



# Freedom Tracker UI Design Video Group 2 - Spring 2025

COS20001 - User-Centred Design

# Meet the team



**Ta Quang Tung**  
104222196

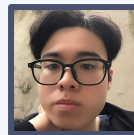
**Presents** - Background,  
Prototype

**Designs** - Home Page,  
Location Page, Event Page



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104169507

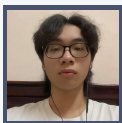
**Presents** - Design Scenarios  
**Designs** - Symptom Log Page



**Doan Trung Nghia**  
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**Presents** - Iterations and Design  
Guidelines

**Designs** - Location Page, Editing



**Do Quang Minh**  
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**Presents** - Wireframe  
**Designs** - Location Page,  
Editing



**Pham Quang Minh**  
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**Presents** - Limitations and  
Future Work  
**Designs** - Resources Page



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01

# Project Background



# Definition

A complex cognitive condition that interferes with memory, thinking, and daily activities.

Includes Alzheimer's disease and vascular dementia.

Symptoms:

- Loss of memory
- Poor concentration
- Self-repetition
- **Wandering**

Caring for a person with dementia can be very stressful.



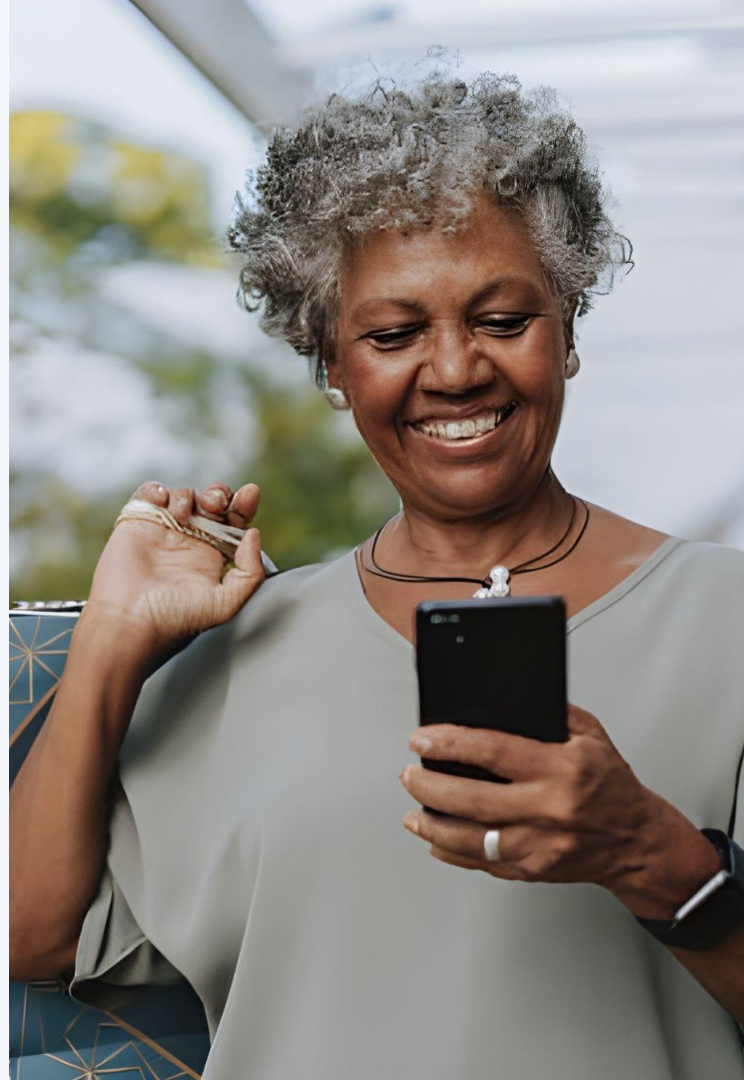
# Our goal

Provide a technological solution to support dementia caretakers, with a major focus on wandering behavior.

Care-receivers can live freely without caregivers being present.

Features:

- Real-time location tracking and alerts
- Emergency contacts
- Task management
- Connecting with other caregivers
- Recording symptoms and information search

