

UNIVERSITY OF YORK
DEPARTMENT OF COMPUTER SCIENCE

User Evaluation Report Cohort 2 - Group 16 (Skloch)

Group Members:

Charlotte MacDonald
Hollie Shackley
Luis Benito
Kaustav Das
Sam Hartley
Owen Gilmore

We completed a task based user evaluation of our system. Recruitment focused around fellow students who are also doing the Engineering module and gaps were filled with other University of York students. These were chosen as they are close to representative of the intended users as we knew from the client interview these would be prospective and current university students. 6 people were recruited as required by the assessment. Dates, times and locations were arranged in advance with the participants and this agreement to take part was followed up with [informed consent](#) at the start of the process in order to follow ethical procedures. The following documents were created or filled out for the ethical process: [informed consent form](#), [ethical approval form](#) and [information sheet](#).

Tasks were set up by us in advance with 2 big tasks - game play and changing settings - each consisting of many smaller sub-tasks. This was approached in this way as although each task consisted of many elements, they were very dependent on each other. For example, interacting with the computer science building couldn't happen without starting the game and adding their name to the leaderboard couldn't happen without completing the 7 days. The most important part of the project is the game play so this was tested first. Nothing in the implementation was seen as particularly risky so this was not considered when ordering tasks. Once in game play, the order of tasks was left largely down to participants as future users would be playing the game without further instruction and the customers wanted an emphasis on exploring the game so it was important to keep the experience as close to this as possible.

The environment chosen was on the university campus as much as possible as this would be where the product would be used in future. However, occasionally evaluation was carried out elsewhere in York as it was felt that it was important to be as adaptive to the participants' needs and preferences as possible.

Tests were no longer than 15 minutes as the game lasted around 10 minutes and then other tasks like starting the game and settings lasted no more than a few minutes each. The ability to complete the tasks but also the engagement was monitored as a game should be enjoyable to play and not feel like a chore. Tests used the concurrent verbal protocol from the think aloud protocols as this allowed us to gather information as the game was played and students on the engineering module had practised this. Prompting and follow-up questions were used where necessary and users were observed as they carried out the tasks. Issues were noted down during the tests and given severity ratings after. Severity ratings are as follows:

- 1) Cosmetic problem - slight difficulty completing task
- 2) Minor problem - difficulty completing task
- 3) Major problem - severe difficulty completing task
- 4) Catastrophic problem - impossible to complete task

A track of how many users had been able to complete each task and sub-task was also kept to add to this data. These allowed prioritisation of the issues that came up so that the implementation team could work on the most pressing issues. Several aspects of the game design were then redesigned to improve the experience. These included adding readable signs, better matching of UI themes, moving instructions to before any dialogue, adding a zoom out function and editing the map to make it easier to navigate.

ID	Usability Problem	Who encountered	Severity rating 1	Severity rating 2	Severity rating 3	Severity rating 4	Severity rating 5	Severity rating 6	Average	Priority
U1	Not knowing how to exit the first dialogue box as the instructions come after	Most	4	4	4	3	4		4	High
U2	Buildings that aren't interactive appear to be interactive	Most	1			1	1	2	1	Medium
U3	Too many places to sleep make it confusing to navigate around that area	Some	3	3			2		3	High
U4	Getting lost in the map as the layout wasn't accurate enough to Campus East and there wasn't an overview of the map	Some	2			3		2	2	Medium
U5	Wanted a letter grade as well as a numerical score to give it more of an exam feel	One		1					1	Low
U6	The font on the game over screen was different to the font used when adding a name to the leaderboard	One		1					1	Low
U7	Confused by what the score means	Some			2	2			2	Medium
U8	Didn't like the colour contrast between the base of buildings and the ground	One			1				1	Low
U9	Would like 'e - interact' to become 'e - sleep' for sleeping places to save time from trying to interact with them all thinking they might be something different	One				2			2	Low
U10	Weren't sure what they were supposed to be doing or what the objective of the game was	One		2					2	Low
U11	Would have liked ducks especially to make the feeding the ducks activity more obvious	Some	2		1				2	Medium
U12	Would have liked signs to be readable without having to interact with them	One					1		1	Low