Mr Ben Tomsett Undergraduate student in the School of Computing Sciences

30 April 2024

Faculty of Science School of Computing Sciences

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Javascript visual emulator for ARM

PARTICIPANT INFORMATION SHEET

(1) What is this study about?

You are invited to take part in a research study about evaluating the usability of a web-based application which emulates an ARM processor. You have been invited to participate in this study because you have knowledge and experience with computer programming and may have relevant knowledge and experience in assembly programming. This Participant Information Sheet tells you about the research study. Knowing what is involved will help you decide if you want to take part in the study. Please read this sheet carefully and ask questions about anything that you don't understand or want to know more about.

Participation in this research study is voluntary. By giving consent to take part in this study you are telling us that you:

- ✓ Understand what you have read.
- ✓ Agree to take part in the research study as outlined below.
- ✓ Agree to the use of your personal information as described.
- ✓ You have received a copy of this Participant Information Sheet to keep.

(2) Who is running the study?

The study is being carried out by Mr Ben Tomsett, who is conducting this study as the basis for the degree of Computing Science at the University of East Anglia.

This will take place under the supervision of Dr Gavin Cawley.

(3) What will the study involve for me?

Your participation of the study will take place online. It should take no more than 30 minutes.

You'll be asked to perform a set of tasks using the web-based emulator, and observe any results or output. Following this, a short questionnaire will be completed asking questions about the usability of the emulator, for example, "How would you rate the overall usability of the emulator on a scale from 1 (very difficult) to 5 (very easy)?".

You will not have the opportunity to review information generated about you prior to publication.

(4) How much of my time will the study take?

The total time commitment for participation in this study should be no more than 30 minutes, including performing the specified tasks and completing the questionnaire.

(5) Do I have to be in the study? Can I withdraw from the study once I have started?

Being in this study is completely voluntary and you do not have to take part.

Your decision whether to participate will not affect your current or future relationship with the researchers or anyone else at the University of East Anglia now or in the future.

If you decide to take part in the study, you can withdraw your consent at any point. You can do this by contacting me directly, upon which your consent to participate will be withdrawn.

(6) What are the consequences if I withdraw from the study?

If you decide to take part in the study and then change your mind, you are free to withdraw at any time before you have submitted the questionnaire. Once you have submitted it, your responses cannot be withdrawn because they are anonymous and therefore we will not be able to tell which one is yours.

(7) Are there any risks or costs associated with being in the study?

Aside from giving up your time, we do not expect that there will be any risks or costs associated with taking part in this study.

(8) Are there any benefits associated with being in the study?

Participation in this study might help you to gain a deeper insight into the function of computer processors, and the use of assembly language in the context of software development.

Your participation in this study will help to analyse the usability of the web-based emulator, and also to inform about the effectiveness of using such a tool in learning environments, for example, use by students learning about computer architecture and operating systems.

(9) What will happen to information provided by me and data collected during the study? The only data collected will be the information provided by you in the questionnaire. No personal information will be collected - the questionnaire is completely anonymous. Questionnaire responses will be held electronically for the duration of the project, and will be destroyed once the project has been completed. Results from the completion of this study will be presented in a report for my final year project, which may be published.

Your personal data and information will only be used as outlined in this Participant Information Sheet, unless you consent otherwise. Data management will follow the Data Protection Act 2018 (DPA 2018) and UK General Data Protection Regulation (UK GDPR), and the University of East Anglia's Research Data Management Policy.

The information you provide will be stored securely and your identity will be kept strictly confidential, except as required by law. Study findings will be used for the purposes of my dissertation and may also be used for other scholarly and educational purposes such as research publications and in teaching, but you will not be identified if you decide to participate in this study. Where the study findings are solely used for the dissertation, the data will be destroyed following the examination of the dissertation. Where the study findings will also be used for other purposes such as publications, the data will be kept for at least 10 years beyond the last date the data were used. The study findings may be deposited in a repository to allow it to facilitate its reuse. The deposited data will not include your name or any identifiable information about you.

(10) What if I would like further information about the study?

When you have read this information, Mr Ben Tomsett (yru20qyu@uea.ac.uk, 07546 261563) will be available to discuss it with you further and answer any questions you may have.

(11) Will I be told the results of the study?

You are not able to receive feedback about the overall results.

(12) What if I have a complaint or any concerns about the study?

If there is a problem please let me know. You can contact me via the University of East Anglia at the following address:

Mr Ben Tomsett School of Computing Sciences University of East Anglia NORWICH NR4 7TJ yru20qyu@uea.ac.uk 07546 261563

If you would like to speak to someone else you can contact my supervisor: Dr Gavin Cawley (G.Cawley@uea.ac.uk). If you are concerned about the way this study is being conducted or you wish to make a complaint to someone independent from the study, please contact the Head of School of Computing Sciences: Professor Gerard Parr (G.Parr@uea.ac.uk).

(13) How do I know that this study has been approved to take place?

To protect your safety, rights, wellbeing and dignity, all research in the University of East Anglia is reviewed by a Research Ethics Body. This research was approved by the SCI S-REC (Faculty of Science Research Ethics Subcommittee).

(14) What is the general data protection information I need to be informed about?

According to data protection legislation, we are required to inform you that the legal basis for processing your data as listed in Article 6(1) of the UK GDPR is because this allows us to process personal data when it is necessary to perform our public tasks as a University.

In addition to the specific information provided above about why your personal data is required and how it will be used, there is also some general information which needs to be provided for you:

- The data controller is the University of East Anglia.
- For further information, you can contact the University's Data Protection Officer at dataprotection@uea.ac.uk
- You can also find out more about your data protection rights at the <u>Information Commissioner's Office</u> (ICO).
- If you are unhappy with how your personal data has been used, please contact the University's Data Protection Officer at dataprotection@uea.ac.ukin the first instance.

(15) OK, I want to take part – what do I do next?

If you are happy and consent to take part in the study simply access the questionnaire at this website https://forms.office.com/e/M06EyGZRCR and answer the questions. By submitting your responses you are agreeing to the researcher using the data collected for the purposes described above. Please keep the information sheet for your information.

(16) Further information

This information was last updated on 30 April 2024.

If there are changes to the information provided, you will be notified by email or other suitable contact method.

This information sheet is for you to keep