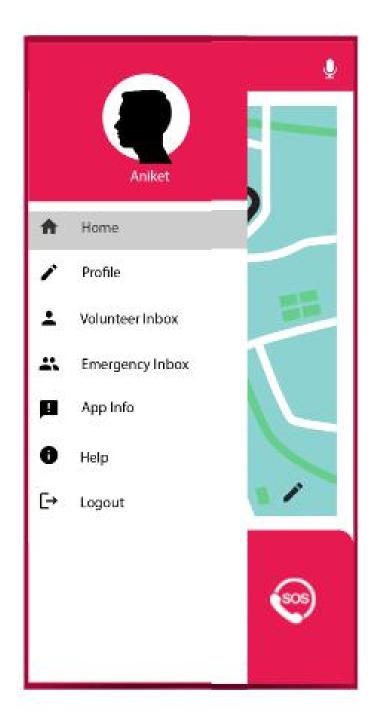


### WIREFRAMES LOW FIDELITY









## WIREFRAMES HIGH FIDELITY

### THANK YOU

Feedbacks are always appreciated...