# DoThings - Jong Kwon Park, Htet Naing Phyo, Sudara Ranasinghe

#### **User Testing Methods**

We recruited from among our classmates based on their familiarity with the situation that our product is designed to resolve. They are part of our ideal user demographic - college aged students who are technically inclined and who have had experience helping less technically capable people (such as family members) with tasks on their smartphones.

Two of the tests were performed in person while two were performed online (subjects 3 and 4) through zoom.

Tests with age group 20-25 took 15 minutes. The test with the person in the 40-50 age range took 45 minutes because a bit more guidance and explanation was required.

We took notes during the tests and used the after-test survey as a way to get more detailed feedback and allow the candidate to self-reflect on their experience.

We focused on feedback regarding usability, since it's a critical part of our application in order to maximize accessibility.

#### **User Testing Results**

We can roughly divide the results into an evaluation of two aspects - form and function.

In terms of form (the way that the app looked and behaved), we are confident that we achieved a high degree of usability, but there was some difficulty getting to a place of familiarity especially because of the features being introduced in our app. The testers knew what to do after the introduction, and although there may have been minor difficulties at the start while testers were figuring out the positions of things, they didn't have difficulty understanding what the interface did once they found everything. Our post-test survey shows universal agreement that the interface was simple and straightforward. However, even if the app was very usable, there were complaints about convenience. One specific example involves how new users are added to the system. Currently, we require the user to scroll all the way to the end of the contacts roll in order to tap the card to add a new user. There was another concern that it may be difficult to find the desired macro without a search bar. We don't anticipate that the user will have enough macros to justify a search bar, but we may add something to help the user better identify what the macro he has selected does.

Based on our testing regarding the form, we have thought of some changes that we have also noted in the MidFi Report. For one, it might be useful to have an explanatory overlay that can either pop up the first time the app is run or when a "Help" button is pressed. We will also place the "Add User" function as a button on the top right of the Contacts page. In order to help with searching, we may re-incorporate "Macro Previews" into this interface from the other interface, as it's a clear way to show a user what a macro does once the user has selected it. A serious potential change we will consider is to add a Home Screen or some other loading screen to clarify what the page being loaded does.

In terms of function (what the app can do for you), it took somewhat more explanation than we anticipated in order for users to understand what features our app can offer for them, but once they understood they could see its utility. This is also reflected in our post-test survey which shows all users would be willing to use this app either as a way to help the people in their lives that require this kind of help or as a way to receive help. One very useful suggestion was that we could improve the way that this app helps people by adding indicators showing where the recording is touching so that it can have an additional educational aspect to those watching the recording.

Based on these results, we have also added to the changes to be made (again included in the MidFi Report). To clear up the language regarding the macros, we may rename the section as "Recorded Actions" and/or have a small subtitle under the header that explains the function of a recorded action, such as "Press an Action and let us do the rest of the work for you!". We will also add an "indicator" that shows the helper's recorded touches so that the person receiving help can watch what is being done and hopefully learn from it.

# Appendix:

# Notes from User Testing Session:

**CSE 323 User Research** 

#### **List of Tasks**

#### As Helena, the Grandma:

- 1. Add Tyler Kim as a helper.
- 2. Ask for help from Tyler Kim to video call John on KakaoTalk.
  - a. Also, as Tyler Kim: Help Grandma video call John on Kakao Talk.
- Play the recorded action that calls John.

#### **Test Sessions**

Subject ID: 1

**Age:** 20 - 25 **Date:** 5/5/2020

Where the test was done: On campus

Time: 10 pm - 10:15 pm How long it took: 15 minutes

# **Team Members Present:** Sudara Ranasinghe **Notes:**

"The message (with the link that is sent to the helper) was long so I didn't want to read the message. Tyler may not even read the message. He may think it was spam. He may even think Grandma's phone was hacked."

"What if the helper wanted to change some part of the recording halfway through the recording? I don't know how I can do that."

"What if I wanted to restart the recording - what do I do?" <The user was not able to restart the recording>

"Maybe the grandma wouldn't use the recorded action. Instead she may keep asking for help remotely."

"I thought it was a 'recording' or a video." <I explained what she saw happen was an action replaying on her phone and not a video>

#### Subject ID: 2

**Age:** 20 - 25 **Date:** 5/5/2020

Where the test was done: On campus

Time: 10:20 pm - 10:35 pm How long it took: 15 minutes

Team Members Present: Sudara Ranasinghe

#### Notes:

"The app looks ugly. I don't like the colors. It's for old people. I might be old but I might want to feel like I'm using a modern interface"

"I want to see all the helpers at once (on the Contacts screen). Don't want to keep going all the way to the right."

"Typos make it look unprofessional."

"I want to add a helper directly in the app or go back directly from the message-app to Do-Things (after sending a link to the helper)."

"I might be too lazy to fill in the details after finishing the recording"

"What if I want to save the action even though the helper doesn't save it?"

"I have to move all the way to the end to find an action. No search bar? No filter?"

"Do I replay a video of the recording in this app?"

"Don't know the term 'action'. Does it mean screen recording?" <I explained what an action is>

"I want to learn, so that I can be independent."

"It's good for complicated tasks"

#### Subject ID: 3

**Age:** 20 - 25 **Date:** 5/5/2020

Where the test was done: On campus

**Time:** 10:55 pm - 11:10 pm

How long it took: 15 minutes

Team Members Present: Sudara Ranasinghe

Notes:

"So Tyler has to click the link to add me as a helpee? Does Tyler have to download the app?"

"How does Helena know the order of doing things or how to use the app?"

