

User Evaluation

Cohort 3 Team 5 - alltheeb5t

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User Evaluation Methodology

Purpose of User Evaluation

We conducted a user evaluation to assess how intuitive and effective our game interface is and to observe how players perform key in-game tasks. This evaluation helps us identify design flaws and improve the user experience. To achieve this, we developed a series of essential tasks that reflect real-world use and structured them into a logical scenario, simulating the typical gameplay sequence.

Scenario Design and Tasks

The evaluation consisted of 20 practical tasks grouped into two categories. The first category focused on game operations, such as switching to fullscreen mode, launching the game with a specific map, managing buildings, and adjusting audio settings. These tasks tested the interface's intuitiveness and operational ease. The second category involved information retrieval, such as checking the remaining game time, the current year and semester, the number of coins, leaderboard slots, and achievements. These tasks assessed how effectively the game presents data and supports player navigation. Together, these tasks provided insights into interface usability and data accessibility.

Task Complexity Assessment

After each task, an observer from our team rated its difficulty on a 4-point scale (1 = easy, 2 = moderate, 3 = difficult, 4 = impossible). This system helped quantify task complexity and pinpoint problem areas. The observer's rating ensured consistent and unbiased difficulty assessment by comparing participants' performances across tasks. Participants were also invited to provide feedback on task execution, offering valuable suggestions and highlighting specific challenges they faced.

Interviews and Feedback Collection

Following the tasks, participants participated in interviews covering topics like overall game impressions, gameplay mechanics, interface design, events, challenges, and potential improvements. These discussions helped us understand user experiences, identify issues, and gather ideas for refining the game.

Participant Selection and Testing Location

To ensure relevance and accuracy, we recruited participants who closely resemble our target audience: students and faculty, particularly those interested in strategy and design. Our game simulates building and managing a university campus, which aligns well with their experiences and interests. We primarily engaged students from ENG1, who are familiar with the game's goals and mechanics but can still offer an external perspective. For objectivity, we avoided selecting students from Cohort 3, Team 2, as they were directly involved in the game's development earlier in the semester. Additionally, we included several university staff members to gather diverse opinions.

Test Organization

We conducted the evaluation in the computer lab at the Department of Computer Science, University of York, as it provided the necessary equipment and environment. Before testing, participants reviewed an information sheet and signed a consent form. During the test, the observer read the task instructions aloud, recorded participant responses, and made notes in Google Forms. This structured approach ensured a smooth and effective user evaluation.

Usability Issues and Severity Ratings

Issue	Suggested Solution	Severity	Addressed?
Lack of instructions at the start of the game	Add an interactive tutorial or a 'Help' menu	3	Partially. Controls are now also listed in the pause menu
Lack of visual feedback when placing buildings in restricted zones	Show red outlines or shaded areas with tooltips explaining restrictions	1	Yes. A popup appears saying 'you can't place buildings here'
Difficulty in maintaining a high level of player satisfaction	Change the logic behind the satisfaction level	4	No
Unclear method for pausing the game	Add 'Pause' buttons	3	Yes. A pause button has been added in the top right
Non-intuitive labeling for building classification	Add labels or names	2	Yes. Labels appear when you hover over a button
Unimplemented building relocation feature	Add a 'Relocate' tool	4	No
Confusing placement of additional building type buttons	Relocate and redesign 'Next' and 'Previous' buttons	2	No
Unclear method for removing buildings	Add a 'Delete' button	3	Partially. Controls required to delete listed in pause menu
Insufficient clarity in achievement display	Use progress indicators and real-time unlock notifications	3	Yes. Achievements can be viewed in game and notifications appear when new achievements unlocked
No zoom functionality for the game field	Add zoom buttons and scroll-wheel support	1	No
Unintuitive method for closing building menus	Relocate and redesign the 'Close' button	2	Yes. Large 'Close' button sits just under the 'Buy' button