CSE 323: Group Sketches and Storyboard Product Name: Do-Things

Abaya Ranasinghe Mudiyanselage Sudara Ranasinghe

Htet Naing Phyo

Jong Kwon Park

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Contact Information:

abayaranasingh.ranasinghe@stonybrook.edu

htetnaing.phyo@stonybrook.edu

jongkwon.park@stonybrook.edu

Tasks

After the brainstorming section (Please see the appendix for notes), we chose the following three tasks to do sketches on.

1. **Using a recorded macro** - Helpee needs help with an already recorded problem, go into the app, look for it and replay it.

2. **Remote helping with established connection** - Helpee went into the app, allowing the established connection from the helper. And then, wait and see what helper would do on their phone and helper keep them as macro for later uses.

3. **Establishing connection (Remote)** - Helpee and helper establish connection for the first time in remote situations.

We included stars for the interfaces that we agreed as the best.

TASK (1) Using a recorded macro: Storyboard (Fixed)
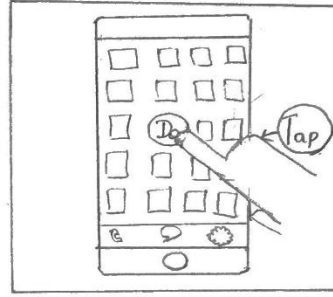
TASK(1) STORY BOARD, Using a recorded macro

* macro = repeated actions on smartphones (touch and swipes) which can be recorded and play

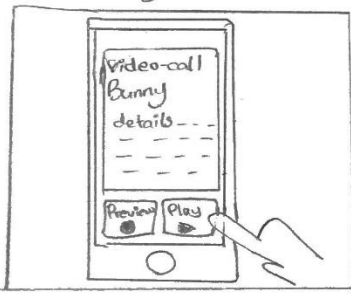1. Helpee forgot how to video call her grandson, and he taught her that last week.

2. She remembers that she can use "Do-things" app. (macro was recorded)
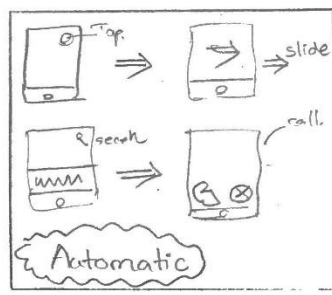
3. Go into Do-things app.

3. search for video-call macro, and found it.
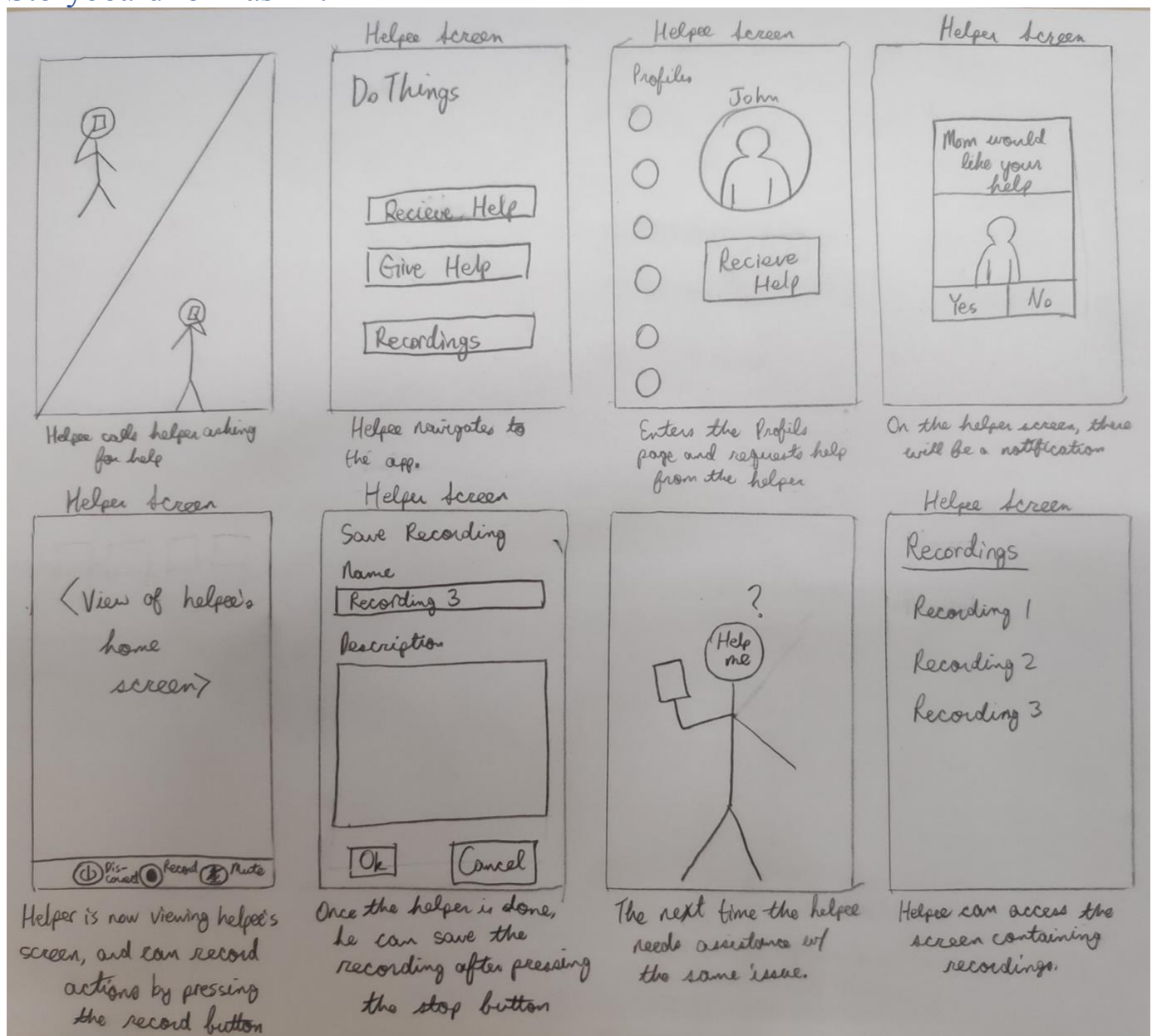
9. Choose play button. (To initiate macro process)

5. Automatically, smartphone goes through steps to video-call her grandson.

6. Now, she is video-calling with her grandson.

Storyboard for Task 2:

Helpee Screen

Do Things

Recieve Help

Give Help

Recordings

Helpee calls helper asking for help

Helpee navigates to the app.

Helpee Screen

Profiles

John

Recieve Help

Enters the Profiles page and requests help from the helper

Helper Screen

Mom would like your help

Yes | No

On the helper screen, there will be a notification

Helper Screen

< View of helpee's home screen >

Dis-connect | Record | Mute

Helper is now viewing helpee's screen, and can record actions by pressing the record button

Helper Screen

Save Recording

Name

Recording 3

Description

Ok | Cancel

Once the helper is done, he can save the recording after pressing the stop button

?

Help me

The next time the helpee needs assistance w/ the same issue.

Helpee Screen

Recordings

Recording 1

Recording 2

Recording 3

Helpee can access the screen containing recordings.

# TASK (3) Establishing connection (Remote): Storyboard

Users:

      A. Kumari is a stay-at-home mom who has recently started to use a smartphone. She is still not familiar with many functions of her smartphone, so she frequently asks for help from her son. But her son has moved to a different area for work reasons. She needs his help when he is away.

      B. Alex is Kumari's son and usually helps his mom with her smartphone. Alex has to move out of his mom's house to a different area for work. He wants to help his mom even when he is away.

Motivation:

      Alex wants to remotely help his mom, Kumari, when he is away. Kumari would also like to receive help from her son, even when he is away.
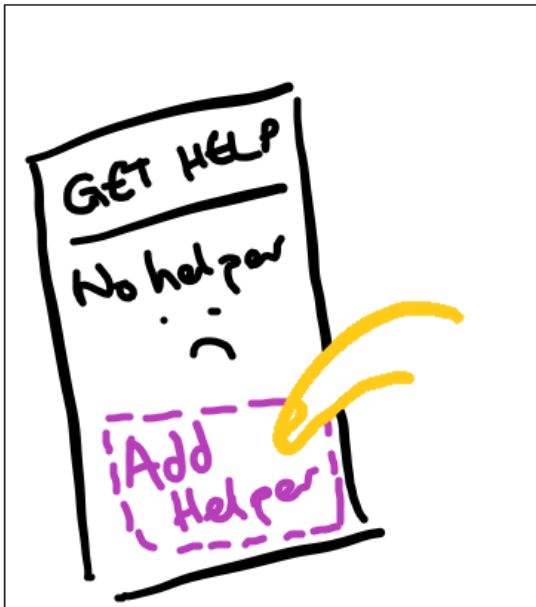
Establishing connection (Remote) - Helpee and helper establish connection for the first time in remote situations.
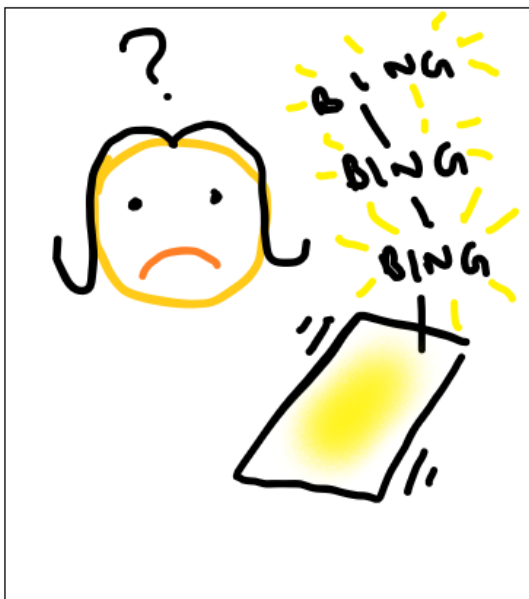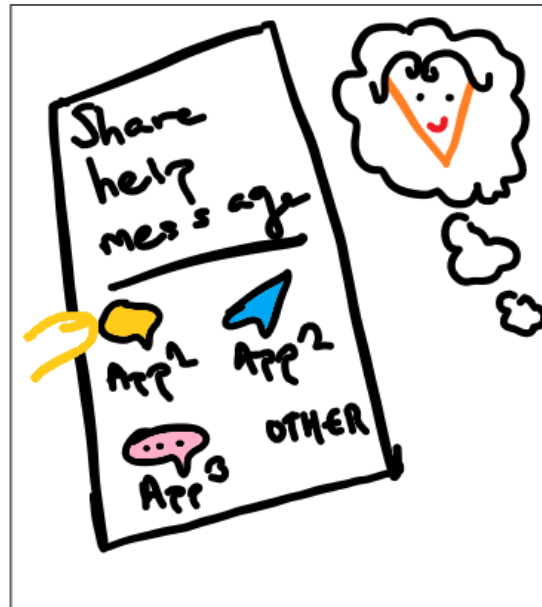
1. Kumari does not know how to turn off notifications for a messaging application she uses.
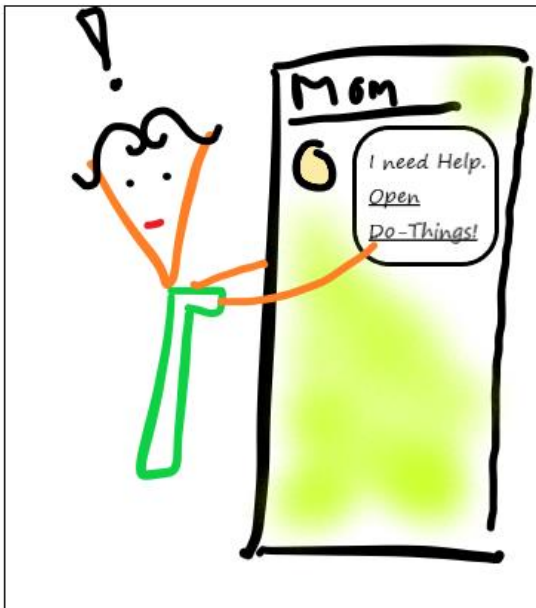
2. She uses the Do-Things app to get help from her son.

