User Evaluation 2

Cohort 1, Group 6

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Our Method for User Evaluation

Recruitment

We recruited 6 participants for our user evaluation from other teams within our cohort. These participants were chosen due to their strong familiarity with gaming and software systems, meaning they could interact well with our UniSim project and provide relevant constructive feedback. Participants were provided with information sheets outlining the purpose of our user evaluation process. They also signed a consent form prior to taking part, ensuring our evaluation aligns with the university's ethical guidelines for research involving human subjects.

Tasks

Participants were asked to carry out the following tasks which assessed key aspects and functionalities of UniSim:

1. Place a building
2. Respond to an event
3. Navigate the UI to review satisfaction, number of building types placed, and number of students
4. Attempt to maximise student satisfaction score within the 5 minute gameplay window

These tasks were selected to ensure all key gameplay mechanisms were assessed and that all of the system's essential features were intuitive. This combination of tasks meant we could evaluate a standard gameplay experience, so we could test both the interface and inner game dynamics.

Data Collection

Data was collected through a combination of observation, tracking of task completion, and feedback from the participants after their gameplay session. During the observation we focussed on identifying any usability issues that occurred in real time, like difficulties when navigating the UI or how easy the player found the building placement process. Each task was compared against three different metrics:

- Was the task successfully completed?
- How long did the task take?
- Did any participants encounter any errors or difficulties?

Post-gameplay feedback was taken from recorded data via a Google Form, which contained a mix of qualitative and quantitative questions.

Justification

Our chosen methods ensured we would obtain a comprehensive evaluation of our UniSim game. Observing participants in real time allowed us to immediately identify any usability issues or difficulties, which participants may not have noticed themselves. Asking participants to carry out a set list of tasks meant we could ensure our game met the basic requirements set out by the client. The final feedback form ensured we received honest feedback from participants about their own gameplay experiences, and using a Google Form meant it was easy to spot trends between participants. Ethical procedures were followed via information sheets and consent forms, and all data was kept anonymised aligning with university expectations.

We feel our approach resulted in a thorough, honest evaluation of our product, allowing us to identify several key potential areas for improvement for future releases.

Our Usability Problems Table

Problem	Severity	Comments
UI is not user-friendly	High	The overall UI design is unclear. Participants noted that the ‘Play’ button on the main menu should stand out, and that game settings and main menu should be accessible during gameplay.
Difficulty with building placement	High	Some participants struggled with placing buildings where the cursor was hidden by the lower menu bar. Also, most participants were frustrated when there was no visual indicator that a building couldn’t be placed due to insufficient funds.
Lack of clear game instructions	High	All participants were unsure on how to unpause the game (there is no instruction to use the spacebar). The ‘Help’ screen is poorly formatted and overwhelming, which doesn’t encourage players to read it through.
Game over screen missing key options	Medium	The ‘Game Over’ screen only contains a button to navigate back to the main menu. Participants felt for a smoother experience they should also be able to view the leaderboard or restart the game at this point.
Leaderboard not saving between sessions	Medium	The leaderboard does not save between runs of the game, making it potentially frustrating for a player who wants to track progress.
Inconsistent UI features	Low	The volume slider is unreliable, and the tooltips for satisfaction score and student count aren’t always accurate. One participant also noted that not all of the menu bar items have tooltips and highlighted this inconsistency as an issue.