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Phone: (403) 220-3531

**Title of Project:**

User Studies on User Interfaces Layouts in Extended Reality Environments

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This consent form, a copy of which has been given to you, is only part of the process of informed consent. If you want more details about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

The University of Calgary Conjoint Faculties Research Ethics Board has approved this study (REB23-1359).

**Participation is entirely voluntary and confidential.**

**Purpose of the Study:**

The purpose of this study is to understand the impact of spatially arranging virtual displays and number of virtual displays in immersive environments, on user's performance with search and memory tasks.

**What Will I Be Asked to Do?**

If you agree to participate in this study, you will be asked to participate in the following different research activities:

1. You will be asked to complete a pre-study questionnaire to assess your familiarity with head mounted devices. This questionnaire should take less than 5 minutes.

2. You will be asked to perform a practice round of tasks where you will be given a description and demonstration of each task. The practice session should take about 10 minutes.
3. You will then be asked to complete tasks. A researcher will observe, take notes, and videotape your interactions and your responses until you feel satisfied with your answers. You may be asked to complete a post-study questionnaire about your experience after a task. Completing tasks and filling post-study questionnaires will take 30 minutes.
4. After completing the study, you will participate in a semi-structured interview. This will take about 10 minutes.

Participation is voluntary and you may withdraw at any time. The whole process should last no longer than approximately 60 minutes.

### **What Type of Personal Information Will Be Collected?**

The experiment session includes interactions with the system and the interview will be audio and video recorded. If you agree to participate, we will ask you to write down your comments during the study. No other personally identifying information (such as your full name) will be recorded. In all written publications and presentations based on this research, you will remain anonymous and your comments from the interviews will be referred to with either a participant number or a pseudonym.

There are several options for you to consider if you decide to take part in this research. We will conduct the experiment upon your acceptance of audio and video recordings. You can choose all, some or none of them. Please put a check mark on the corresponding line(s) that grants us your permission to:

I grant permission to save questionnaire data:	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
I grant permission to be audio taped:	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
I grant permission to be video taped:	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
I grant permission to use some anonymized image frames from the recorded video to be shared in an academic publication:	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>

### **Are there Risks or Benefits if I Participate?**

Your benefits include knowledge of the latest immersive technologies. Wearing HMD has potential side effects such as nausea and eye fatigue. The risk of having these side effects is low. There is a rare risk immersion could incite seizure symptoms for the first time. However, we will terminate the study session if you feel uncomfortable.

### **What Happens to the Information I Provide?**

Participation is completely voluntary, anonymous and confidential. You are free to discontinue participation at any time during the study. If you choose to withdraw from the study, any and all information you have provided will be destroyed. No one except the researchers and their supervisors will be allowed to see or hear any of the answers to the questionnaire or task performance. There are no names on the questionnaires. The questionnaires are kept in a locked cabinet only accessible by the researchers and their supervisor. All the collected data will be kept by the investigators indefinitely, and it might be used, in anonymized form, with publications and thesis purposes.


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### *Signatures (written consent)*

Your signature on this form indicates that you 1) understand to your satisfaction the information provided to you about your participation in this research project, and 2) agree to participate as a research subject.

In no way does this waive your legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from this research project at any time. You should feel free to ask for clarification or new information throughout your participation.

Participant's Name: (please print) Lyle Ruggles

Participant's Signature  Date: Jan.28 2025

Researcher's Name: (please print) Parisa Daeijavad

Researcher's Signature:  Date: Jan 28, 2025

### **Questions/Concerns**

If you have any further questions or want clarification regarding this research and/or your participation, please contact:

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*Or*

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*If you have any concerns about the way you have been treated as a participant, please contact the Research Ethics Analyst, Research Services, University of Calgary at (403) 220-4283 or (403) 220-8640; e-mail [cfreb@ucalgary.ca](mailto:cfreb@ucalgary.ca).*