"Does the user look at the video recorded and follow the video?" <I explained that it wasn't a video but an "action" that gets replayed automatically.>

"Oh wow! How it does something automatically on my phone is a bit creepy"

#### Subject ID: 4

**Age:** 45 - 50 **Date:** 5/5/2020

Where the test was done: On Zoom

Time: 11:50 pm - 12:30 am How long it took: 40 minutes

Team Members Present: Sudara Ranasinghe

Notes:

"Is it a video that gets recorded?"

"Does it get played automatically?" <The word automatically was used by all the participants when they understood what an "action" is>

"I don't know where I can add Tyler's name" <I had to guide the user to the Contacts screen because he expected the "Add" button to be on the first screen. When the user saw the "+" sign on the Contacts screen, he immediately knew he could add Tyler by clicking on it.>

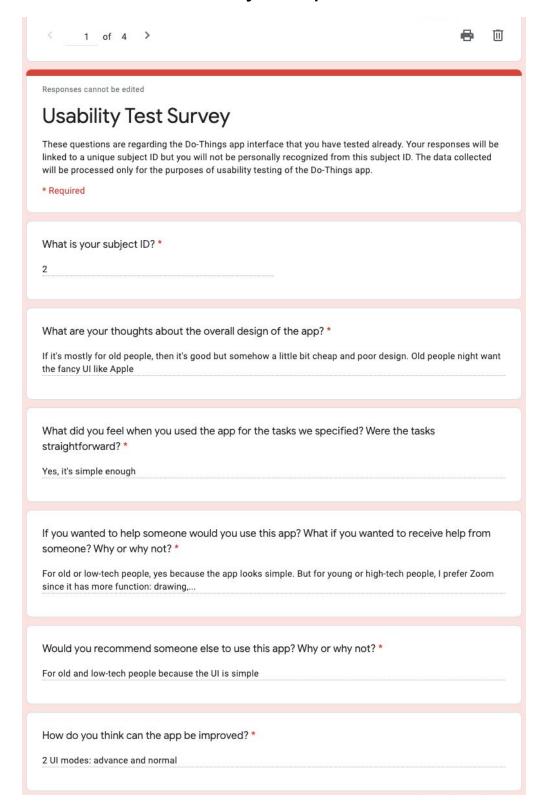
"Which app should I select? Can I select any app" <The user didn't know the purpose of selecting an app after clicking on "Add a helper" button>

<After seeing the app perform an action>:" Wow this is like a robot"

"This could be used for tasks/features I do not use often, like recording a call"

"It would be useful if it could be made available in one's native language"

# Scans of the Survey Responses:







Responses cannot be edited

### **Usability Test Survey**

These questions are regarding the Do-Things app interface that you have tested already. Your responses will be linked to a unique subject ID but you will not be personally recognized from this subject ID. The data collected will be processed only for the purposes of usability testing of the Do-Things app.

\* Required

What is your subject ID? \*

1

What are your thoughts about the overall design of the app? \*

I think the icons are big and easy to read, but it is a bit hard to find stuff easily. For example, it is kind of energy consuming to find the helper from the helper list, since I need to swap a lot.

What did you feel when you used the app for the tasks we specified? Were the tasks straightforward? \*

Personally, I would have just not call John cause there are too many steps. But it was an interesting experience. Tasks were straightforward.

If you wanted to help someone would you use this app? What if you wanted to receive help from someone? Why or why not?  $^*$ 

I would be little confused at the beginning, since I didn't understand what is going on.(Didn't know that it was just

Would you recommend someone else to use this app? Why or why not? \*

I would recommend to a person who has at least 3 friends who are willing to help anytime. Because the app depends on the existence of helpers. No friends...no help.. If you have someone, it seems like it could be useful.

How do you think can the app be improved? \*

It felt like I needed time to get use to the app, meaning helpees may need a helper for using this app as well. It would be nice it is more straightforward. For example, when the app begins, it would be nice to see TWO big buttons: 'ask for help' button and 'I did this before but dont remember' button... From the first interface, it was hard to find the 'ask for help' button. Overall, it was a bit complicated even for a person who knows phone.





Responses cannot be edited

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\* Required

What is your subject ID? *
3
What are your thoughts about the overall design of the app? *

The design looks easy to use. Good approach for people to use the app.

What did you feel when you used the app for the tasks we specified? Were the tasks straightforward? \*

It was straightforward. Though it might be better to put an explanation for first-time users.

If you wanted to help someone would you use this app? What if you wanted to receive help from someone? Why or why not?  $^*$ 

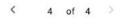
I would like to use this app for helping others and getting help from others. This app will easily help people remotely whenever help is needed.

Would you recommend someone else to use this app? Why or why not? \*

Yes. The app looks really helpful for my family.

How do you think can the app be improved?\*

It will be helpful if the path shows what place the helper is touching. Then people can repeatedly see and learn how to use by themselves.







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\* Required

What is	your sub	ject ID? *
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4

What are your thoughts about the overall design of the app? \*

It's marvellous .It's very useful for the common people. Thousands of people don't know even the basics of android phones. I'm one of them. It's very useful for people like us. Main thing is we are always busy with our business affairs and we have no time to learn some complicated steps of using android or apple phones.

What did you feel when you used the app for the tasks we specified? Were the tasks straightforward?  $^\star$ 

As I feel it's very simple.

If you wanted to help someone would you use this app? What if you wanted to receive help from someone? Why or why not? \*

Of course.If I have

the app with me it will be very useful for me. When I do the same task again it works itself and I don't have to worry.

Would you recommend someone else to use this app? Why or why not? \*

Yes, I think people don't tend to learn new things about android phones. So For the busy people it's very easy to use this app and get the things done by someone.

How do you think can the app be improved? \*

If someone can understand it in his or her own language it will be very convenient for them.