



EXPLANATORY STATEMENT

Project ID: 42470

Project title: Investigating the usability of a model-driven accessible-adaptive user interface generation approach with Senior Citizens and software developers

Investigators

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Student Investigator

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You are invited to take part in a research project that investigates the usability of a software tool that generates accessible and adaptive user interfaces for Flutter mobile applications. Please read this Explanatory Statement document fully before deciding whether or not to participate. If you would like further information regarding any aspect of this project, please contact the researchers via the email addresses listed above.

This study is conducted as a part of PhD project at the HumaniSE Lab, Faculty of Information Technology, Monash University, Australia.

This research is funded by the Australian Research Council Australian Laureate Fellowship (FL190100035).

Why were you chosen for this research?

We invite you to join our research because we value the insights you can offer as a software developer with experience in the Flutter Framework for developing mobile applications. Your feedback will be crucial in evaluating the usability of a software tool we have developed.

What does the research involve?

We're conducting a series of interviews with Flutter developers to investigate the usefulness of a new software tool that automates the adaptations to the user interface of a Flutter mobile application. This tool is designed to make apps more accessible to senior citizens by adjusting for common age-related challenges, including those related to vision, hearing, cognitive function, and mobility, within mobile app interfaces.

When participating in the study, you will be shown a series of short video demonstrations of our software prototype during the interview. In between videos, the student investigator will ask you questions regarding the usefulness and usability of the tool/approach.



The interview will be conducted through Zoom and your expected time commitment for the interview session will be 45 - 60 minutes.

Consenting to participate in the project

To consent to this project, you must first read and understand this explanatory statement. Then you must read and complete the Consent form as well. You retain the right to withdraw this consent up to thirty (30) days following the conclusion of the interview session, without giving a reason, and any data collected will be removed from the study and deleted.

Possible benefits and risks to participants

Our aim is to publish the software tool demonstrated in this study as an open-source contribution at the conclusion of the project. It will allow software practitioners and developers (in general) to address age-related accessibility issues that negatively impact the user experience of elderly citizens in most software applications more effectively compared to existing tools/approaches.

You will also be able to empathise more with the accessibility barriers faced by senior citizens. It may influence how you address their age-related needs as a software practitioner in software projects that you contribute to, resulting in better app user experiences among your elderly user base.

There are no known or anticipated risks to you as a participant. Please note that you can opt-out from participating in the interview at any time and that you do not have to answer any questions that you are not comfortable with. Moreover, no personal details or identifiable information about you will be collected.

Confidentiality

All data and recordings generated throughout the study will be stored in a secure Google Drive folder. All forms of data will only be made accessible to researchers listed at the top of this page. All information collected from the interview will be de-identified and processed in an anonymised fashion.

Otter.ai (online transcription tool) will be used for transcribing audio recordings from our interview sessions due to its strong commitment to data security and privacy. Otter.ai is compliant with the General Data Protection Regulation (GDPR), ensuring adherence to strict data protection standards. Furthermore, it has been independently audited and awarded a SOC 2 certification, which verifies that Otter.ai maintains high levels of security and privacy in its operations, as evaluated over time by an external auditor. Additionally, as the session will only be audio recorded in an anonymised fashion, it is impossible for Otter.ai to identify individual participants.

Storage, Retention, Destruction and Future Use of Data

Firstly, all data and recordings generated throughout the study will be stored in a secure Google Drive folder and only made accessible to researchers listed at the top of this page. The data will be de-identified after user studies are complete. All data will be destroyed after five years. Carefully analysed and anonymised data may be uploaded to the IEEE Data Port if required.



Secondly, any of the audio recordings uploaded to the online transcription tool Otter.ai will be deleted from the platform as soon as the transcription process is successfully completed. The Otter.ai service will then permanently delete the audio files and their text transcriptions.

Use of data for other purposes

The data collected during this research may be used for related studies by the investigators within five years. If data is reused, it will still be in anonymised form and covered by ethics approvals of those future projects.

Results

The results of this study may be published in peer-reviewed academic conferences and/or journals and may be summarised at relevant industry workshops. A research report will also be available to participants upon request.

Complaints

Should you have any concerns or complaints about the conduct of the research, you are welcome to contact the Executive Officer, Monash University Human Research Ethics Committee (MUHREC):

Executive Officer

Monash University Human Research Ethics Committee (MUHREC)

Room 111, Chancellery Building D,

26 Sports Walk, Clayton Campus

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Thank you,

Professor John Grundy