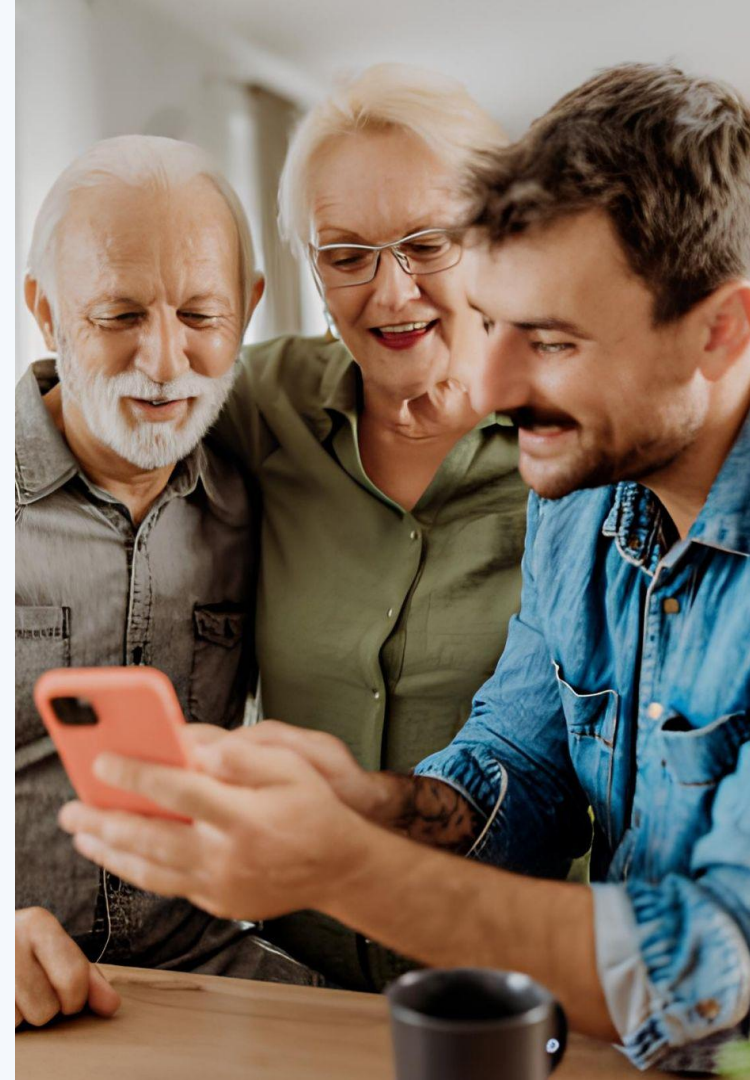


# Target users

Adult family members of people with dementia:

- Spouses
- Sons or daughters

Relatives, friends, neighbors, or social workers can also be caregivers, but they will not be the focus of this project.



02

## Design Scenarios





# Design solution

A mobile app that can be used on the fly. It would assist caregivers in both indoor and outdoor caregiving.

Our design scenario features Mary, an elderly spouse of a person with dementia.



# Design Scenario

## Location tracking and emergency contact



### Before

- Hope he didn't wander too far.
- Rush outside, asking neighbors for help if he is in danger.



### After

- See his location update in real time.
- Receive alert if care-receiver is in danger.
- Contact nearest emergency contact quickly.
- Manage emergency contact list efficiently.
- Mark some specific outdoor and indoor location as dangerous easily.

# Design Scenario

## Task and appointment management



Before

- Pin sticky notes on the fridge.
- Get busy and forget to check them.



After

- Receive timely notification for each task
- Manage the upcoming tasks and schedule easily

# Design Scenario

## Symptoms logs



Before

- Track everything manually in the notebook



After

- Note everything on the apps

# Design Scenario

## Dementia research and networking



Before

- Search for reliable information was frustrating.
- Find local caregiver support was nearly impossible due to outdated contacts.



After

- Easy to look for credible dementia related articles.
- Able to connect with all of the local dementia caregivers.

03

# Wireframes





# Wireframe walkthrough video

View the full video [here](#).

04

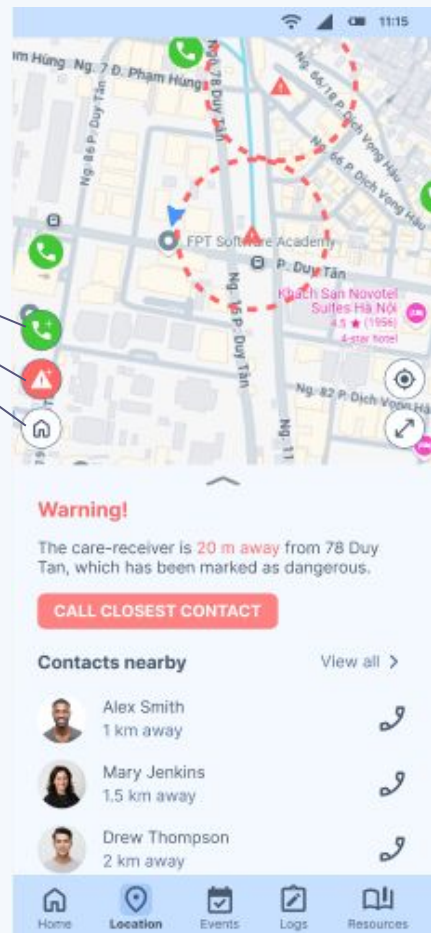
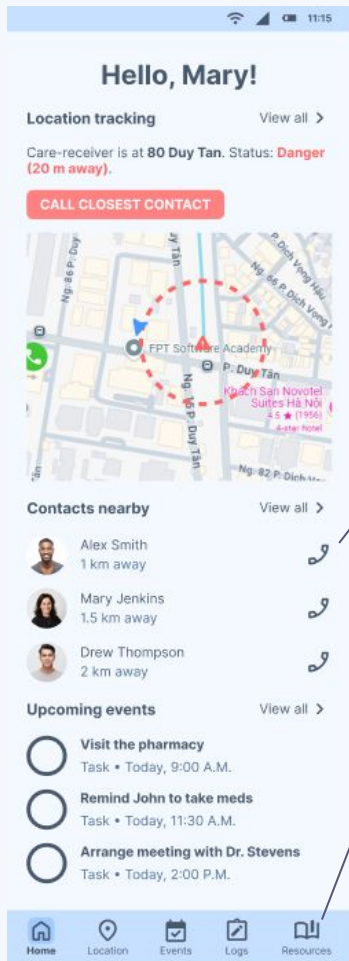
## Iterations & Design Guidelines



