

# Project Report

Part 5 - Playtesting

S T A T I C

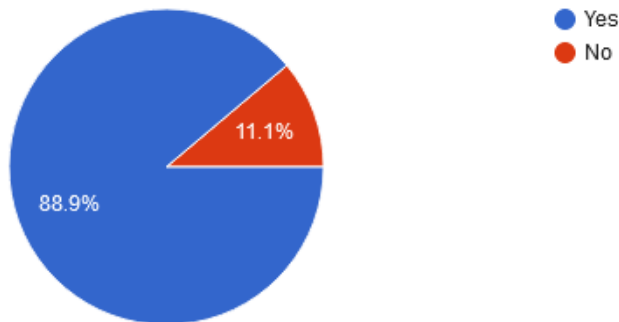
Computer Games Laboratory  
Winter Term 2021/2022

**Team Well-Meaning Scorpion**

Matthias Ellerbeck  
Musfira Naqvi  
Mert Ülker  
Doğa Yüksel

# Participants

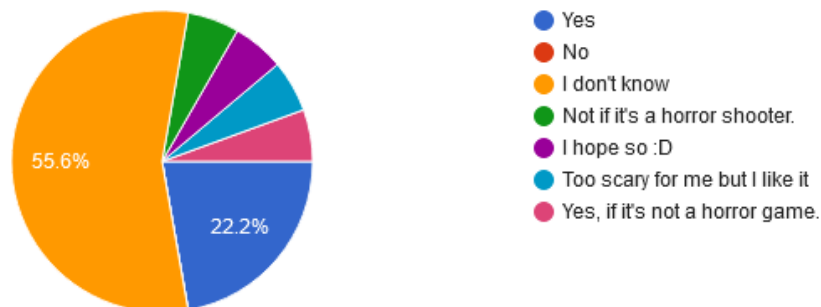
Most of the participants were friends. We managed to gather 18 of them. The majority of the participants were between 20 to 27 years old. The participant's gender was not recorded.



As can be seen in the upper graphic, around 88.9 % of our test group were already familiar with First Person Shooters while 11.1% were not.

When asked about what to expect from the game 'Static' the majority of the submitted statements included words like "to scare me", "horror elements", and "jump scares".

Afterwards, the participants were asked whether they think they will like the game. The majority of the players were unsure about what to expect:



## Session Structure

Most sessions took place online. We used screen sharing software to observe the participant's actions. A session consisted of four sections. First, we gave the participants some context for the game, i.e., the course structure, theme, and the type of game they will be playing. We then asked them a few questions about themselves and their expectations for the game. During or after these questions, the participants downloaded the game from the web. Then they played for a variable amount of time while we watched. We encouraged them to think loud and to share any emotions they experienced while we stayed silent, only informing the participants if they experienced a bug. After they played the game we asked further questions, first relating their previous expectations to their experience, then about memorable moments, and then specific questions to certain features and if they understand these features after playing the game.

Finally, we asked if they wanted to make any changes to the game and consequently, if they have suggestions for improvement.

The playtesting sessions can be separated into two phases, since we noticed some severe issues in the first sessions which would have prevented players from testing our game fully. After the first two sessions we paused playtesting and fixed these issues, then we resumed with a fresh build of the game and conducted another 16 sessions.

## Questionnaire Results

'Static' was well accepted by the majority of the test-players. 82.4% answered with 'Yes' to the question "Did the game fulfill your expectations?"—whereas 17.6% answered with 'No'. About 88.9 % stated that they liked the game with 11.1% saying the opposite.

A lot of the participants enjoyed the explosion effect of the boomer enemy when it was being hit by the player. Some of them stated that it was the utilization of the game's core mechanic which they liked the most, which was basically trying to keep the enemies in sight so that they could not attack the player.