3. She has not established a connection with her son yet, so she starts the process of adding her son as a helper.

4. She can choose from different apps on her phone to share a help message with her son.
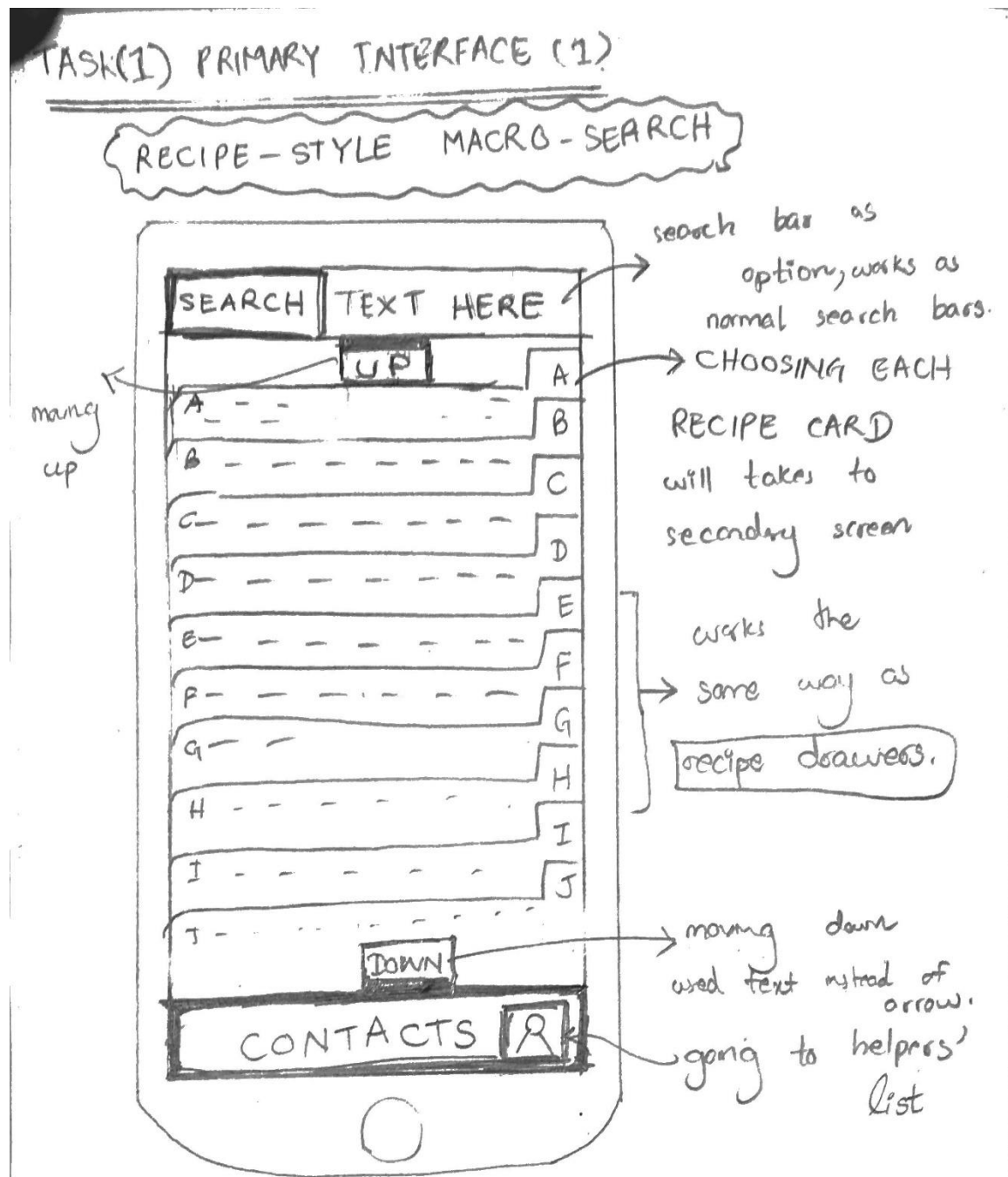

5. Her son, Alex, receives the message and clicks on the link.

6. Alex appears in the Helpers list on the Do-Things app. His mom can ask him for help now.

*Drawn on Microsoft paint

TASK (1) Using a recorded macro: Primary Interface 1

TASK(1) PRIMARY INTERFACE (1)

RECIPE-STYLE MACRO-SEARCH

search bar as option, works as normal search bars.

→ CHOOSING EACH RECIPE CARD will takes to secondary screen

SEARCH TEXT HERE

UP

moving up

A
B
C
D
E
F
G
H
I
J

A
B
C
D
E
F
G
H
I
J

works the same way as recipe drawers.

DOWN

moving down used text instead of arrow.

CONTACTS

going to helpers' list

※ This interface is designed to bring similarities from recipe drawers and dictionaries into app.

Easy to understand for elder people.

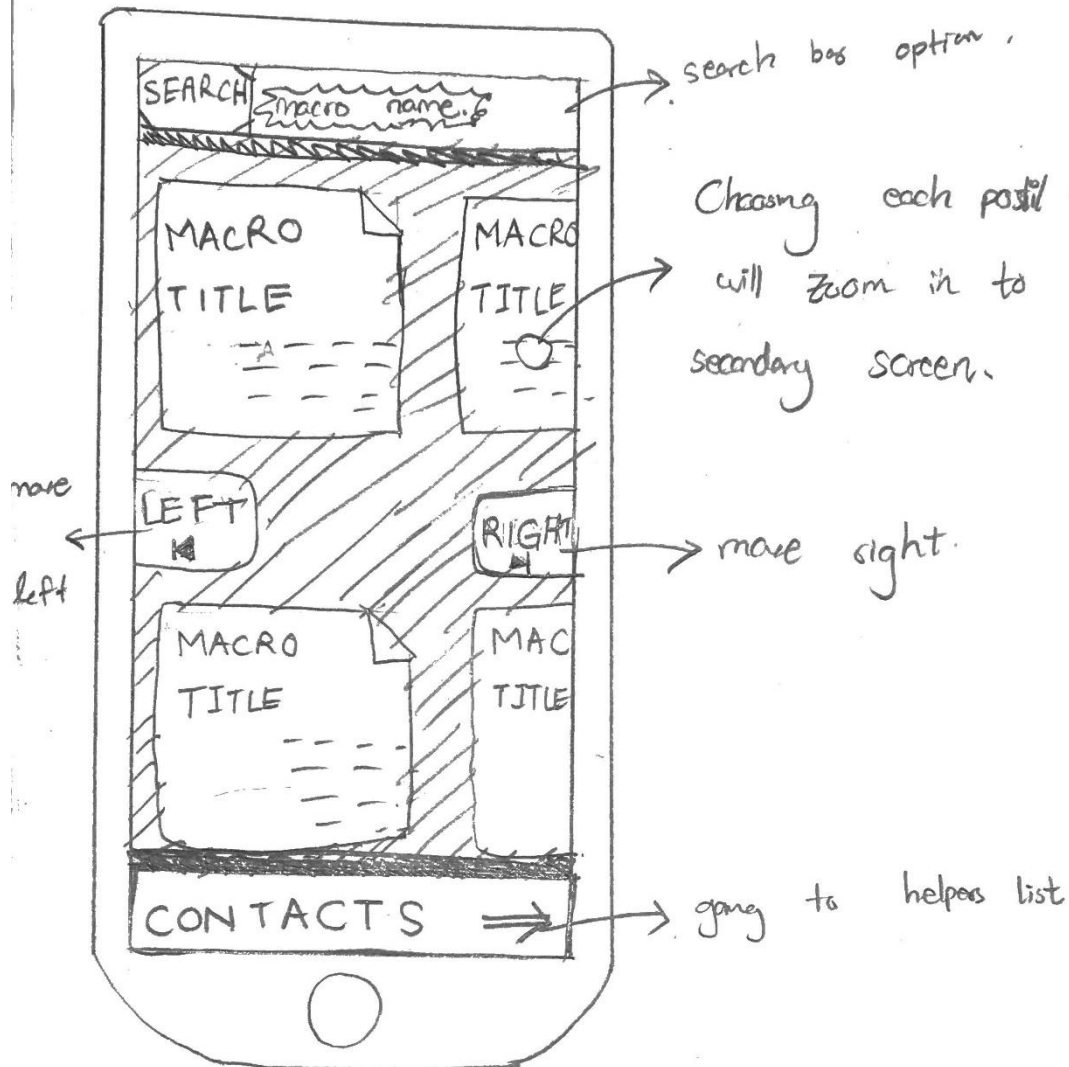※ Buttons are created similarly to physical buttons

TASK (1) PRIMARY INTERFACE (2)

POST-IT BOARD STYLE MACRO-SEARCH

SEARCH [macro name..] → search bar option.