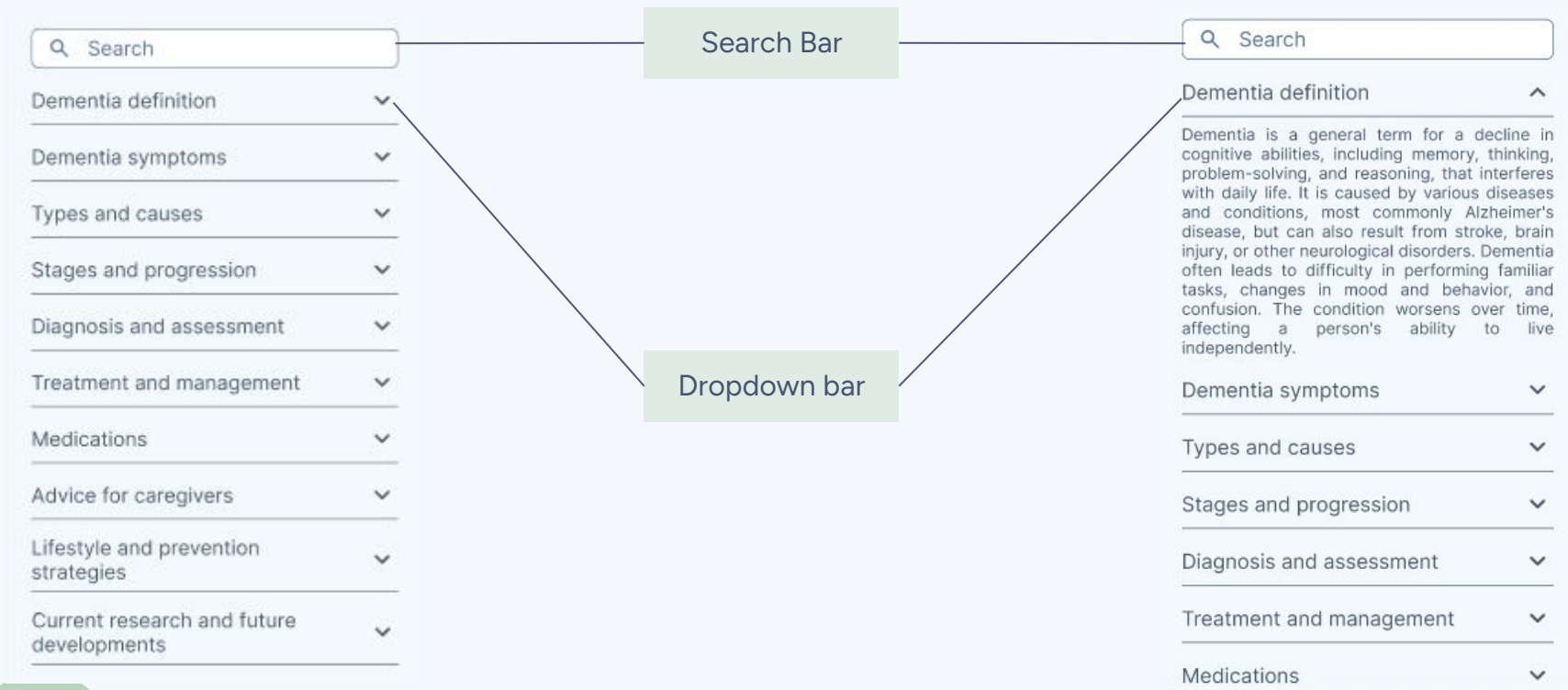


# Physical Affordance

Buttons



# Physical Affordance



# Sensory Affordance

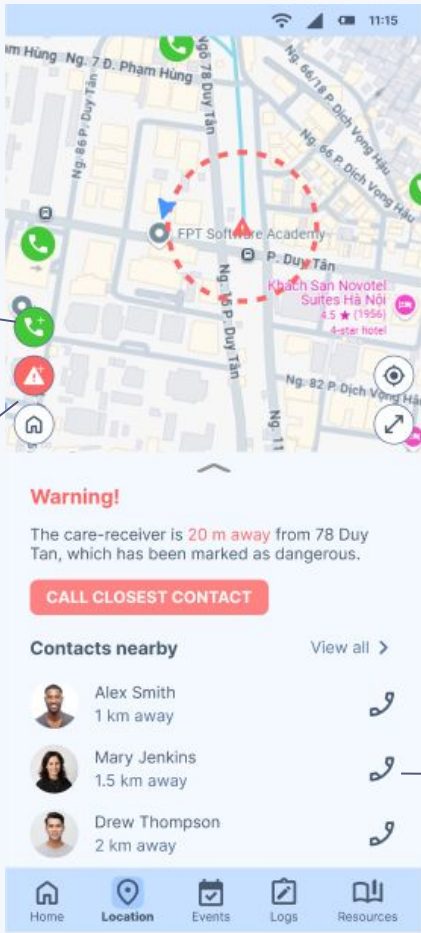
All the buttons clearly show their functionality

