User Interfaces group, School of Electrical Engineering, Aalto University

INFORMATION SHEET FOR RESEARCH PARTICIPANTS

"User Interface Experiment"

Name and topic of the research project: Computational User Interface Design (COMPUTED): Optimization of user interfaces based on predictive models of human-computer interaction.

General description of study method: This is a controlled experiment. The focus is on performance and experience when carrying out a task with a user interface. The process and outcome of tasks are measured.

Purpose of the study. The purpose of the study is to understand factors affecting the usability and user experience of user interfaces. For this end, we have produced several different kinds of user interfaces. The processing of personal information is necessary for public interest to conduct scientific research.

Research group 's experience of the method: The members of the group have experience in over 50+ controlled studies in human-computer interaction. There are no reported incidents of ethical misconduct.

Funding and responsible researcher: European Research Council Starting Grant 2014 ID 637991. Funding period 2015-2020. Principal investigator Prof. Antti Oulasvirta (tel 050-3841561).

Time commitment: Participation in this study will take [1-3] hours.

Suitability for the study: Legally competent adults are allowed as participants. The following criteria are required: Generally healthy and able to use the user interface under study, in particular: Normal or corrected-to-normal vision and audition; No known motor or cognitive deficit; Not under the influence of medication or drugs.

Compensation: The compensation is [12 euros/one movie ticket] per hour.

Voluntary participation: Participation in the study is voluntary. You have the right to discontinue participation at any time without obligation to disclose any specific reasons.

The rights of the study participant: It might be necessary to depart from the participant's rights if the research is conducted for the purpose of public interest and if the participant's rights prevent or greatly hinder achieving this purpose.

The following rights specified in the GDPR will be probably deviated from:

- □ The right to access stored personal information
- □ The right to correct inaccurate personal information
- □ The right to oppose the processing of your personal information
- $\hfill\square$ The right to delete your information

If, however, it is possible to achieve the aims of the study and the achievement of the purpose is not greatly hindered, Aalto University will actualize your rights as defined in the GDPR. The extent of your rights is related to the legal basis of processing of your personal data and exercising your rights required proof of identity.

Possible risks and their prevention: 1) Exhaustion and fatigue. We prevent this by asking you to take breaks frequently and allowing breaks at will. 2) Tripping, strain injury, or falling: This is prevented by disallowing dangerous postures, as well as pointy or sharp objects in the movement area.

Communication with the research staff during testing: You can stop the trial and ask the experimenter at any time if you have questions about the study or your participation.

Description of study situation: You will be instructed to carry out tasks with a user interface. Task performance will be recorded and measured. These data are not used to assess you, rather to model user performance and assess usability. Your opinions and experiences will be asked in an interview and/or with a questionnaire.

Collection of data: 1) Behavioral measures of the interaction process: keypress times, mouse movements etc; 2) Performance metrics: speed, accuracy, errors, task completion time; 3) optionally video data (face not recorded); 4) optionally eye tracking data (Tobii X400) or optical motion tracking data (OptiTrack system); 5) Interview data: opinions and experiences, 6) Personal information: name, email address, sex and age. Personal information is

collected to enable communication with the subject and for statistical information about the participants.

Who will process your personal information:

- 1) Recipients processing data for Aalto University:
- 2) Recipients processing data independently:

Transferring data outside EU: [Your data will not be transferred outside the EU/ Your data will be transferred to the following countries outside the EU:].

Anonymity, secure storage, confidentiality: The data will be used for scientific purposes only and are confidential. All data will be anonymized. No explicit clues of your identity will be left to the stored data. All data will be stored securely and accessible only to the members of the User Interfaces group: [N.N, N.N and N.N]. The personal information is deleted when it is no longer needed.

Measures taken in cases of unexpected incidental findings: This study has not been designed to provide clinical information. In case the data reveal an illness, or any other incidental finding which you are not aware of, the finding will be consulted with a medical expert and based on his/her estimation you shall be forwarded to appropriate further examinations.

Insurance coverage: You are covered by Aalto-level insurances for accidents and damages during the study.

Contact details:

Aalto University is the data controller in this research.

In question regarding research you can contact the responsible researcher: Name Surname, name.surname@aalto.fi, +358 00 00 000 00

You can contact the Aalto University data protection officer if you have questions about data processing and protection: Jari Söderström, dpo@aalto.fi, +358505665186

If you notice a violation in the data protection legislation, you can contact the Data Protection Ombudsman (http://www.tietosuoja.fi/en).

If you agree to take part in the study, please sign the consent form overleaf.

Computational Design of User Interfaces (COMPUTED, ERC-StG 637991)

CONSENT FORM

I.....agree to participate in the user interface experiment by the User Interfaces group.

I have read and understood the study information sheet given to me.

I have understood that the material and research data is gathered for scientific purposes only. The purpose and nature of the study has been explained to me in writing. I have sufficient information on the process of the study.

I understand that my participation in the study is completely voluntary and that I have the right to discontinue my participation at any stage without any consequences.

I give permission for my data to be recorded in the described manner.

I understand that I can ask to take a break at any time during the study.

It has been explained to me that a designated researcher will, at my request, provide me with additional details of the general principles of the study and its progress or of the results concerning myself.

I understand that anonymity will be ensured by disguising my identity. I have been explained who are the different parties involved in the research that have access to my data. I understand the practices of storing, protecting, and using the data.

I know that the collected data will not be presented to a third party without my written consent. I know that the research group may ask for a professional consultation on possible unexpected incidental findings without separate consent provided that the anonymity of the results has been ensured. Any type of commercial exploitation of the results is prohibited.

I understand that a fully anonymized subset of the data may be released to other research groups for the purposes mentioned above, if I give permission to it.

(Please tick one box:)

[] I agree to releasing anonymized extracts from my data.

[] I agree to releasing anonymized extracts from my data only if I am informed about the research groups

in question. I have been told what that subset will be.

[] I do not agree to releasing extracts from my data.

I understand that extracts from possible interviews may be quoted in subsequent publications if I give permission below:

(Please tick one box:)

- [] I agree to anonymized quotation/publication of extracts from my interview
- [] I do not agree to quotation/publication of extracts from my interview.

By my signature, I confirm my participation in this study and agree to volunteer as a study subject.

Date.....

RESEARCH PARTICIPANT

PRINCIPAL INVESTIGATOR

Signature.....

Signature.....

City.....