Pre-Study

* Each activity is prepared in advanced before the participant arrives.
* The researcher will set the save location and participant number in the data collection program.
* Participants are welcomed.
* Participants are led to the area where the study will be conducted.
* The researcher will explain the study to the participant.
* It will be explained that no video will be recorded of the user, only the location of the gaze points and relative movements of their eyes will be collected.
* The researcher will then gain consent from the participant and continue with the study.

Study

* Participants will then be placed in front of a computer, with their eyes approximately 60cm away from the centre of the computer monitor.
* The Tobii EyeX will be calibrated for the participant.
* The user will be instructed that they will be performing several different activities whilst their gaze data is being recorded.
* Each activity from *table 1* will be completed in random order, with the NULL activity coming last. Each activity will be allocated 5 minutes.

*Table 1*

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| **Activity** | **Description** |
| 1: Reading Text | The participant is asked to read a passage1 and then quickly summarise the passage to the researcher. The participant continues to read until 5 minutes has passed. No interaction with keyboard/mouse. |
| 2: Watching Video | The participant is asked to watch a short video2 and then quickly summarise the video to the researcher. No interaction with keyboard/mouse. |
| 3: Googling to Find Answers to Multiple Quiz Questions | The participant is presented with a list of 10 questions3 they need to find the answers to using Google. They continue trying to find the answers until 5 minutes has elapsed. Interaction with keyboard/mouse permitted. |
| 4: Playing a Simple Game | The participant is presented with a simple game and the rules are explained to the participant. The participant is instructed to play the game until 5 minutes has elapsed. Restarting as many times as needed. Mouse okay. |
| 5: NULL | The participant is presented with a video of white noise and asked to watch the video for 2 minutes. The video is not explained beforehand. No mouse/keyboard permitted. |
| 6: Determining the Output of a Function (Reading Code) | The participant is presented with 3 short functions4 and are asked to determine what the code will print for each one. Interaction with keyboard/mouse permitted. |
| 7: Writing a Simple Sorting Algorithm (Writing Code) | The participant is asked to implement bubble sort in whatever language they are comfortable with (include pseudocode if the participant prefers). Interaction with keyboard/mouse permitted. |
| 8: Find and Fix a Bug in a Short Function (Debugging) | The participant is presented with a function6 that is supposed to output a certain value, however the output is incorrect. The participant is asked to identify the fix the bug and confirm that their fix works. Interaction with keyboard/mouse permitted. |

* After each activity, the researcher will stop the current data collection in the data collection program and start the next activity’s collection.

Post-Study

* The participant will be asked to complete a short survey
* The participant will be thanked for their time and the study will conclude