PARTICIPANT INFORMATION SHEET

Investigating Factors Affecting User Immersion in Virtual Reality Applications

You are being invited to take part in a research project. Before you decide whether or not to take part, it is important for you to understand why the research is being undertaken and what it will involve. Please take time to read the following information carefully and discuss it with others, if you wish.

Thank you for reading this.

## 1.	What is the purpose of this research project?

This project aims to focus on how representing a user in different ways in VR affects a user's experience and sense of immersion when using that application, and collect anonymous user provided data for analysis with respect to how the changes alter their experience, and how this data could be applied to other applications.

## 2.	Why have I been invited to take part?

You have been invited because you meet the requirements of having an interest in Virtual Reality and are in possession of a VR headset and a VR capable PC.

## 3.	Do I have to take part?

No, your participation in this research project is entirely voluntary and it is up to you to decide whether or not to take part. If you decide to take part, we will discuss the research project with you and ask you to sign a consent form. If you decide not to take part, you do not have to explain your reasons and it will not affect your legal rights.

You are free to withdraw your consent to participate in the research project at any time, without giving a reason, even after signing the consent form.

## 4.	What will taking part involve?

Taking part will involve playing a short, interactive puzzle game in VR that guides users through a series of 3 organisation-based puzzles in which the method of approach corresponds to how the user is physically represented in that section. Once 3 sections have been completed, the user will be presented with a final puzzle to solve and be given the choice to solve the puzzle in any of the 3 previously presented ways.
This final choice will be the key data collected from your play session and will be the basis of the questions asked in the optional anonymous questionnaire that will ask you questions pertaining to your experience with the application and the representation that you chose, and a second optional section relating to you and your experience with VR overall. This second set of questions will not have any identifying questions and is only to gauge how much experience you have previously had with VR as a medium and your feelings on it.

5.   Will I be paid for taking part?
No. You should understand that any data you give will be as a gift and you will not benefit financially in the future should this research project lead to the development of a new treatment/method/test/assessment.

6.   What are the possible benefits of taking part?
There will be no direct or tangible benefit presented from taking part in this project, but your contribution will help to map user preferences and experiences in VR and their immersion.

7.   What are the possible risks of taking part?
Users not experienced with VR may experience motion sickness when engaging in certain mechanics presented in the game.

8.   Will my taking part in this research project be kept confidential?
All information collected from (or about) you during the research project will be kept confidential and any personal information you provide will be managed in accordance with data protection legislation. Please see 'What will happen to my Personal Data?' (below) for further information.

9.   What will happen to my Personal Data?
Cardiff University is the Data Controller and is committed to respecting and protecting your personal data in accordance with your expectations and Data Protection legislation. Further information about Data Protection, including:

-   your rights
-   the legal basis under which Cardiff University processes your personal data for research
-   Cardiff University's Data Protection Policy
-   how to contact the Cardiff University Data Protection Officer
-   how to contact the Information Commissioner's Office

may be found at https://www.cardiff.ac.uk/public-information/policies-and-procedures/data-protection

After 2 weeks, the research team will anonymise all the data it has collected from, or about, you in connection with this research project. Your consent form will be retained 6 months and may be accessed by members of the research team and, where necessary, by members of the University's governance and audit teams or by regulatory authorities. Anonymised information will be kept for a minimum of 6 months but may be published in support of the research project and/or retained indefinitely, where it is likely to have continuing value for research purposes.

10.   What happens to the data at the end of the research project?
The data collected from this project will be used to offer a deeper understanding of how users perceive themselves and their environments. This data will be analysed within the basis of the project's final report. The data will be publicly available if the project remains on the university internal archive, but otherwise the data will be for internal use only.

11.   What will happen to the results of the research project?
It is our intention to publish the results of this research project in academic journals and present findings at conferences. Participants will not be identified in any report, publication or presentation.

12.   What if there is a problem?
If you wish to complain or have grounds for concerns about any aspect of the manner in which you have been approached or treated during the course of this research, please contact Alexander Scott with regards to your complaint.

If you are harmed by taking part in this research project, there are no special compensation arrangements. If you are harmed due to someone's negligence, you may have grounds for legal action, but you may have to pay for it.

13.   Who is organising and funding this research project?
The research is organised by Alexander Scott and Charith Perera in Cardiff University.

14.   Who has reviewed this research project?
This research project has been reviewed and given a favourable opinion by the Computer Science School Research Ethics Committee.

15.   Further information and contact details
Should you have any questions relating to this research project, you may contact us during normal working hours:

Main Supervisor – Charith Perera – PereraC@cardiff.ac.uk

Thank you for considering to take part in this research project. If you decide to participate, you will be given a copy of the Participant Information Sheet and a signed consent form to keep for your records.