Visual Field Test in VR Study Level 4 Project 2023/2024 Alfie Macintosh

Please do not participate in this study if you have any history of visual disorders or epilepsy. If you have any other condition that you think might affect you during the study, please bring this to attention beforehand.

The aim of this study is to test a Virtual Reality program designed to assess and report on a user's visual field. The results of this study will be used to evaluate how continuous visual feedback to the user affects test results, while also collecting information on the user's experience.

During the experiment, you will be tested in two stages. During each stage you may be given visual feedback to inform you if you are following test protocol, by looking at the centre of the test. Each stage corresponds to one of your eyes. You will wear an eyepatch to limit testing to one eye. Due to the serve limitation of users vision the test will be conducted sitting down to minimise the chance of physical collision.

Before the experiment you will be given an outline of the test procedure. You will be asked to keep your gaze on the central stimulus during the test. If you are doing the test with visual feedback a green light indicates your gaze is on the central stimulus while a red indicates otherwise. When idle or receiving no feedback, the stimulus will be orange.

At the start of the experiment, you will be familiarized with the headset and controller. You will then be fitted with an eyepatch on one of your eyes, to ensure the results are on a per-eye basis. You will then be asked to put the headset on, and we will begin by fitting the headset and then calibrating the eye-tracking component of the headset. There is a menu environment to familiarise yourself with the controls. Once you start the test, which will take approximately 6 minutes per eye, you will be reminded to keep your focus on the centre stimulus for the duration of the test.

If during the experiment you experience discomfort, please stay seated and remove the headset.

After the first stage you will be given a questionnaire on usability and comfort and then the opportunity to break. Next you will be asked to swap the eyepatch to the second eye and begin testing again. After the second stage you will be asked to complete the questionnaire on usability again before being offered another break. Finally, you will be asked to complete the final usability questionnaire and then you will be shown your test results and debriefed.

During the test there will be several datapoints gathered on your responses and actions. Your reaction time, number of stimuli hit, gaze direction, time taken as well as the responses to your questionnaires will be stored and processed anonymously. Please ask me if you have any questions.

You have the right to withdraw from this experiment at any time.