MACRO TITLE

MACRO TITLE → Choosing each post-it will zoom in to secondary screen.

LEFT ◄◄ ← move left

RIGHT ►► → move right.

MACRO TITLE

MAC TITLE

CONTACTS ⇒ → going to helpers list

✱ Inspired by real-life poster boards

✱ meant for managing a few macros only with maximum visibility

✱ easier to navigate.

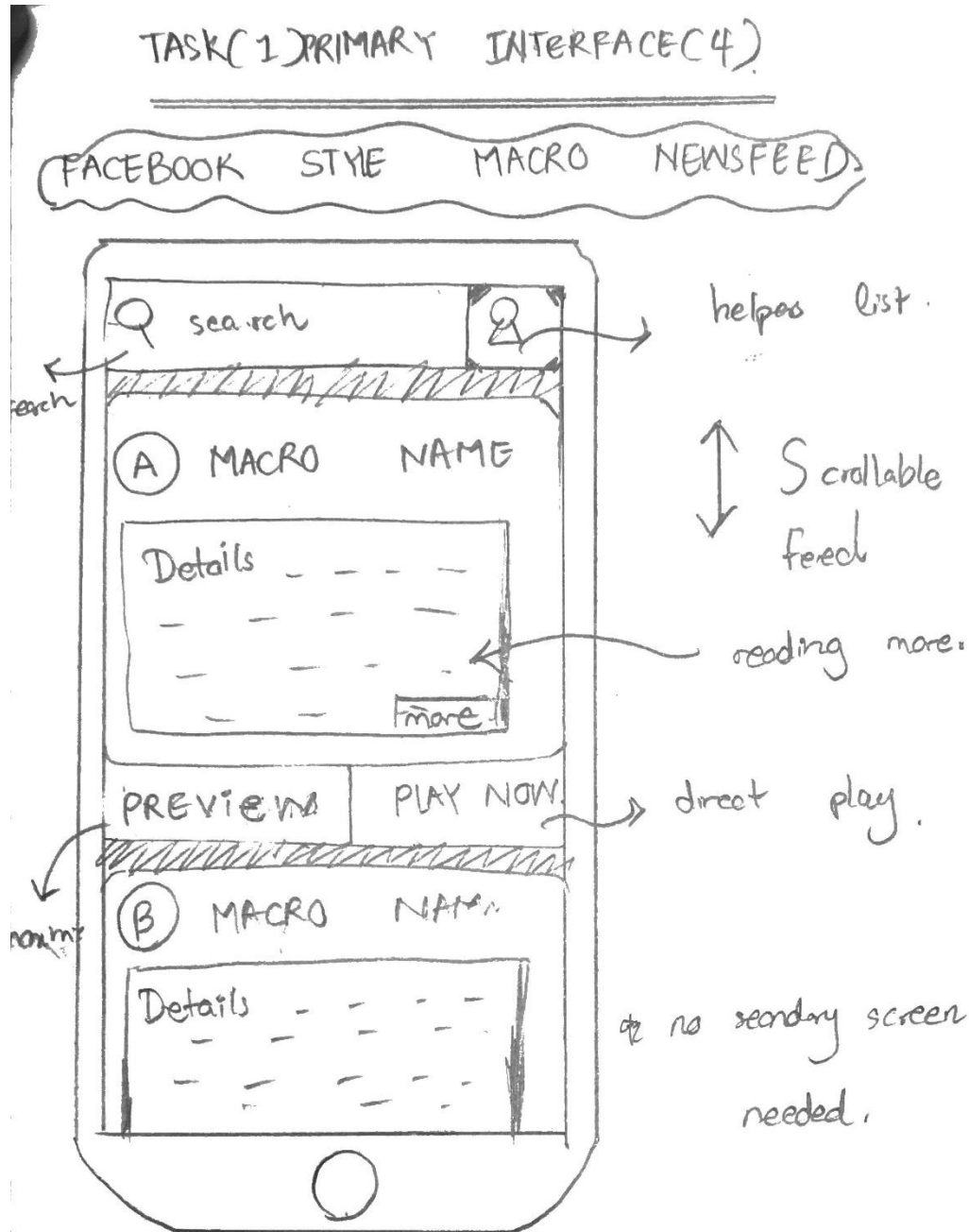**TASK (1) Using a recorded macro: Primary Interface 3**

TASK(1) PRIMARY INTERFACE (3)

CONTACTS-APP STYLE MACRO SEARCH

MACROS LIST   Q   ← search option

beginning letters for easier look up.

(a) MACRO NAME

a
b
c
d   ← Bigger size contact list - style macro tobs
e
f

(b) MACRO NAME

g
h
i   → choosing each tob will take to secondary interface.
j

Scroll

(h) MACRO NAME

k
L

I NEED HELP ⊗   → going to helpless
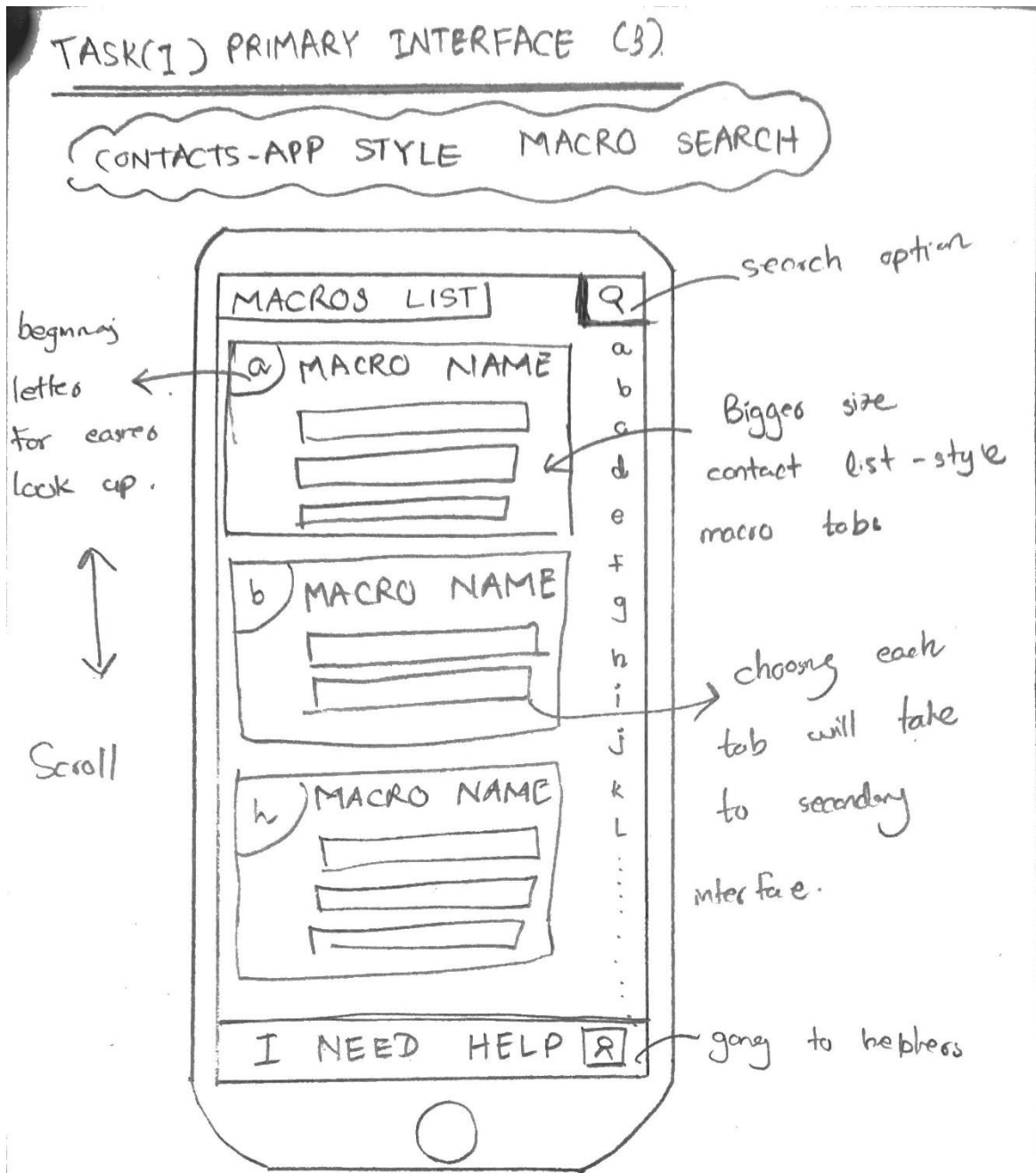
※ tend to use "user"'s prior knowledge of contacts app of smartphone, more functionality, they already know how to use

※ Bigger Text, Bolder Icon for elder people.

TASK (1) Using a recorded macro: Primary Interface 4

TASK (1) PRIMARY INTERFACE (4)

(FACEBOOK STYLE MACRO NEWSFEED)

helpeo list

search

search

(A) MACRO NAME

↕ Scrollable feed

Details _ _ _ _ _

_ _ _ _ _

_ _ _ _ _

more

reading more.

PREVIEW | PLAY NOW → direct play.

(B) MACRO NAME

Details _ _ _ _

_ _ _ _

de no seondary screen needed.

