

User Evaluation

Cohort 1 Group 2

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User Evaluation Method

We conducted a task-based user evaluation (TBUE) to gather feedback on our prototype system. This method was chosen as it is an effective way to evaluate whether users can successfully and efficiently achieve tasks without any problems. TBUE is also one of the most commonly used methods in human computer interaction as it shows a more realistic interaction between users and the system, while still keeping focus on task completion.

Recruitment

We recruited individuals from other teams within the cohort to perform our user evaluation. This ensured that our test users were representative of the end users of our game but still remained unbiased as none of our test users were involved in the development of the game. A minimum of 3 users completed the user evaluation, as suggested, as this was enough to bring to the surface the majority of significant usability problems in our prototype. Some of these tests were done in person while most were done remotely.

Procedures

A set of predefined tasks were created based on the core functionality of the prototype and user end goals. Users were encouraged to verbalise their thoughts by thinking aloud while interacting with the system and completing the tasks. This was done as it helped us as developers gain an insight into how someone unfamiliar with our system understands and approaches the game, helping to find any outstanding problems or misunderstandings with our system's design. There were about 5 tasks, but all required follow up questions to help understanding.

Data collection tools and data

Data collection involved observational notes and verbal feedback from users, both during and after they completed the tasks. Follow up questions were asked to better understand the user's game experience and overall thoughts on the system and functionality of the prototype. The purpose of this was to identify usability issues and learn how unfamiliar users interacted with our prototype. From these observations, we were able to identify usability problems and prioritise them by severity ratings, provided by the users.

User Evaluation Findings

ID	Usability Problem	Description	Severity Rating
Multiple_Time_Penalties	Time penalty awarded multiple times when caught by the deans in the second level instead of once.	Being caught by the first dean applies the time penalty 6 times, and the second applies it 3 times. This results in unnecessary time loss for the user, and lowers their chances of winning the game in the 5 minute time limit. As this issue occurs on the second level, at least 1 minute has passed in completing the first level, and the time penalties result in at least a 3 minute time loss, making it almost impossible for the user to escape in time.	Catastrophic - Significantly affects task completion as it makes escaping the game very difficult to do in the time limit.
No_Map_Boundary	Players can walk off the map and skip the second level.	There is an issue with the map boundaries as the user can walk off the map and bypass the room to reach the final door and win the game without the intended gameplay.	Major - Issue rarely occurs but if it does, it affects player experience, making the game too easy.
Unclear_Spike_Removal	Unclear how to lower the spikes to get to the chest in the first level.	User was unsure how to lower the spikes needed to access the chest at first, with some prompting, this problem was solved.	Minor - Causes slight confusion and delay in completing the task, but easily overcome as the user figures it out eventually.
Key_Chest_Unnoticable	Key chest is difficult to notice in the second level.	The key required to enter the room in the second level is contained in a chest. This is placed in the top left corner of the screen and is not easily noticed as it gets hidden by progress updates, such as time penalties.	Minor - Makes the level harder than intended, but the user eventually discovers the chest.
Walking_On_Water	Players can walk over water in the map on the second level.	The user is unclear as to whether the water was supposed to be an obstacle to go around or not as it can be crossed easily.	Cosmetic - Doesn't hinder task completion, but may cause momentary confusion.