Add contact

Add Danger location

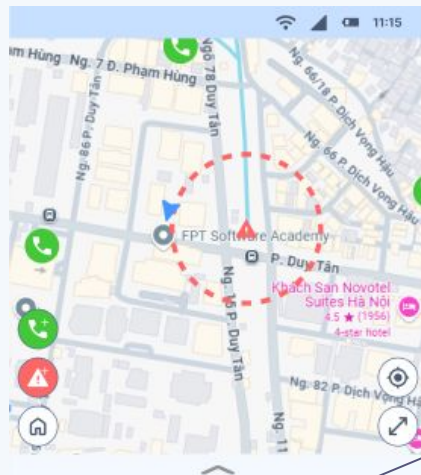
Zoom in

Calling



# Text Readability

Using appropriate text size, and color



Color and size changes for  
Heading

Color changes for crucial information

Adjust big size to create highlight  
and get the user's attention

# Proximity

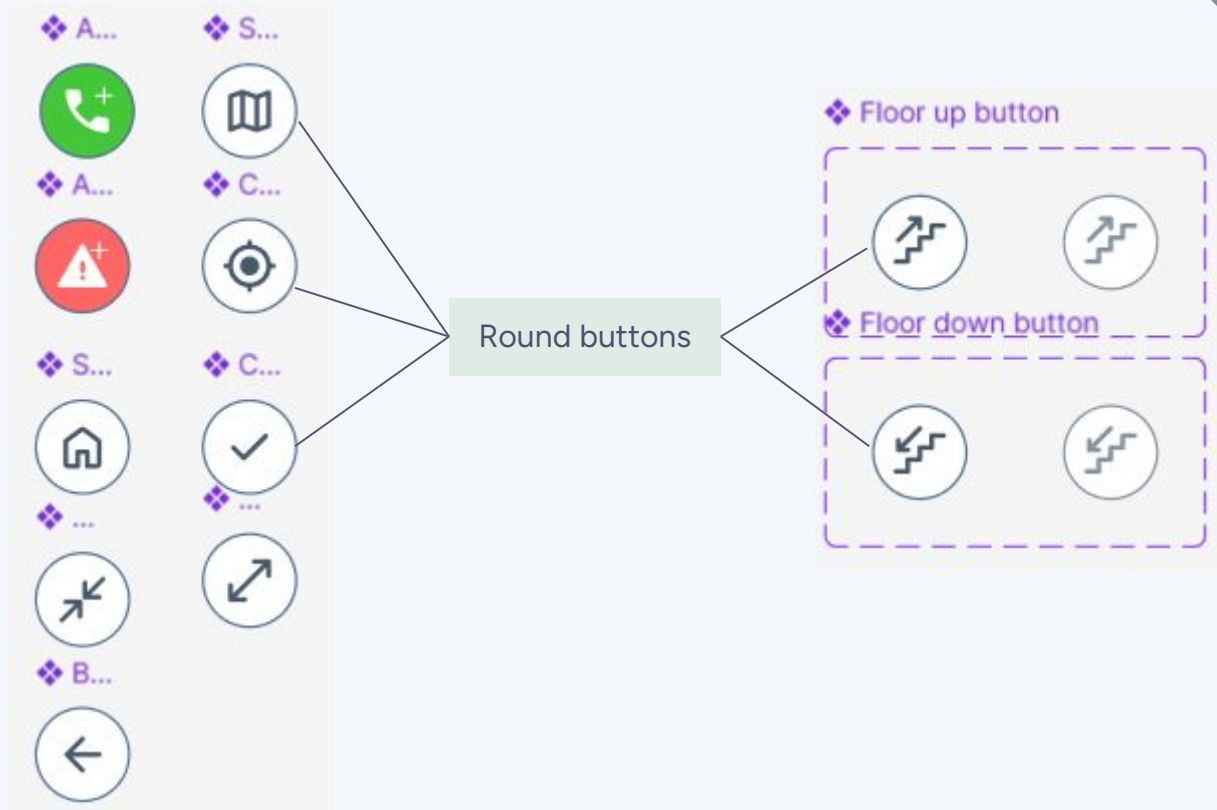
Objects physically close together are perceived to be more strongly related than those further apart