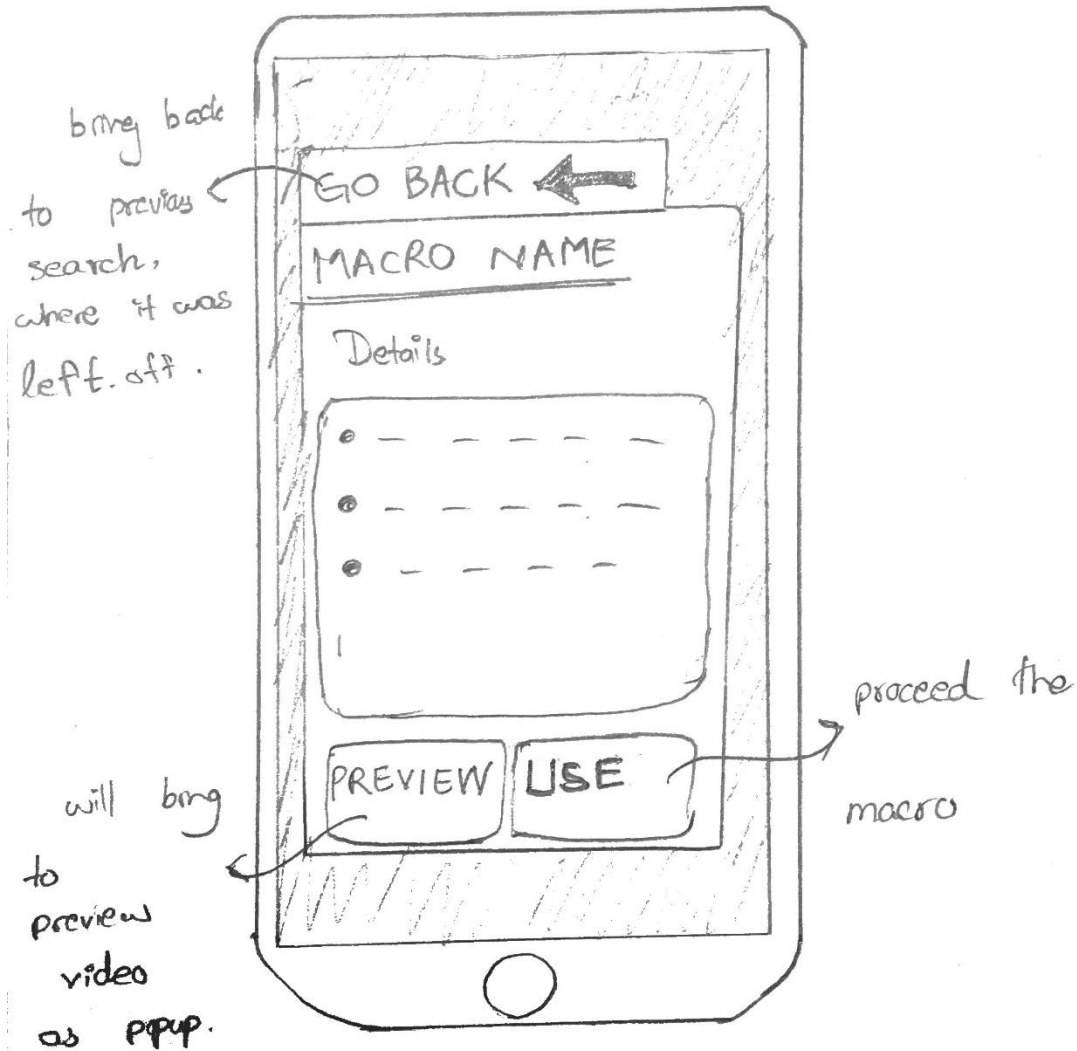* since a lot of elder people, know how to use Facebook apps,

of Similar interface with bigger icons and text

* preferrable for smaller macros lists.

TASK (1) Using a recorded macro: Secondary Interface 1
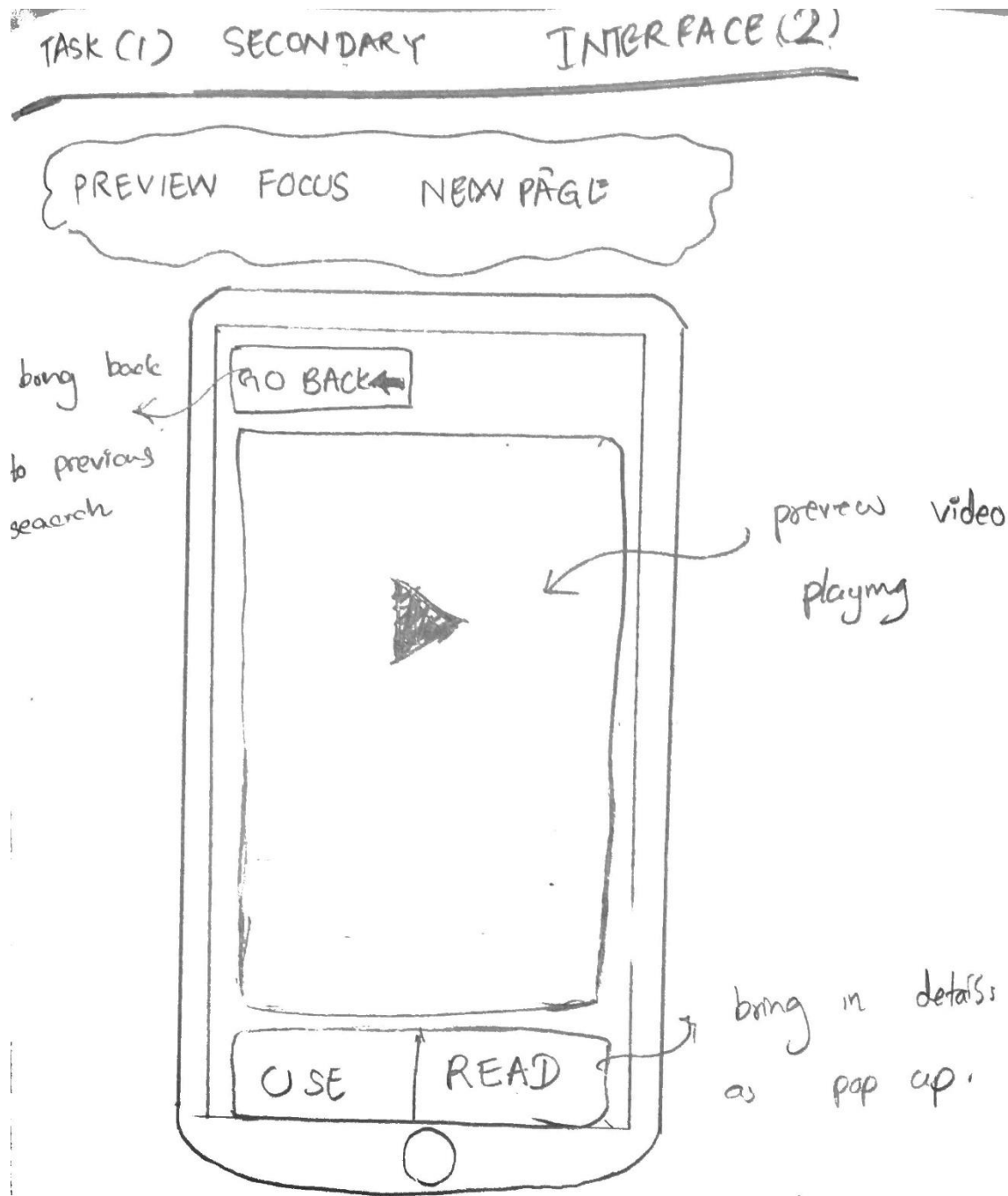
TASK(1) SECONDARY INTERFACE(1)

(BIG-TEXT READABILITY POP-UP)

bring back
to previous
search,
where it was
left. off.

GO BACK ←

MACRO NAME

Details

- — — — — —
- — — — — —
- — — — — —

PREVIEW | USE

proceed the
macro

will bring
to
preview
video
as pop.

★ Details are the center of the interface.
★ preview is displayed with a button.

TASK (1)   SECONDARY   INTERFACE (2)

PREVIEW   FOCUS   NEW PAGE

bring back
to previous
search

GO BACK ←

preview video
playing

USE   READ

bring in details
as pop up.

