Participant Information Sheet for Adults

Multidimensional Web-Plotter

University of Dundee School Research Ethics Committee Application/Approval Number:
UOD-SSEREC-DoC-Class-2020-010

Invitation

You are invited to take part in a research project. Before you decide whether or not you would like to participate it is important that you read the information provided below. This will help you to understand why and how the research is being carried out and what participation will involve. Please let the researcher who gave you this information know if anything is unclear or you have any questions.

Who is conducting the research?

This study is being conducted by Sameer Al Harbi (szalharbi@dundee.ac.uk) in order to fulfil requirements for an undergraduate degree project within the Discipline of Computing, School of Science and Engineering, University of Dundee. The project is supervised by Dr Iain Martin (i.martin@dundee.ac.uk). The project coordinator is Dr Craig Ramsay (cdramsay@dundee.ac.uk).

Who is funding the research?

This is non-funded research taking place as part of an undergraduate degree project at the University of Dundee.

What is the purpose of the research?

The purpose of the research is to develop and evaluate a system which will allow a user to explore and visualise large, multidimensional datasets without any prior programming or specialist knowledge. Visualisation tends to be an important step in the data analysis process and this system aims to increase accessibility in this step of analysis.

Why have I been invited to take part?

You have been invited to take part to help us to ascertain the potential features for this system and to evaluate its effectiveness.

Do I have to take part?

No, taking part is voluntary. If you choose not to take part it will not disadvantage you or the study in any way. You may decide to withdraw from the study at any time without explanation and without penalty. If you decide to withdraw from the study then any data or information collected from you up to that point in time will be removed and destroyed; that is unless the data is anonymous and no longer identifiable to you. Even if you don't withdraw from the study you do not have to answer all questions or complete all tasks that are presented to you.

What will happen if I take part?

There are three possible stages at which you may be able to take part in the research. You can be involved in one or more of these stages. The three stages are thus: (1) Requirements Gathering; (2) Prototype Evaluation(s); (3) Final Evaluation. This information sheet provides a summary of all three stages below but it will be made clear to you at the time by the project researcher which stage you are currently participating in.

Stage 1: Requirements Gathering stage. The purpose of this stage is to gather requirements for the system which is being developed and we are seeking your assistance to do so. Requirements may be gathered in a variety of ways, e.g. a one-to-one interview, a focus group, a workshop, a questionnaire. In the case of an interview, focus group, or workshop we will invite you to a location which is convenient and accessible to you on the University of Dundee campus. Alternatively, we will arrange to have a meeting with you via an online communication platform such as Microsoft Teams. We will provide you with any materials that you require if applicable, e.g. sample designs of the system being developed for you to comment upon. We will then have a discussion to elicit your views and opinions or provide you with a questionnaire to complete. We may utilise a mixture of open questions (e.g. "*What features do you normally expect to see in this kind of application*") or scaled questions (e.g. "*Please rate the importance of this feature to you, from 1 to 5*"). Some questions may request general demographical information from you, e.g. your age range, levels of computing experience, and so on. In some cases, the researcher may wish to ask your consent to take video or audio recordings of the session to enable them to transcribe your feedback later. Please see sections later for how we ensure that your data is kept secure and confidential. It is anticipated that interviews will last between 30 to 60 minutes on average. In the case of focus groups or workshops, it is estimated that these may last for a half-day on average but up to a full day depending on the type of or the nature of the event and the variety of people involved.

Stages 2 and 3: Prototype Evaluation Stage and Final Evaluation. The purpose of these stages is to gather feedback from you regarding a final version or a work-in-progress version of a system under development. You may be presented with system prototypes to review and/or interact with. You may be provided with guided tasks to perform such as logging in to a system or locating features within it. You may be asked to review the general look and feel of the system. While you are exploring the prototype system, the researcher may observe alongside you and offer guidance, direct you, and/or make notes about your experiences and feedback. In some cases, the researcher may wish to ask your consent to take video or audio recordings of the session to enable them to transcribe your feedback later. Please see sections later for how we ensure that your data is kept secure and confidential. Having completed any tasks with the system, the researcher may then wish to ask you questions about your experience which may be in the form of an interview or a questionnaire. The questions will usually relate to aspects of usability, ease of use, how well the requirements have been addressed, and your suggestions for what you think works well in the system or areas that need to be improved. The evaluation will be arranged at a time that is convenient for you and will take place online or in-person at a meeting point which is convenient and accessible on the University of Dundee campus. It is estimated that the evaluation will take between 20 to 45 minutes to complete on average.