text and picture proximity are well-designed to be separated

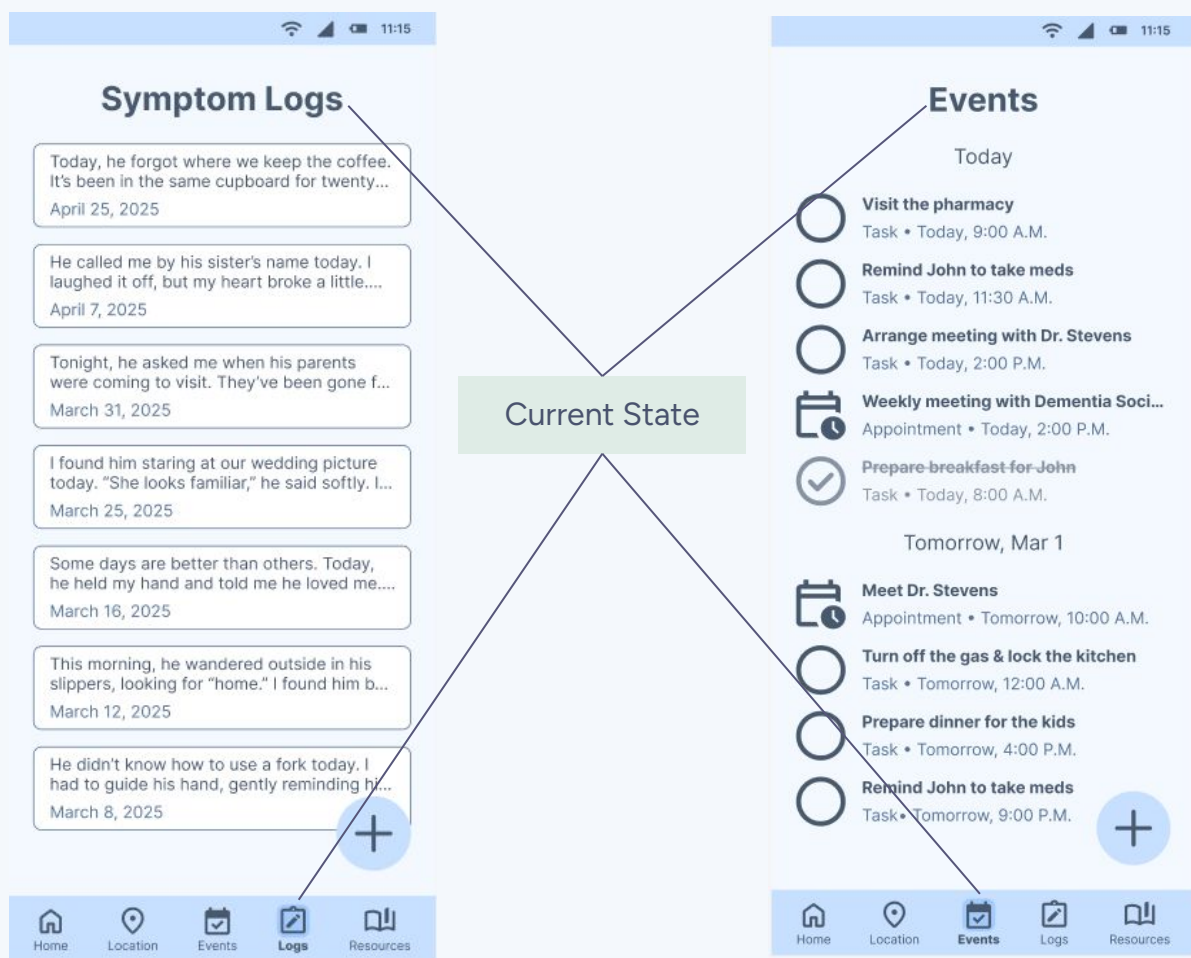
# Similarity

Objects that look similar are perceived to be more closely related than those that look different



# Visibility

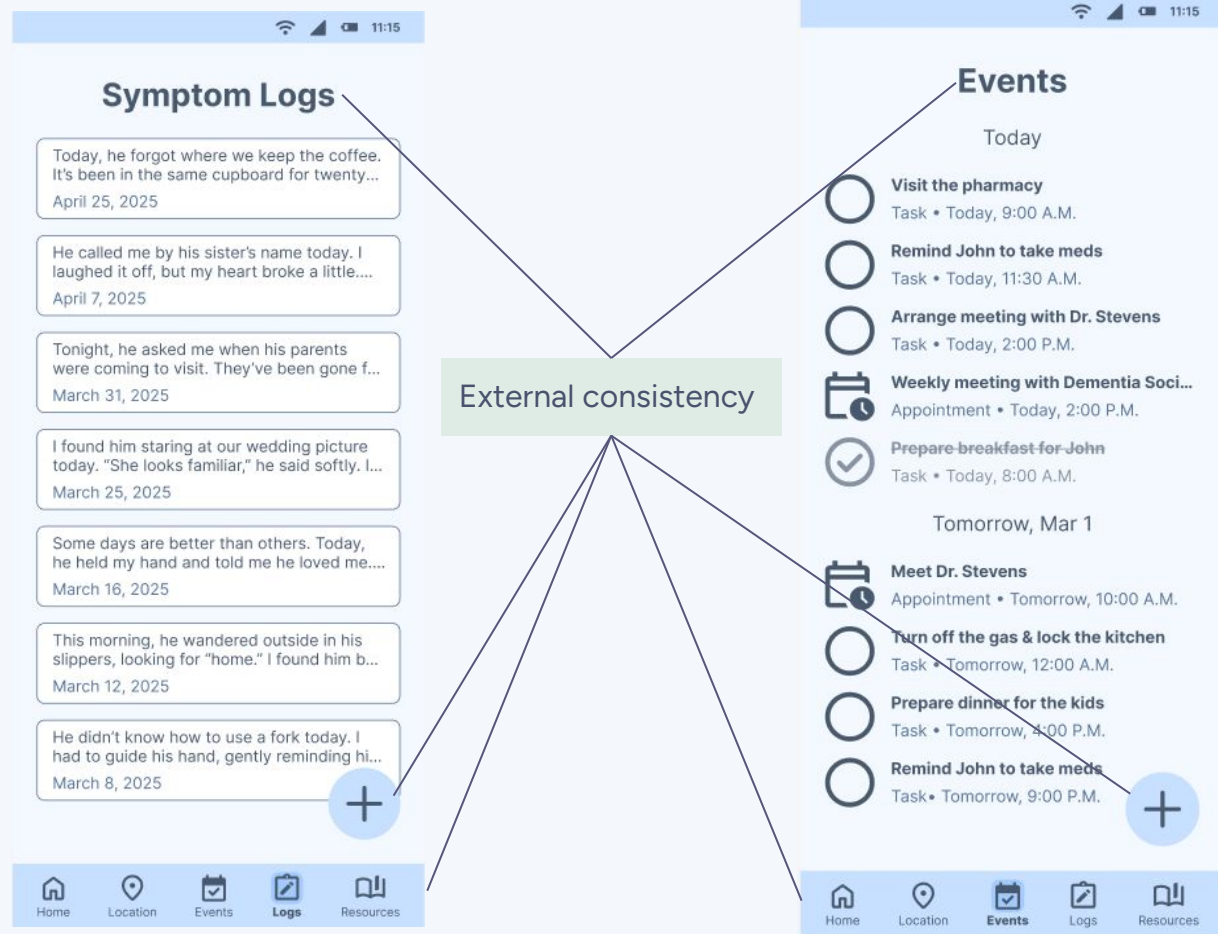
Clearly present what is the current status of the system