- preview is automatically displayed.
- details is hidden.
- not a pop up

Primary Interfaces for Task 2 – Screen overlay to control the recording process.
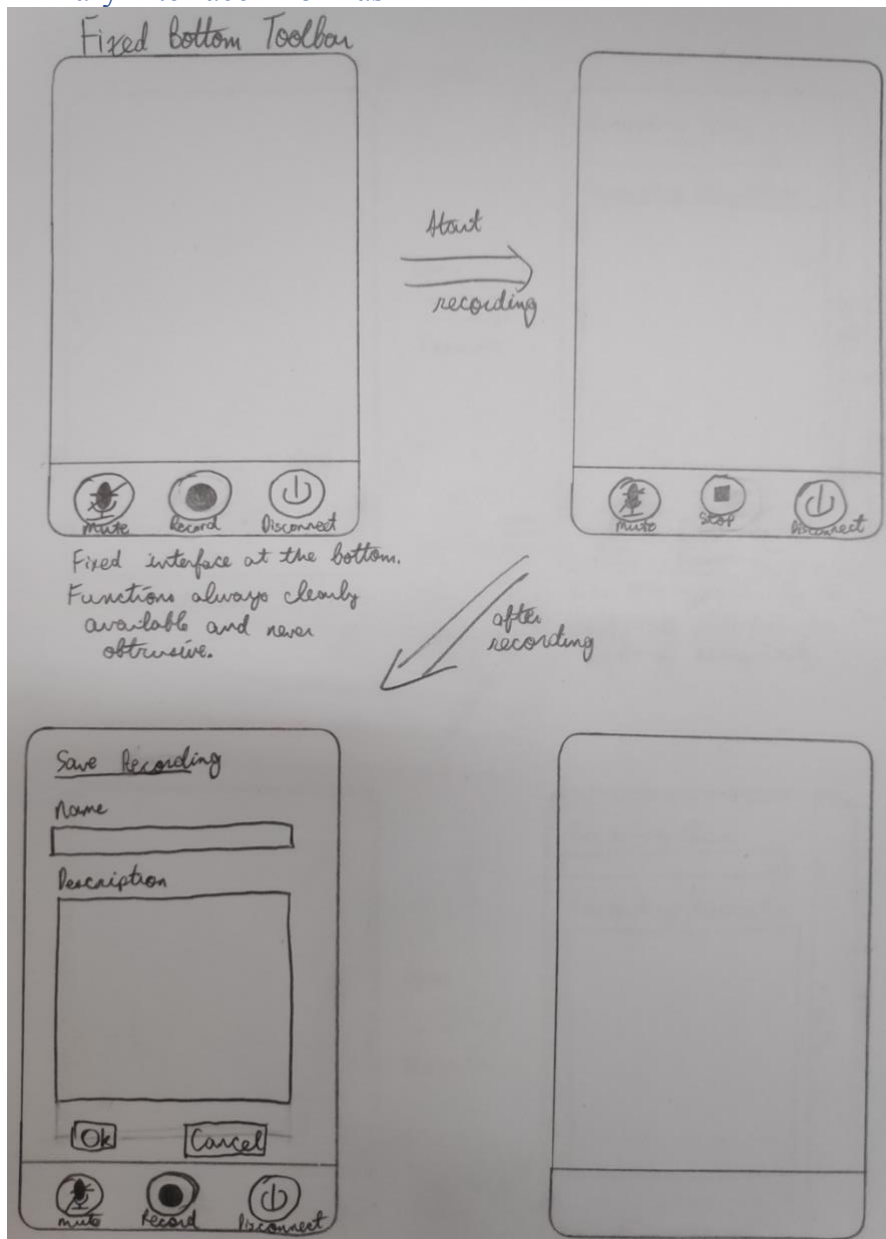
Primary Interface 1 for Task 2: Starred
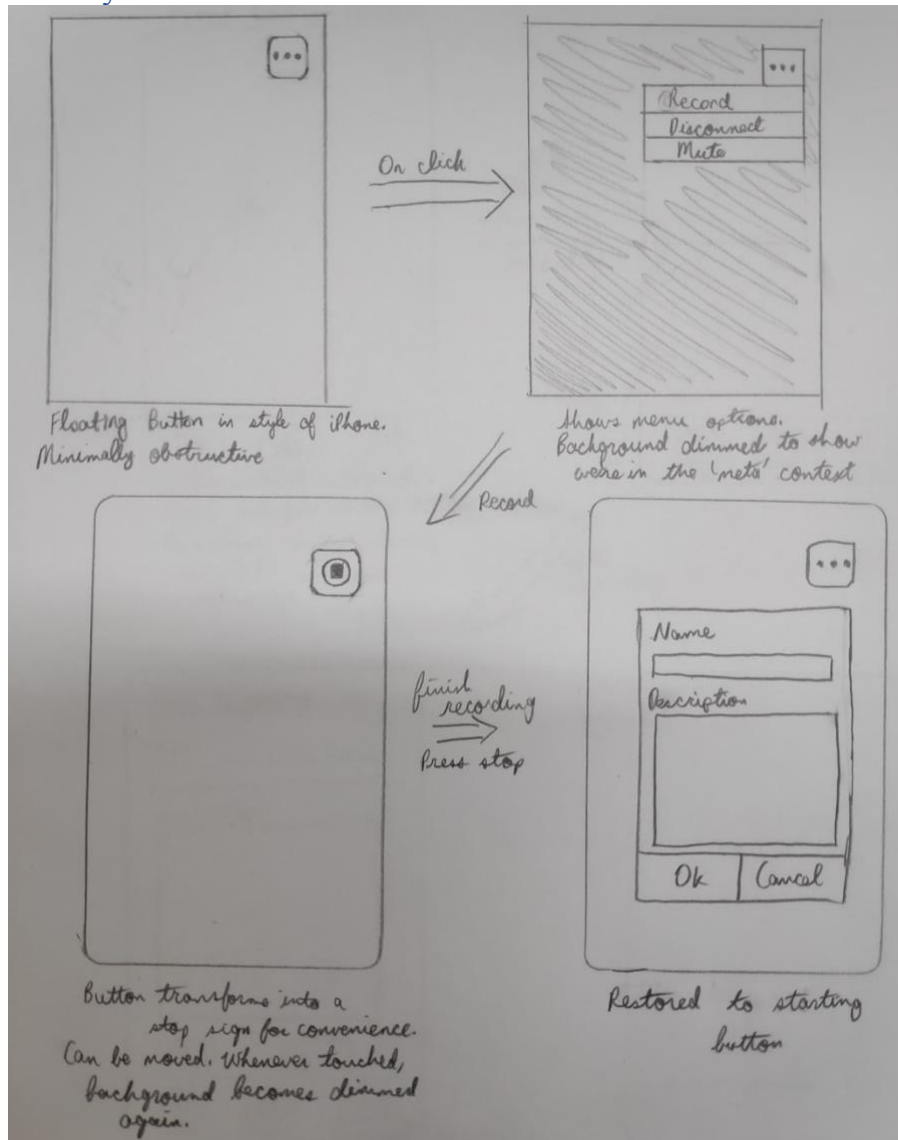
Pros:

+Easily recognizable as a button due to familiarity with both IOS and Android offering similar interfaces.

+Minimally obstructive while icon shows the recording state.

+Dimming shows a clear distinction between interacting with the phone vs the controls.

Cons:

-Requires two steps to start recording and access any other options.

-Options are inaccessible while recording.

-Drop down menu might be cumbersome to click on.

Primary Interface 2 for Task 2

Fixed Bottom Toolbar

Start recording

Mute Record Disconnect

Fixed interface at the bottom. Functions always clearly available and never obtrusive.

after recording

Mute Stop Disconnect

Save Recording

Name

Description

Ok Cancel

mute Record Disconnect

Pros:
+All functions are always available.
+Very clear division between the recording section of the screen and the control section.
Cons:
-May reduce visibility by having to reduce the size of the viewport.
-Reducing viewport size makes remote control harder in accessibility.
-Buttons are not always necessary to have around. Additional clutter.
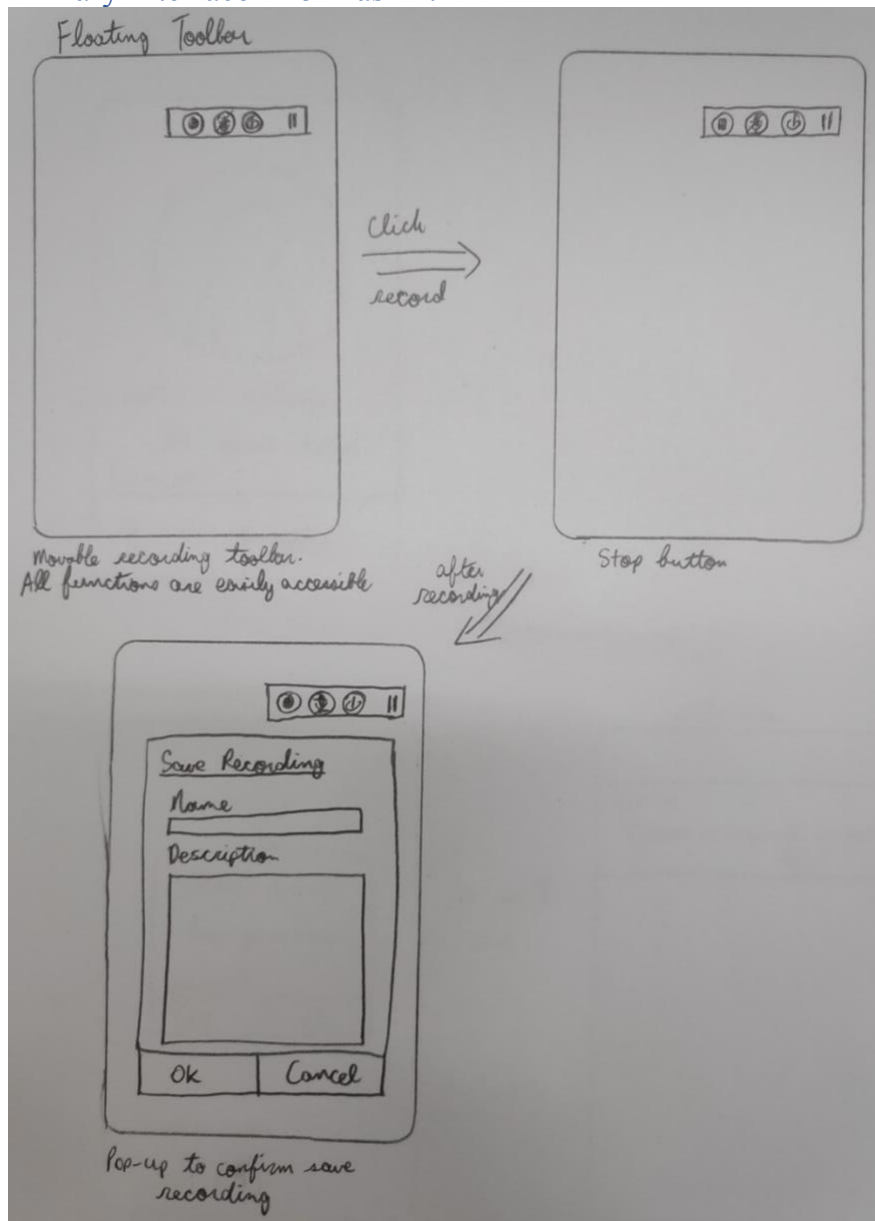
Primary Interface 3 for Task 2:
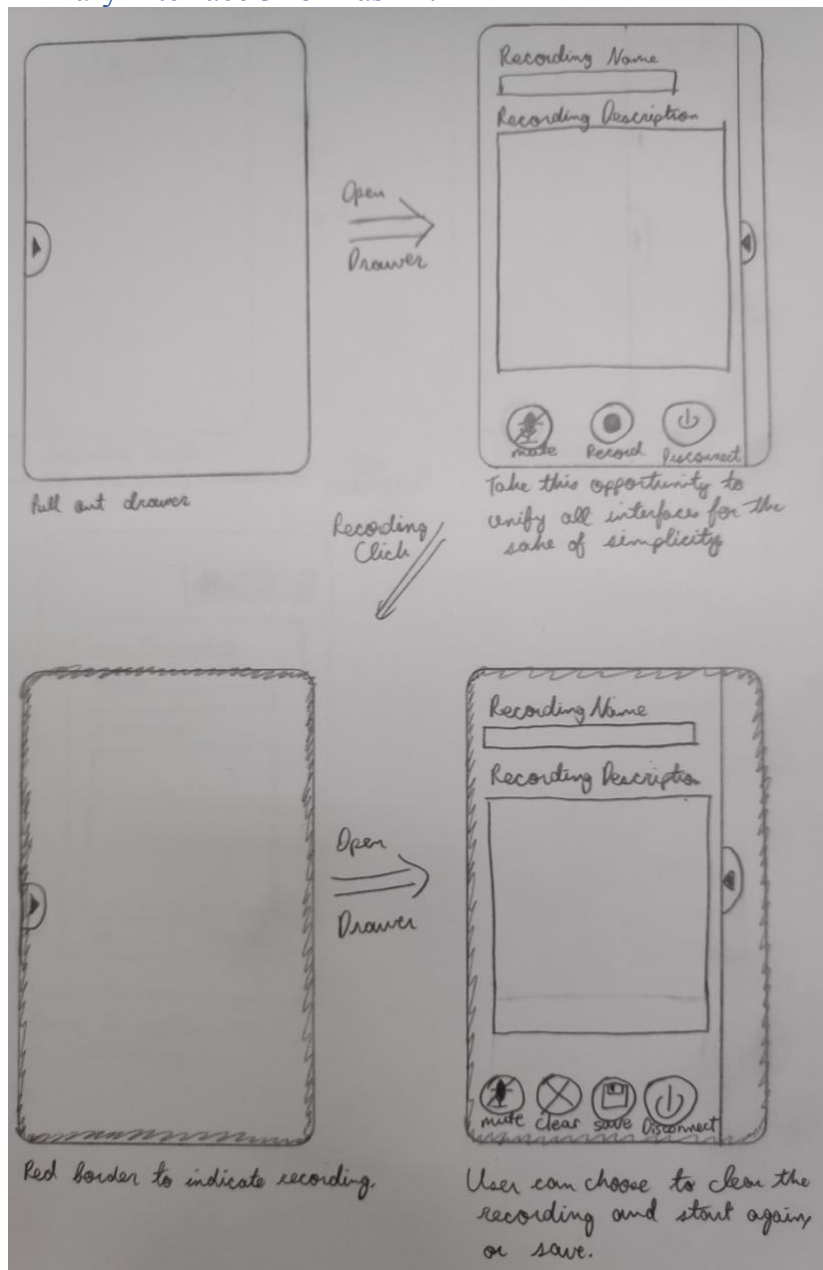
Pros:
+Very non-obstructive during the recording phase.
+Clearly shows recording being done.
+A single, self-contained screen for the whole macro recording process.
Cons:
-Two clicks to access any function.
-Changing buttons on the bottom row.
-Requires a long transition animation to access the drawer.

