Questionnaire toolkit: Examining Distance Choices of Questionnaires in VR

Project specification:

The notable rise of a new generation of virtual reality (VR) systems in recent years opened up new methods and interventions for researchers across many different areas, Typically, developer set questionnaire to collect subjective feedback analysis the product. Questionnaire in VR has been proved more powerful than paper questionnaire [1] because paper questionnaire can lead to a break in presence (BIP) and ﻿disrupt the immersive experience but In VR questionnaire can decrease above case [2]. However, Susanne said there is no ﻿investigate that how BIPs affect performance of tasks with different degrees of complexity and different virtual environment [3]. In my final year project, I plan to investigate if user have the same initiative in different virtual environment for in VR questionnaire and the impact of the distance of the questionnaire in VR on BIP and initiative, finally I will development a questionnaire toolkit for different virtual environment.

Project plan:

1. developing questionnaire toolkit demo.
2. User study
   1. Set many groups (based on kind of game) and invite every group member accomplish the VR questionnaire which have default distance.
   2. Set many questionnaire distance for one game, and ask volunteer accomplish the VR questionnaire after game.
3. Find the questionnaire distance which is get most positive feedback.

Reference:

[1] ﻿ Schwind Valentin, Knierim Pascal, Haas Nico and Henze, Niels. ﻿2019. Using presence questionnaires in virtual reality. Presence: Conference on Human Factors in Computing Systems - Proceedings.DOI: [https://dl.acm.org/doi/﻿﻿10.1145/3290605.3300590](https://dl.acm.org/doi/10.1145/3290605.3300590)

[2] ﻿ Putze Susanne, Putze Felix, Höffner Sebastian and Smeddinck Jan David. 2020. Breaking the Experience: Effects of Questionnaires in VR User Studies. Presence: Conference on Human Factors in Computing Systems - Proceedings.DOI: [https://dl.acm.org/doi/﻿10.1145/3313831.3376144](https://dl.acm.org/doi/10.1145/3313831.3376144)

[3] ﻿Jane Lessiter, Susanne Putze, michael Bonfert, and Jules Davidoff. 2020. Examining Design Choices of Questionnaires in VR User Studies. Presence: Conference on Human Factors in Computing Systems -Proceedings.DOI: <https://dl.acm.org/doi/10.1145/3313831.3376260>