# User Evaluation Report


Cohort 3 Group 6 - Carbon Goose

Members: Bailey Horsley, Owen Jones, Rory Ingram, Ken Jacob, Abishek Kingslin Raj, Louis Polwarth, Adam Johnson

*a) A brief report of the method for the user evaluation (e.g. recruitment, data collection tools and data procedures), explaining why these were chosen. (5 marks, ≤ 1 page)*

Participants were recruited from students within our cohort who we already knew. We opted for this due to its practicality, as it allowed us to efficiently access participants within a limited timeframe while ensuring their availability for the evaluation sessions. Additionally, recruiting from our cohort was relevant and justified because they closely represent the target audience for UniSim. By selecting participants with this shared background, we ensured that the feedback would be both contextually relevant and valuable for evaluating the usability and functionality of the system.

Before participating, all users were provided with an Information Sheet, explaining the purpose of the evaluation, the tasks involved, and their rights. Participants then completed the Informed Consent Form prior to the session, confirming:

- Their understanding of the evaluation's goals and process.
- Their voluntary participation and the option to withdraw at any time.
- Agreement to anonymised data handling.

This approach adhered to the ethical approval guidelines outlined by the department, ensuring all recruitment and evaluation processes complied with University standards. By following these procedures, we ensured the evaluation was conducted responsibly, ethically, and in line with best practices for user testing in Human-Computer Interaction.

The evaluation followed a Task-Based User Evaluation approach. This method was selected because it allows structured testing of the system's usability and functionality.

Tasks focused on the most important and difficult-to-implement features of UniSim, which ensures users interact with the system in a realistic context. Participants were asked to verbalise their thoughts as they performed tasks. The Concurrent Verbal Protocol (CVP) was used here, where participants were prompted to explain their actions and rate usability issues using a severity scale. Each session included an evaluator and an observer: The evaluator guided participants through tasks neutrally whilst the observer recorded detailed notes about errors, challenges, and user behaviors using a structured observation template. No audio or video recordings were made, in line with ethical approval guidelines. The Think-Aloud Protocol provides qualitative insights into users' thoughts, helping to understand their thought process and areas of confusion. Having an observer take notes avoids the need for recordings, maintaining ethical compliance while ensuring rich qualitative data are collected.

Upon completion of the user evaluation, we noticed that the clarity of the game events was a relatively major issue. Therefore, we updated the game to include missing functionality for the events, which are now clearer and work properly. Using the updated code, we created a new release on GitHub which more effectively meets user requirements.

*b) A table listing the usability problems found by users in the prototype system and the users' severity ratings of those problems (5 marks, ≤ 1 page)*

| Problem | Description | Severity |
|---|---|---|
| Monetary system not clear | Some of our user found earning money confusing, while others felt it was easy to understand after gaining a bit more experience playing | 2 |
| Events are not clear | Majority of our users felt that they could not understand what each event did and how it affected the game | 3 |
| Unable to Deselect items | One user reported that they could not cancel an option once selected. | 1 |
| Information on different quality of buildings not provided | Few of our users felt that the different building qualities were not explained properly | 2 |
| Clarity on the working of satisfaction | Most of our users felt that they could not figure out how to increase satisfaction in the first try, but most of them understood how it works by second playthrough | 2 |
| Unclear on what achievements contribute to the game and could make the achievements UI more legible | Some users felt that it was not easy to understand how the achievements contributed to the game and felt that the way it was displayed on screen could be improved | 2 |
| Building counter blocking view of map | One of our users suggested adding an option to move the building counter in the top left portion of the screen, as it was blocking some parts of the map | 2 |