Pros:
+All functions easily accessible in a single click.
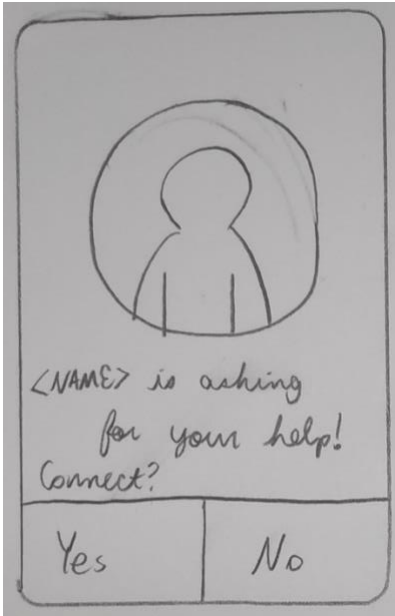+Clear that this is part of the application.
Cons:
-Obstructive during recording, especially compared to the single button.
-Buttons are small and hard to press, since we have to make the toolbar small to minimize obstruction.
-No label text.
-Unclear when recording.

Secondary Interfaces for Task 2
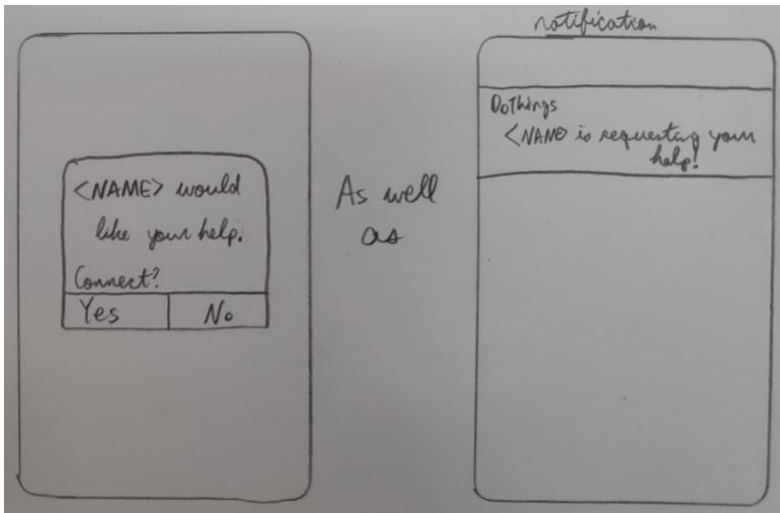## Interface 1: Starred

Pros:
+Reminiscent of Kakaotalk and other messengers' call screens.
+Makes it clear what's going on. That this is a task that requires immediate attention.
Cons:
-Completely obstructive.

Interface 2:

Pros:
+Notifies without being too obstructive.
Cons:
-Lacks space for information.
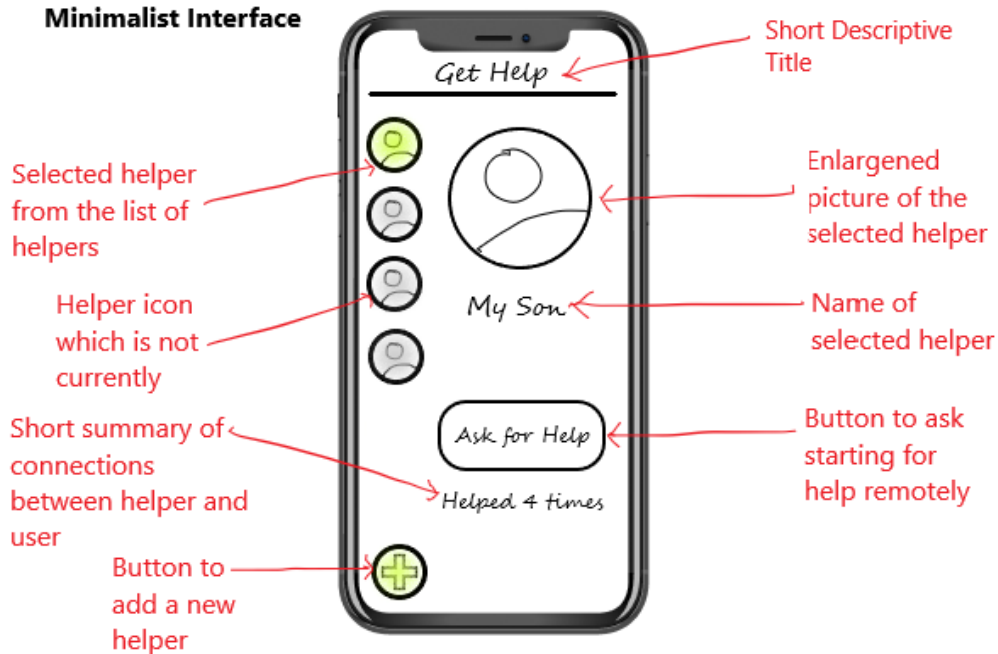-Not distinctive as something that requires immediate attention.

TASK (3) Establishing connection (Remote): Primary Interface 1

Descriptive Interface

Short Descriptive Title

Get Help

Who do you want to ask for help?

Description to guide the user

Picture of the helper

My Son

Name of person who the user wants to get help from

Ask for help

Button to ask starting for help remotely

John

Cards which have different helpers the user can choose from

Ask for help

Button to add a new helper

Add a new helper

TASK (3) Establishing connection (Remote): Primary Interface 2

Minimalist Interface

Short Descriptive Title

Get Help

Selected helper from the list of helpers

Enlargened picture of the selected helper

Helper icon which is not currently

My Son

Name of selected helper

Short summary of connections between helper and user

Ask for Help

Button to ask starting for help remotely

Helped 4 times

Button to add a new helper

*Drawn on Microsoft paint

TASK (3) Establishing connection (Remote): Primary Interface 3

Big Interface

Big cards which have different helpers the user can choose from

Picture of the helper

Get Help ← Short descriptive title

My Son   John ← name of the helper

Tyler   Add a helper ← Button to add a new helper.

