User Evaluation Report

ENG1 Team 9

Jacob Dicken
Bertie Cartwright
William Croft
James Dovener
Henry Chan

Methods

Our user evaluation consisted of 2 tasks that we asked the user to complete, followed by a short questionnaire that would help us to understand how users felt about less specific aspects of the game. The user would complete the tasks under the supervision of 2-3 of our team members and they would be asked to "think aloud" allowing us to understand how they were coping with the elements of the tasks. The tasks were as follows:

1. Start a new game and build a ring road or roundabout.
2. Play through the game with the goal of reaching the highest student satisfaction possible.

The areas of the game that we most wanted feedback on from the user evaluation were usability, events and student satisfaction. The first task was chosen because it gave the user a very specific technical job to do which would require a good understanding of the menus and building placement mechanics to complete. The second task was chosen because we felt that the student satisfaction and events only had their proper meaning in the context of a full playthrough of the game, so we decided that giving users the opportunity to experience them in this way would best to ensure useful feedback. Before starting the second task, we directed the user to read the in-game instructions which would give them an idea of what they needed to do, with the idea that we would need to give them as little information about the game as possible, however we were able to give pointers if we felt that it was necessary for the user to progress with the task, to avoid missing out on any data.

The evaluation was conducted in the Week 11 practical session, which was geared towards user evaluations. During the session, we approached individuals in the room that were not from our team, and asked them to complete our user evaluation, often in exchange for one of our team members completing their evaluation. Before starting the evaluation, they were asked to read our version of the information sheet on the VLE and to read and sign the consent form from the VLE. All team members were informed of the ethical procedures we need to follow when conducting an evaluation, and this was kept in mind throughout the evaluation process. By having the user read and understand the information sheet and consent form, we ensured these procedures were followed correctly. We reminded participants that the goal of this evaluation was to test our product, not them as a user. The idea of this was to put them at ease, allowing them to use the product in a way that they normally would, without feeling stressed, which could cause them to behave and use the product differently, as well as being unfair on the user.

The game was set up ready for the users to allow them to focus on completing the tasks we had set. While the users were completing the tasks, two of our team members took notes of what the users were saying and what we could observe from how they were interacting with the system. If they went quiet for a long period of time, we prompted them by asking what they were planning or how they were finding the task. We also prepared a checklist of things we were hoping to see from the users (for example, we wanted the user to pause/play the game without prompting) that one of our team members filled in as we observed the user attempting to complete the tasks. This allowed us to have a standardised way of collecting data about areas of the product we specifically wanted feedback on, while the notes gave us a way to collect new information that we hadn't anticipated.

Usability Problems

This table lists the main usability problems that arose when users tested our game, and assigns each one a potential remedy and severity. This can be used to inform further development.

Description	Remedy	Severity Rating (0-5)
Unintuitive keybinds - two users accidentally pressed ESC and ended the game when trying to deselect a building.	Adjust the keybinds such that ESC clears the currently selected building.	4
Events weren't that noticeable. Only events with big graphical effects such as rain and snow were noticed every time.	Add a notification system that shows a notification every time a new event starts.	3
Users struggled to achieve high satisfaction scores	Adjust the satisfaction algorithm to be slightly more forgiving, as the default difficulty is a little too hard	2
The building information text wasn't noticeable in the corner so users didn't know what each building they were placing was.	Move the building information text to the centre of the screen.	3
Buildings didn't align with the cursor as expected when placing.	Adjust where the buildings are drawn such that they follow the cursor in a more intuitive manner	1
Users didn't know if events were positive or negative or how to react to them.	Add a notification system that shows a notification every time a new event starts. The notification should explain whether the event is good or bad and how to mitigate its effects if necessary.	3
Some users expected roads to 'snap' when placing, and struggled with the separate corner roads and rotation mechanic.	This could be achieved by rewriting the roads and building system, so is a low priority task but would be nice to have.	1
Some users weren't sure what they had to do to make the student satisfaction go up.	Tweak the instructions page to better explain the satisfaction system.	3