

Informed Consent of Participation

You are invited to participate in the user study **Evaluating Active Gaze-based Interaction Methods in Virtual Reality** initiated and conducted by László Kopácsi. The research is supervised by Daniel Sonntag. Please note:

- Your participation is entirely voluntary and can be withdrawn at any time
- The user study will last approximately 60-80 minutes
- We will record personal demographics (age, gender, etc.)
- We will record data of your eye movements, record the screen and/or activities on your device, and take notes during the user study.
- All records and data will be subject to standard data use policies
- Repeated participation in the study is not permitted

The alternative to participation in this study is to choose not to participate. If you have any questions or complaints about the whole informed consent process of this research study or your rights as a human research subject, please contact Daniel Sonntag (E-Mail: daniel.sonntag@dfki.de) You should carefully read the information below. Please take the time you need to read the consent form.

1. Purpose and Goal of this Research

The study aims to investigate the usability and efficiency of various active gaze-based interaction methods in virtual reality (VR). The study is conducted within the MASTER-XR EU project and aims to evaluate our methods. Your participation will help us achieve this goal. The results of this research may be presented at scientific or professional meetings or published in scientific proceedings and journals.

2. Participation and Compensation

Your participation in this user study is completely voluntary. You will be one of approximately 15-34 people being tested for this research. You will receive 15 EUR as compensation for your participation. You may withdraw and discontinue participation at any time without penalty or losing the compensation. If you decline to participate or withdraw from the user study, no one on the campus will be told. The investigator may withdraw you from this research if continued participation will not meet the study goals or affect your well-being.

3. Procedure

After confirming the informed consent the procedure is as follows:

- (1) Study Introduction,
- (2) Task 1: VR Onboarding: task introduction via guide cards, scene familiarization using information displays, and recap through a quiz utilizing pie menus,
- (3) Break,
- (4) Task 2: VR Sorting: execution of sorting tasks using two selection methods,
- (5) Post-experiment

The complete procedure of this user study will last approximately 60-80 minutes.

4. Risks and Benefits

There are no risks associated with this user study. Discomforts or inconveniences will be minor and are not likely to happen. If any discomforts become a problem, you may discontinue your participation. In order to minimize any risk of infection, hygiene regulations of the DFKI apply and must be followed. Any violations of the hygiene regulations or house rules of this institution can mean immediate termination of the study. If you get injured as a direct result of participation in this research, please reach out to the principal investigator. Enrolled students are automatically insured against the consequences of accidents through statutory accident insurance and with private liability insurance in case of any damages. The confirmation of participation in this study can be obtained directly from the researchers.

5. Data Protection and Confidentiality

We are planning to publish our results from this and other sessions in scientific articles or other media. These publications will neither include your name nor cannot be associated with your identity. Any demographic information will be published anonymized and in aggregated form. Contact details (such as e-mails) can be used to track potential infection chains or to send you further details about the research. Your contact details will not be passed on to other third parties. Any data or information obtained in this user study will be treated confidentially, will be saved encrypted, and cannot be viewed by anyone outside this research project unless we have you sign a separate permission form allowing us to use them. All data you provide in this user study will be subject of the General Data Protection Regulation (GDPR) of the European Union (EU) and treated in compliance with the GDPR. Faculty and administrators from the campus will not have access to raw data or transcripts. This precaution will prevent your individual comments from having any negative repercussions. During the study, we log experimental data, record data of your eye movements, record the screen and/or activities on your device, and take notes during the user study. Raw data and material will be retained securely and compliance with the GDPR, for no longer than necessary or if you contact the researchers to destroy or delete them immediately. As with any publication or online-related activity, the risk of a breach of confidentiality or anonymity is always possible. According to the GDPR, the researchers will inform the participant if a breach of confidential data was detected.

6. Identification of Investigators

If you have any questions or concerns about the research, please feel free to contact:

László Kopácsi
Researcher
laszlo.kopacsi@dfki.de

Daniel Sonntag
Principal Investigator
Trippstadter Str. 122
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daniel.sonntag@dfki.de

7. Informed Consent and Agreement

This consent form will be retained securely and in compliance with the GDPR for no longer than necessary.

- ☐ I understand the explanation provided to me. I understand and will follow the hygiene rules of the institution. I understand that this declaration of consent is revocable at any time. I have been given a copy of this form. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this user study.
- ☐ I agree that the researchers will record data of my eye movements, record the screen and/or activities on my device, and take notes during the user study. I understand that all data will be treated confidentially and in compliance with the GDPR. I understand that the material will be anonymized and cannot be associated with my name. I understand that full anonymity cannot be guaranteed and a breach of confidentiality is always possible. From the consent of publication, I cannot derive any rights (such as any explicit acknowledgment, financial benefit, or co-authorship). I understand that the material can be published worldwide and may be the subject of a press release linked to social media or other promotional activities. Before publication, I can revoke my consent at any time. Once the material has been committed to publication it will not be possible to revoke the consent.

Printed Name of Subject

Signature of Subject

Location, Date