⊗
Click on a helper above to ask for help! ← Instructions to guide the user.
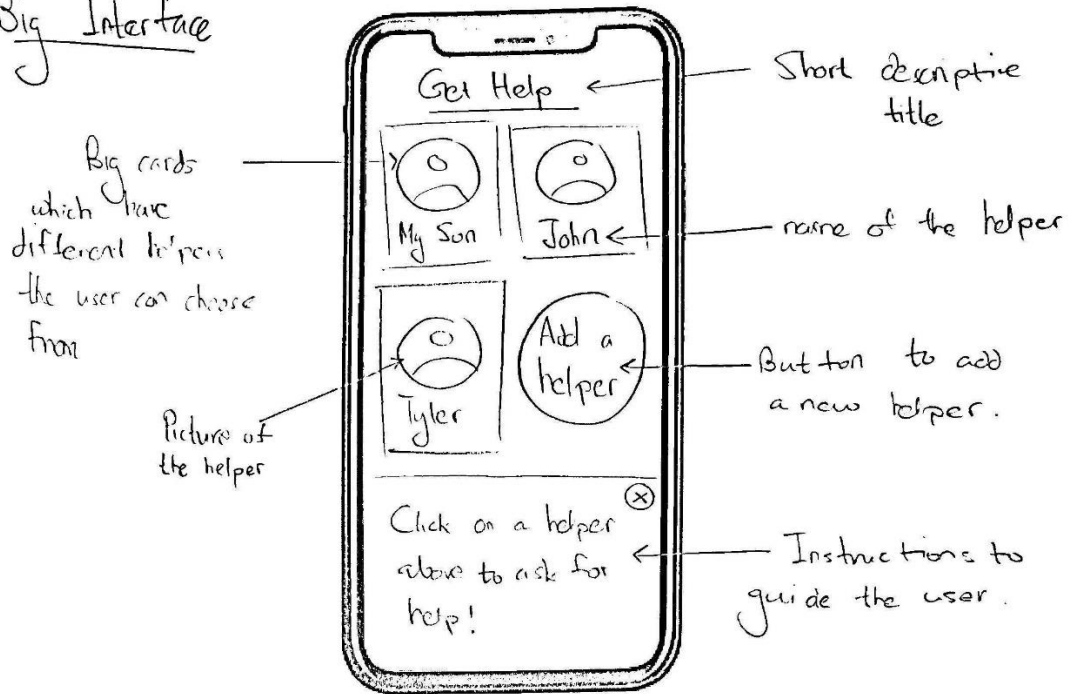
TASK (3) Establishing connection (Remote): Primary Interface 4

Small Interface

Get Help ← Short descriptive title

My Son

Picture of the helper

John ← name of the helper

Button to start asking for help

Tyler
Ask for Help ← Border/accent around selected helper

⊕ Add Helper

Button to add a new helper.

TASK (3) Establishing connection (Remote): Secondary Interface 1

Descriptive Interface

Share Help Message ← — Short descriptive title

Prompt to enter — → Describe your issue: user's issue in the below text input box

text input box to enter the descrip of the user's issue.

Prompt to — → Choose an app to share your message choose an app which can share the help-message.

App1 App2 App3
App4 App5 App6

One of different apps the user can choose to share the message with a link to add as a helper.

⭐ TASK (3) Establishing connection (Remote): Secondary Interface 2

Minimalist Interface

Short, — Share Help Message descriptive title

Choose an app:

Prompt to — select an app which can share the help-message

App1 App2 App3
App4 App5 App6

Pop-up screen which appears when user clicks on the button that adds helpers.

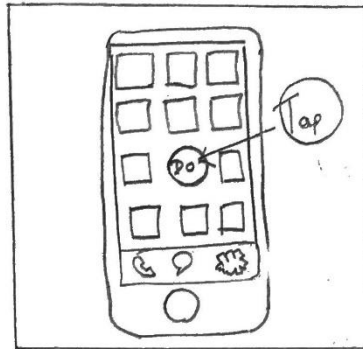One of different apps the user can choose to share the message with a link to add as a helper.

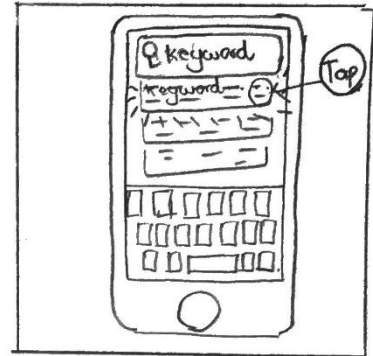# TASK (1) Using a recorded macro: Iterated Story Board (Old)

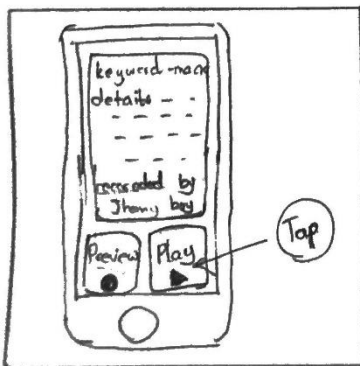TASK(1) STORYBOARD, Using a recorded macro
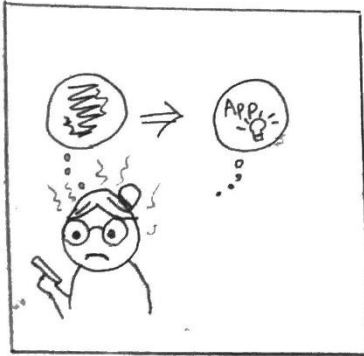
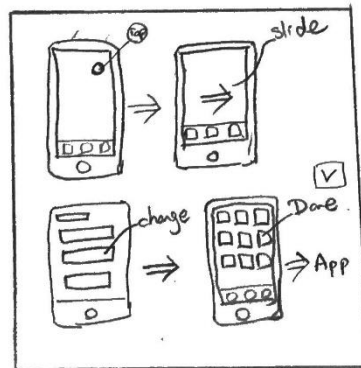1. Helpee having an old problem, and remembers that she has the macro recorded

2. go into the app

3. search for the macro, find it

4. choose play options

5. macro gets played, and the process got automated.

6. check the result, problem solved.

Feedback

- Lacking some concrete explanation, (didn't mention smartphone)
- Macro is too confusing concept for a storyboard
- Instead of generalization, the specific example will be better to understand.
- Automation part is unclear that it is automated.

TASK (1) Using a recorded macro: Iterated Story Board (New)

TASK(1) STORY BOARD, Using a recorded macro

＊ macro = repeated actions on smartphones (touch and swipes) which can be recored and play

1. Helpee forgot how to video call her grandson, and he taught her that last week.

2. She remembers that she can use "Do-things" app. (macro was recorded)
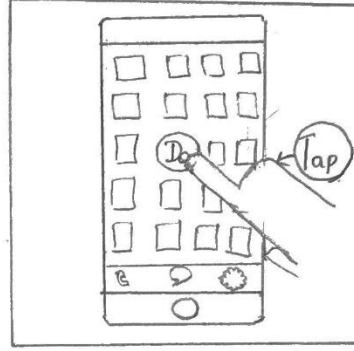
3. Go into Do-things app.

3. search for video-call macro, and found it.

4. Choose play button.
(To initiate macro process)
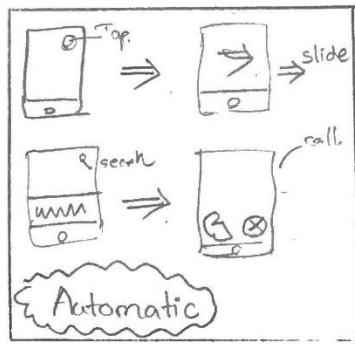
5. Automatically, smartphone goes through steps to video-call her grandson.

6. Now, she is video-calling with her grandson.

Original Storyboard for Task 2

Helpee asks helper for help

Profiles

Mom
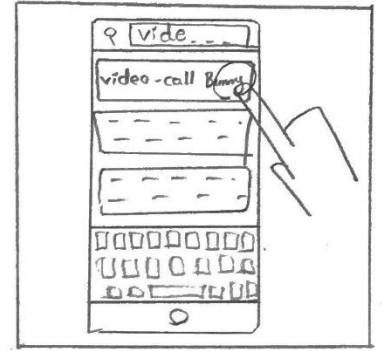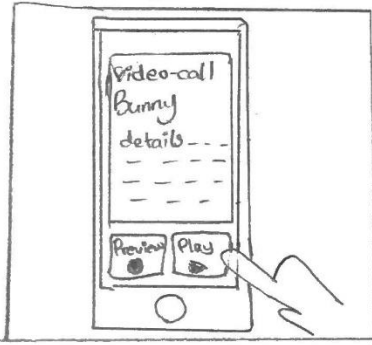
| Give Help | Recieve Help |

Helper selects 'Give Help'

Son would like to help

Yes   No

Helpee gets an alert

Profiles

Son

| Give Help | Recieve Help |

Helpee selects 'Recieve Help'

Mom would like for help

Yes   No

Helper gets an alert

OBS!!

Helper is now remotely accessing helpee's screen. Has a small floating toolbar to allow control of the recording proccess. Can start recording at any time

Macros

11-3-2020
Macro1

Once finished, helper can quit. In the background, a macro has been automatically saved.

Iterated Storyboard for Task 2:

Helpee Screen

Do Things

Recieve Help

Give Help

Recordings

Helpee navigates to the app.

Helpee Screen

Profiles

John

Recieve Help

Enters the Profiles page and requests help from the helper

Helper Screen

Mom would like your help

Yes | No

On the helper screen, there will be a notification

Helpee calls helper asking for help

Helper Screen

< View of helpee's home screen >

Dis-connect | Record | Mute

Helper is now viewing helpee's screen, and can record actions by pressing the record button

---

Helper Screen

Save Recording

Name

Recording 3

Description

Ok | Cancel

Once the helper is done, he can save the recording after pressing the stop button

---

?

Help me

The next time the helpee needs assistance w/ the same issue.