# Consistency

The system follow a slightly similar pattern





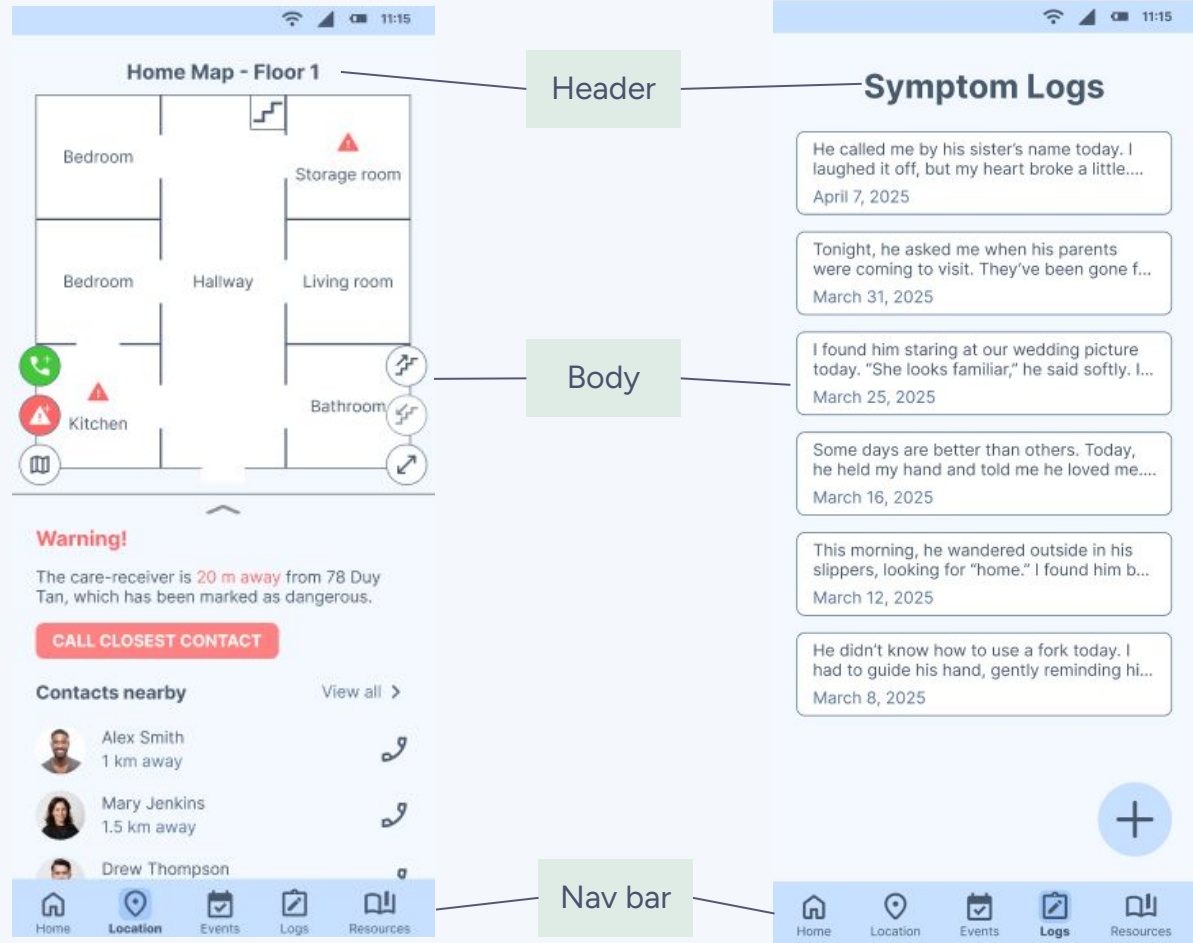
# Consistency

The system follow a slightly similar pattern



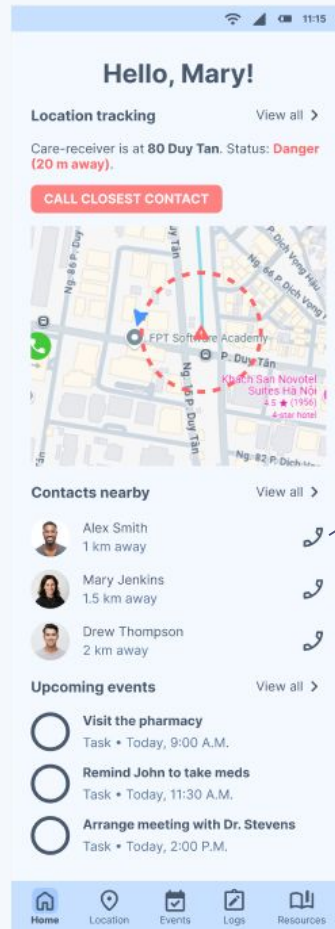
# Structure

Organisation of interface elements should match users mental model or common design patterns