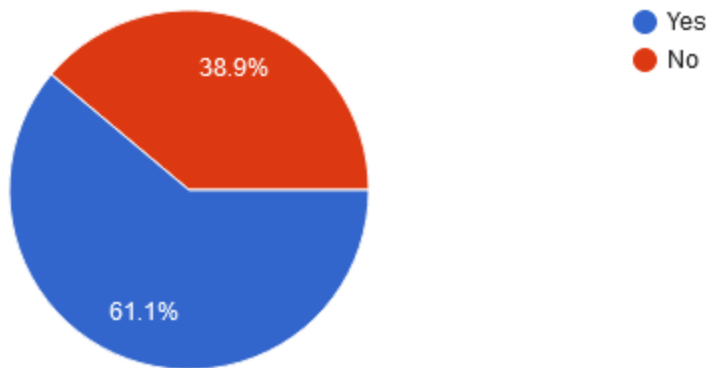
Regarding the least favorite moment/interaction, some players expressed their frustration about the lack of player mobility, for instance being unable to jump or to control the flashlight. Some of the participants voiced their confusion about the game's instructions as some commands were not conveyed clearly enough to the player, e.g., that reloading was possible; and they did not understand the game's main objective. Another issue which was mentioned in the responses was the interactivity of the items: The item's hints would still be visible even if the player was looking in a different direction. There was also the issue of the first-aid-kit not working properly: After using it, the player's health would apparently not increase. This was a bug in the UI. It was also discussed that the explosion range of the boomer enemy was unclear—meaning that the range of the explosion's particle-system was different from its damage range.

Concerning the moments which were the most fun, the game play was often mentioned as one of them. Among others the participants mentioned that it was quite entertaining for them to finally understand the enemy movement.

A small number of the test-players criticized the level design: Some said that it was frustrating to find the right exit, another one said that there is still work to be done on the game's atmosphere.

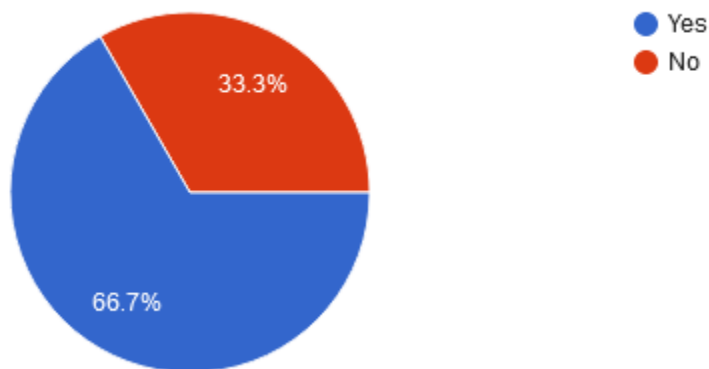
A majority of the players expressed their irritation about not being able to jump and interact with the items in the surrounding (f.ex. the items in the shelves). As the health-kit was not working properly, some of the participants criticized its inability to heal the player.

When asked about whether 'Static' was stressful, the participants answered as follows:



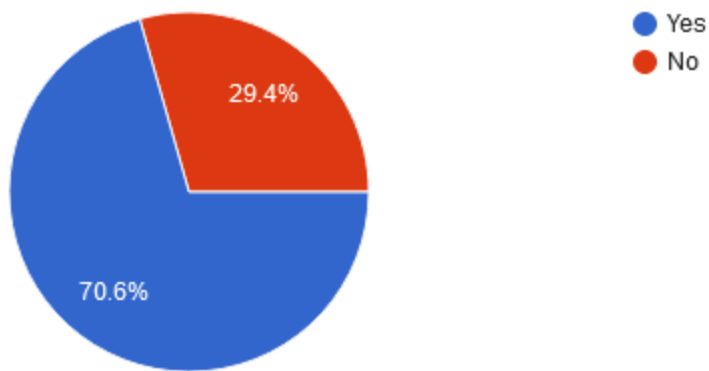
When analyzing the responses it became apparent that the placement of the ammunition was one of the more frustrating parts among the players. At the same time, the navigation of the level was also perceived to be difficult—one of the responses mentioned that it was hard to create a mental map. Furthermore, the search for the correct exit was another point which was identified as a source of player irritation.