Helpee Screen

Recordings

Recording 1

Recording 2

Recording 3

Helpee can access the screen containing recordings.
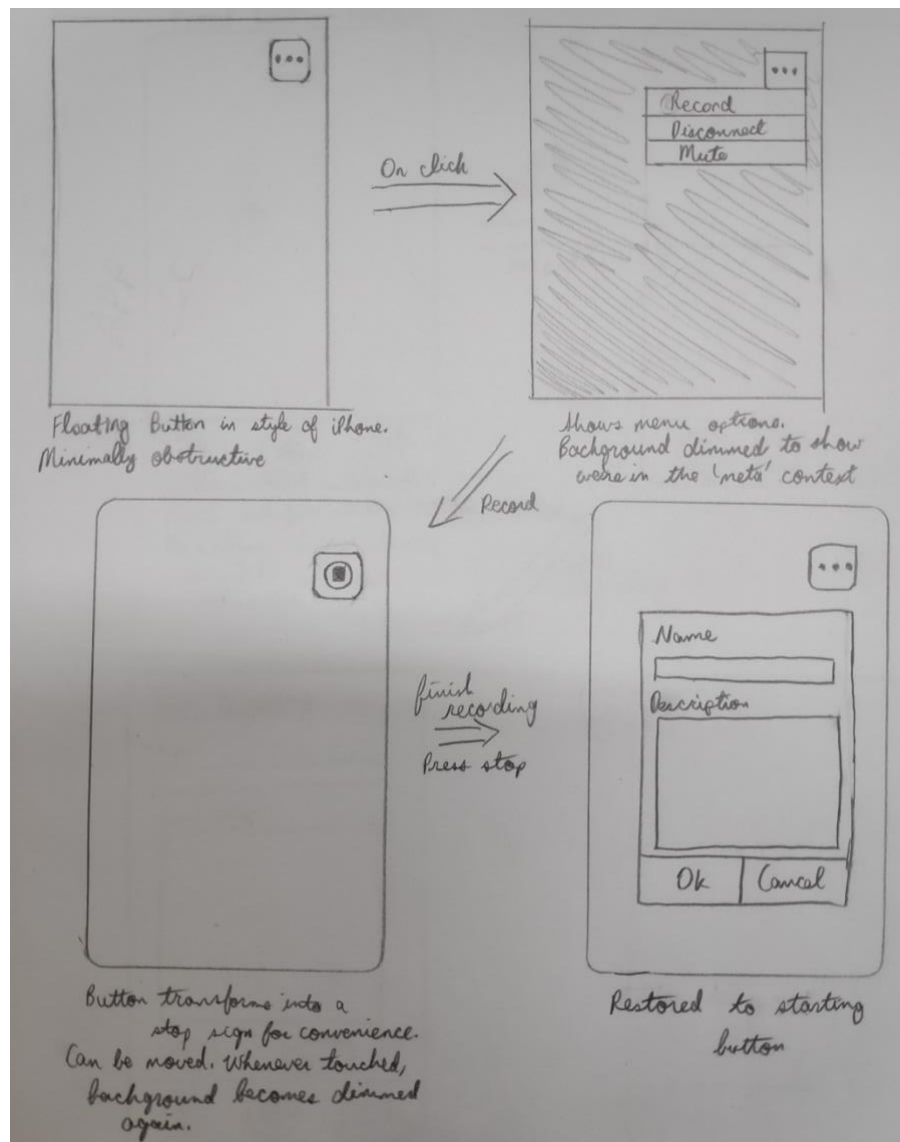
Iterated Primary Interface 1 for Task 2:

Old:

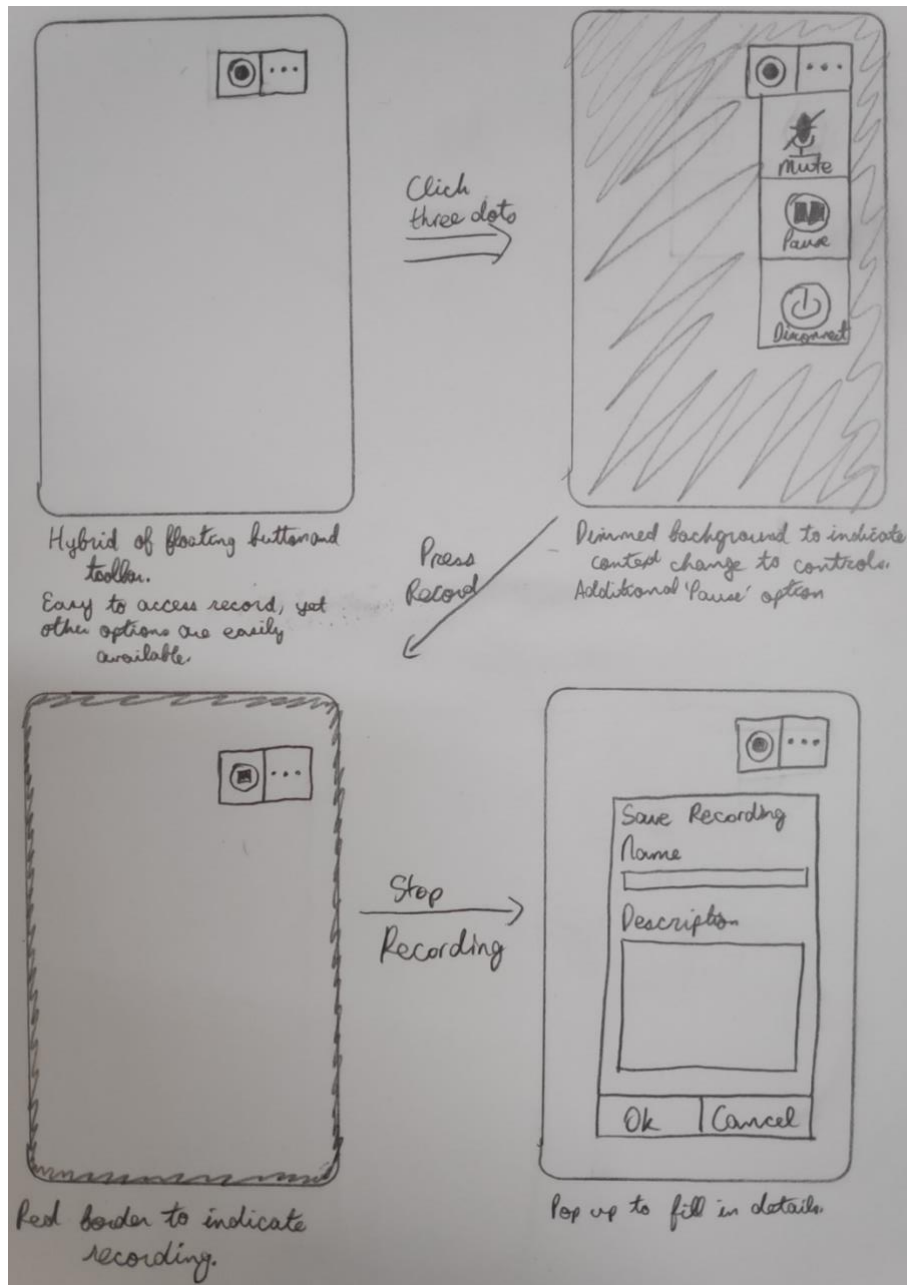
Pros:
+Easily recognizable as a button due to familiarity with both IOS and Android offering similar interfaces.
+Minimally obstructive while icon shows the recording state.
+Dimming shows a clear distinction between interacting with the phone vs the controls.
Cons:
-Requires two steps to start recording and access any other options.
-Options are inaccessible while recording.
-Drop down menu might be cumbersome to click on.

New:

Click three dots →

Press Record

Hybrid of floating button and toolbar.
Easy to access record, yet other options are easily available.

Dimmed background to indicate context change to controls.
Additional 'Pause' option

mute

Pause

Disconnect

Stop Recording →

Red border to indicate recording.

Save Recording
Name
Description

Ok | Cancel

Pop up to fill in details.

Notes:
+Start the recording process in a single click.
+Includes a pause function.
+Large icons in the drop down for easy accessibility.

Appendix

Brainstorming Tasks

Recording Macros for repetitive tasks- User wants to record a macro that helps with some repetitive function that could be made simpler using a macro. An example would be to change a setting that may take multiple steps.

Using a recorded macro - Helpee needs help with an already recorded problem, go into the app, look for it and replay it.

Primary screen - macro list and search

Secondary screen - macro details / execution and (preview)

Remote helping with established connection - Helpee went into the app, allowing the established connection from the helper. And then, wait and see what helper would do on their phone and helper keep them as macro for later uses.

(or) Helpee requires help again and contacts the user. User re-establishes existing connections through the app and helps.

Primary screen - Helper's remote access overlay

Secondary screen - Helper's remote access screen

Recording macro in-person - If they are physically present next to each other, then the helper can directly record assistive macros on the helpee's phone. The helpee can then later replay these macros as necessary.

Remote access to devices - User wants to remotely access their own mobile-devices. After establishing an initial connection, they can access the remote device easily.

Establishing connection (In person) - Helpee and helper establish connection for the first time in person.

Establishing connection (Remote) - Helpee and helper establish connection for the first time in remote situations.

Primary screen - Interface to add or view existing connections with other users

Secondary screen - Helpee shares private ID with helper(s)

Interface #1 for primary screen - Typical Contacts Screen

Interface #2 -

Reverse remote - helper wants to watch the helpee perform a task. In this case, the connection is made in the other direction, with the helpee establishing a link to the helper's device so that they can view what the helper is doing.

Screen sharing - User wants to watch something together with another user. They can allow the other user to establish a connection to the host's phone where they can then share some activity together.

Managing macros on the device - The user can delete, rename or move recorded macros in their device.

Appendix B: Critique

Task1 storyboard - Panel 1
        What problem? Which problem is she having?
        Some people may not know what a macro is?
        The automation part is not clear
Primary Interface 4 - Details are not that necessary, straight up image or video will be better

Task 2 storyboard
Does the phone automatically ask the helper and helpee if they want to connect?
What kind of problem does the helpee need help with?
It's not clear how to navigate to the various interfaces. Transitional panels must be included.
Should focus on a single workflow, even if there are multiple options to the same end. Should show the ideal case.

Primary Interface 1-
Might be too small.
Not clear what it can do until you click on it.

Primary Interface 2-
Unnecessary to continue to take up so much space.
Hard to adjust to smaller visible window.

Task 3:
        Primary Interface 1:
- It has a good UI
- User has to scroll all the way down to add new helper
- Small amount of additional info would be helpful(e.g. last time helped, number of times helped)

        Primary Interface 2:
- If none of them have profile pics you will not be able to identify / distinguish
- Too much free space

        Secondary Interface 1:
- Divide the steps: writing the issue and choosing the app
- Add a progress bar