Please note: we wish to reassure you that throughout all of these stages neither you nor your abilities are being judged or assessed. We value the time that you are taking to help us and we value the data that you are providing which will help us to improve our research. You do not have to answer any questions that

you don't want to. You do not have to complete any tasks that don't want to. You may choose to withdraw from the study and any time and without penalty.

Are there any risks in taking part?

There are no expected risks.

What are the possible benefits of taking part?

There are no direct benefits other than being involved in research that may be of interest to you.

Will my taking part in this project be kept confidential?

Yes. The researcher will need to record your contact details for the purposes of communication and for liaising with you, e.g. name and email address. These will be stored securely on the University of Dundee One Drive system and will only be accessible to the researcher and their supervisor. When data is being collected from you (e.g. via questionnaires or similar), the researcher may provide you with a unique code or participant ID to use. This can be recorded in any data that you submit instead of your personal contact details. Only the researcher will know which participant IDs relate to which individuals and this information will be stored securely too. The data collected from you will be anonymous and will not require identification of who submitted it and it will not be traceable back to you. This ensures that you do not need to exchange any sensitive information when completing questionnaires, etc. One consequence of data being anonymised is that, if you request the researcher to remove the data that has been collected from you, it may no longer be possible to do so because it will not be possible to identify which data is yours. However, if data has been collected from you and it is possible to associate it with you (e.g. via a unique participant ID that has been assigned to you) then it will be possible to request that this data be removed. In the case of online questionnaires, only those with GDPR compliance will be utilised, e.g. Jisc Online Surveys (https://www.onlinesurveys.ac.uk/). In the case of *any* online data collection, only resources with secure, https protection will be utilised – this ensures that your data is encrypted during transmission. If the researcher has made audio or video recordings of your sessions then these will be stored securely too. The researcher may wish to transcribe the sessions to translate them into written records instead. In which case, these written records will also be stored securely and the audio or video files will be destroyed if they are no longer required. The researcher will be the sole transcriber of the digital content. In the event that you are conducting the evaluation from a location that is outside the EU you will be required to use resources that are GDPR compliant (examples noted above).

What will happen to the information I provide?

All digital data and documents containing (or linking to) the original identification of the participants and the data which has been obtained from them will be stored securely on the University of Dundee One Drive storage system, only accessible to the named researchers. This data will be held for the duration of the project, after which it will be destroyed. Should you decide to withdraw from the study then your data will be removed; this is as long as it is not completely anonymised, in which case we would be unable to link specific data to you. You can request that your data be removed from the study (subject to anonymization); please contact the project researcher to do so. You may also request to be provided with

the data that is being held for you if it is possible to do so. If the data is anonymised or aggregated it would not be possible to tell which data is yours. Any data that is stored will only be utilised by the project researcher and will not be shared with anyone else out with the direct supervisory control of the project. The results of the study may be used in research reports, publications, and presentations. In this case, the results will be presented as anonymised data and/or anonymous quotes from which participants cannot be identified. It is also common for data to be aggregated so that it relates to all participants as a whole rather than individual participants. Where the data for individual participants is referred to, it will be anonymised as noted above. If you wish to access a copy of the published results, please contact the researcher (contact details provided earlier).

Data Protection

No personal data will be collected and processed in this study other than contact information required by the researcher to liaise with you.

The University respects your rights and preferences in relation to your data and if you wish to update, access, erase, or limit the use of your information, please let us know by emailing *szalharbi@dundee.ac.uk.* Please note that some of your rights may be limited where personal data is processed for research, but we are happy to discuss that with you. If you wish to complain about the use of your information please contact the University's Data Protection Officer in the first instance (email: dataprotection@dundee.ac.uk). You may also wish to contact the Information Commissioner's Office (https://ico.org.uk/).

You can find more information about the ways that personal data is used at the University at: https://www.dundee.ac.uk/information-governance/dataprotection/.

Is there someone else I can complain to?

If you wish to complain about the way the research has been conducted please contact the Convener of the University Research Ethics Committee (https://www.dundee.ac.uk/research/ethics/contacts/).

Alternative formats

If you require a copy of the Participant Information Sheet and Consent Form in an alternative format (e.g. large print, Braille) then please notify the researcher (contact details provided previously)*.*