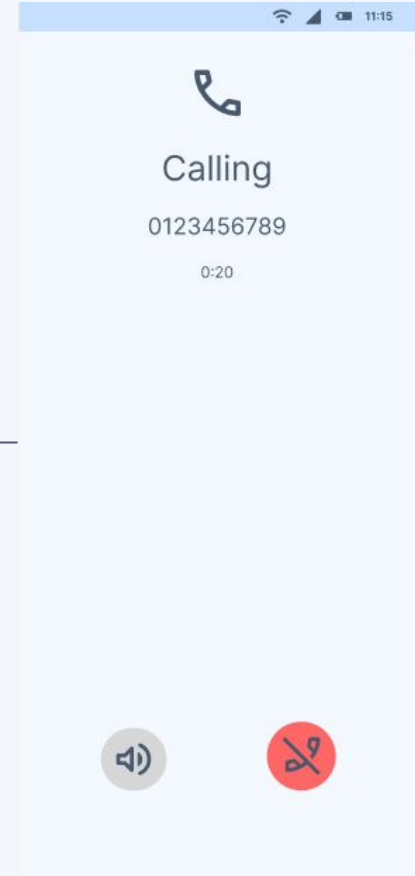


# Feedback

let the user know the results of their actions



When pressing

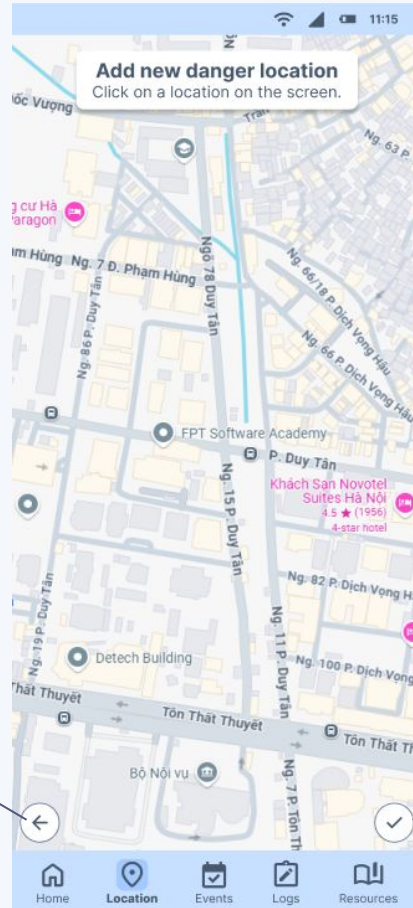


# Mapping

Make the relationship between a control and the controlled obvious

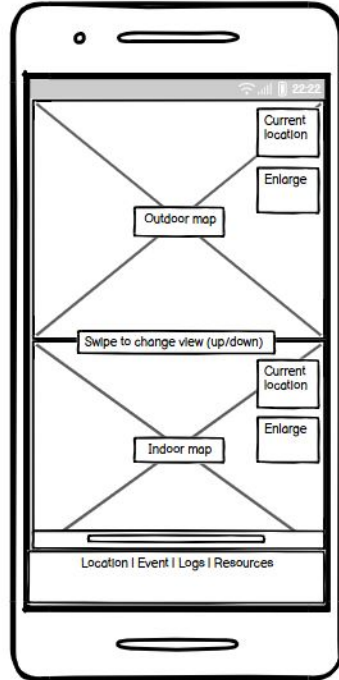
Back

Confirm



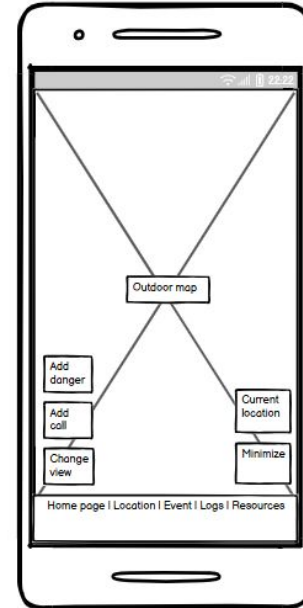
## Iteration 1: Adjusting Location page

Location

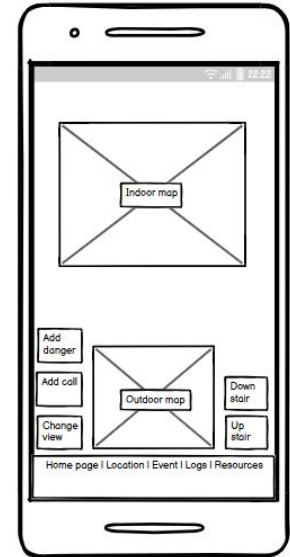


Separate outdoor and indoor map

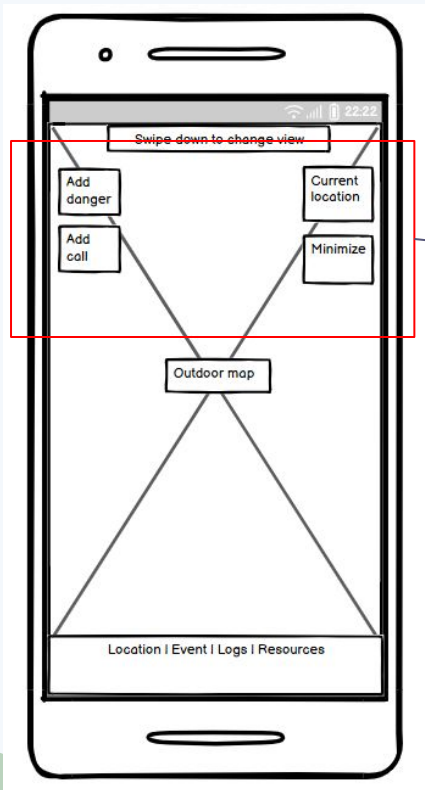
Outdoor map



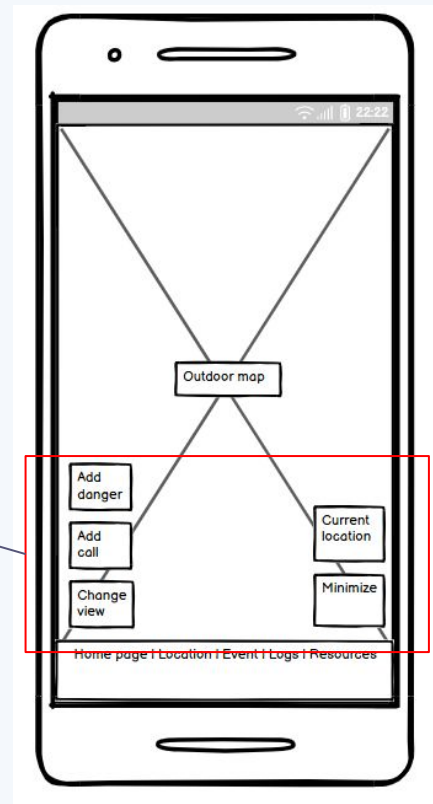
Indoor map



## Iteration 2: Changing action button position



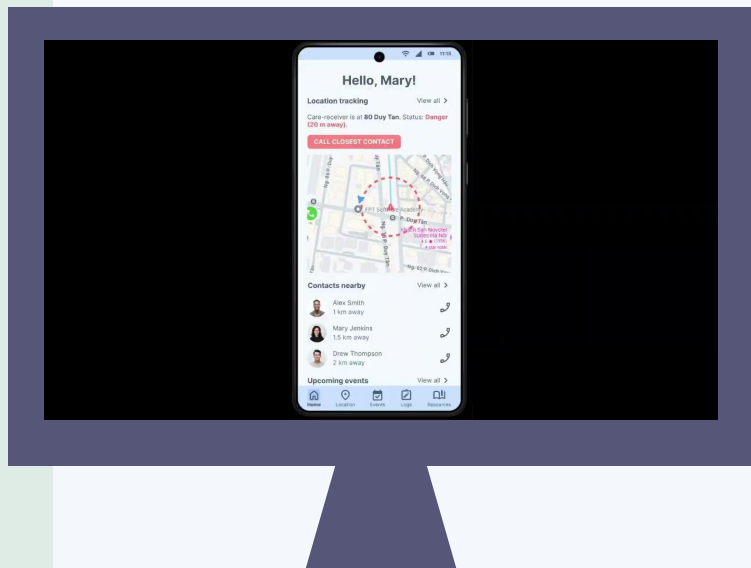
buttons have been moved to the bottom of the screen so that the user can reach them more easily



05

Prototype





# Prototype demo video

View the full video [here](#).



06

## Limitations and Future Work



# Limitations and Future Work



## Caregiver network

Only shows the locations of other caregivers.

**Improvement:** Enable communication (calls or text messages) between caregivers.



## Repeated events

The user has to create repeated events many times.

**Improvement:** Enable users to repeat events, similar to Google Calendar.



## Indoor map

Indoor home layout is not customizable.

**Improvement:** Enable users to define the layouts of their houses through the interface.

Thank you!

