Test Procedure

Examiners

For our testing, we require at least one examiner for each test - though two would lessen the burden on examiners during a given test. The examiner will need to present the prototype to the user and ask the questions of them. In addition, they will need to keep track of which of the tasks the users are able to complete and how quickly. Thus, a good amount of responsibility will be placed on one person.

However, given that the test will be done will a troubleshooter present on the subject's end, the burden of all of these responsibilities will be lessened. The troubleshooter will be able to explain concepts to the test subject while the examiner is conducting the test. Thus, we believe that this tandem of a single examiner alongside a known troubleshooter will be sufficient - though a second examiner would likely be preferable.

Equipment

In order to participate in the study, users will need to have access to a laptop computer on which they can run our product. Examiners will likely need to help testers set up their computer to use the prototype on it. For the 'calling' portion of the app, we are using WebRTC Penguin Academy. To setup the call for the user test, navigate to https://webrtc.penguin.academy/ and insert 8540107.114076983 id for joining a live demo. Please do this for the test subject before beginning the test. This is not part of the testing and thus can be performed for the users.

Handling/Manual

The subject of how to handle our product is explored in depth within our User Manual

Test Subjects

The subjects who should be participating in this study are senior citizens (over the age of 65) who have an interest in using video conferencing as a way to connect with other people - whether family, friends or other members of their community. Ideally, these users will not feel completely comfortable with current video conferencing technology but should have also participated in a video call before in some capacity.

In addition to the participants, we also wish to have troubleshooters available for each of the participants in case they need guidance with the product. We believe that it will be common for

our target users to have a person there to help them navigate video calling - especially the first few times they do it. As such, we will ask that each participant has one person who is technologically savvy with them for the testing.

Test Procedure

1. Download all of the documents provided and familiarize yourself with their content - this includes the user introduction, surveys, etc.
2. Ensure that you have all of the necessary equipment to perform the testing as detailed in the equipment section above.
3. For each participant, follow the following steps:
    a. Connect with the participant on zoom - the test will be conducted over the internet due to the Covid Pandemic and will likely require input from your end via a screen share functionality.
    b. Read them the user introduction document.
    c. Provide them with the consent form and ask them to sign it. Please do not proceed with the test if they are unwilling to sign the document.
    d. Ask the participant to share their screen with you. If they need help with this, the troubleshooter should be able to assist them.
    e. Ask the participant to allow you to take control of their screen for the test. This will allow you to move to the next section if necessary for certain tasks.
    f. Have them navigate to the prototype link found here:https://framer.com/share/HCI-SeniorityRules--fdAZXlsUB2xx3LVe5lnl/fuZKrZXQC this should also be in the user manual. This should begin the testing phase.
    g. Open the data collection sheet and for each task please do the following:
        i. Ask the user to complete the task to the best of their ability. If they seem confused, remind them that the troubleshooter is there for them if they need guidance.
        ii. Do not, however, explain how the system works yourself as this will not provide valuable information of the system's successes and failures.
        iii. In the data collection sheet, note whether or not the participant was able to complete each task, whether they needed the aid of their troubleshooter and how long it took them. Also note if they took some other action not related to the task by accident when trying to complete the task.
        iv. If, after a given task, the prototype needs to be moved to a new section, do so at this point.
    h. Provide the user with the post-test questionnaire and ask them to complete it.
    i. Thank the participant for taking the time to help us out. Ask them if they have anything they wish to add before the completion of the session and make a note if they do.

Measurements

This should be found within the Data Collection Sheet.

Outline

How many examiners are required?
One, along with a troubleshooter who the participant knows personally and feels comfortable working with.

What equipment will the examiners need?
Equipment needs can be found in the equipment section above.

How should your prototype be handled?
The user manual linked above should be able to detail how the prototype should be handled.

How will you instruct your examiners to proceed?
Examiners should proceed according to the test procedure outlined above.

How should the examiners treat the test subjects, what should they tell them?
This is also found above in the test procedure. However, we would like to make particular note that one should not act in a way that is too overtly scientific so as to put the participants at unease. Be polite and courteous and attempt to make this as much of a back and forth as possible.

What should the examiners avoid doing?
Do not direct users to their troubleshooters immediately when they have a small amount of trouble. Allow them some time to figure it out on their own unless they themselves ask for help from their friend/family member. Do not rush the participants as some will likely take time to understand the prototype before they can start to successfully perform tasks.

What should the examiners avoid telling the test subjects?
Examiners should not tell the test subjects how to perform the tasks - only ask them how they would attempt to do them. This is only untrue in cases where a user cannot perform a task that is needed in order to attempt a later task in the list. In this case, one should ask whether the user is unable to figure out a given task and then provide them with direction so that they may be able to complete the later task.

What/How/When should the examiners measure?
Examiners should measure according to the steps found within the procedural outline. The data sheet provided to them should be their outline for how to measure for each task. Allow users enough time at each step - don't put down an outcome unless it has been completed or the user has found they cannot perform the task.