Another question we asked was “Did the game feel repetitive?”:



The graphic shows that 66.7% answered with ‘Yes’ while 33.3% answered with ‘No’.

70.6% of the play-testers found that ‘Static’ had replay value. 29.4% felt the opposite.



Afterwards, the participants were asked whether the story enhances the game or detract from it, the responses were mixed: While some of the responses stated that the narrative elements did not enhance the game for them, other players mentioned that the story “enriched the game”.

Many participants requested for the game’s main objective to be explained better; it was not clear enough for them what the goal of each level was. Additionally, some wish for a better description of which keys to use for which controls.

When asked about the elements which made the player feel more immersed in the game we got the following answers:

A majority of the responses mention the clipboards as a nice way to give the environment more depth. Many participants also mentioned the sound design.

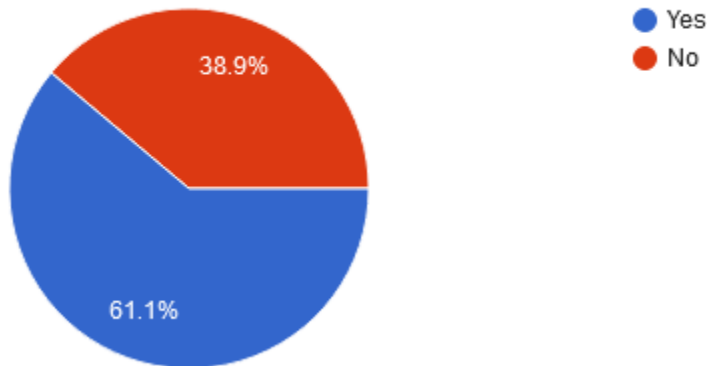
As for the elements that took the player out of the game’s theme, surprisingly multiple answers were again related to the sound effects. Even though the sound effects were a positively recurring theme in the previous question regarding immersion, the results of the follow-up question show that there is still room for improvement on that topic.

Multiple playtesters stated that they tried to save ammo as part of their strategy, which might indicate that the collectable ammo within the levels could be better balanced considering that we did not advertently aim for ammo scarcity. Although no game-breaking strategy was discovered during the playtesting sessions, it should also be noted that most of the testers played the game for a limited amount of time and more advanced strategies can be expected with increased playing time.

Regarding the suitability of the game mechanics with the theme, all of our playtesters were in unison and did state that the mechanics worked well with the given theme. This result demonstrates that our game has successfully integrated the theme into its core mechanics.

The majority of our playtesters were able to state the objective of the game, while a small portion has shown confusion on that topic.

When asked whether the participants knew how the enemies behaved 61.1% answered yes, the others no as the following graphic shows. This tells us that the majority of our players understood the enemies' behavior and our core feature after little playtime.



When asked whether they would make any changes to the game, the only recurring answers from the playtesters were the addition of a jump ability and modifications to the player's movement. Other proposals included design revisions regarding the enemies' appearance, progression introduced by multiple weapon types and an alternative integration of the story elements via audio in the form of tape recordings.

## Observations

### ***Stage 1***

We do not include the results of the questionnaire for stage 1, as we only interviewed two participants in this stage. Watching the participants playing the game showed us the following issues:

The path forward was unclear. We did not communicate the floor the player is in except for a small label in the pause menu. It was visible to the player that they are, step-by-step, moving up in an underground building complex. This resulted in the players not working towards the goal of the game, instead they ran around aimlessly; and if they did enter the next level, they suspected that they moved in a circle as levels were sometimes repeating immediately. We alleviated this by adding hints to the ultimate objective of the game to our diegetic tutorial texts. Additionally we added a sign containing the current floor to the entrance of each level. Finally, we prevented the immediate repetition of levels so that the player will not encounter the same level back-to-back anymore.

Level 2 and level 3 were missing items, i.e., ammo, first-aid-kits, and clipboards. This was an oversight on our part which we fixed for stage 2.

The players did not understand the power loss hazard in level 1. As the level lighting instantly vanished and the keybinding for the player's flashlight was never explained, the hazard resembled a graphics bug or a failure state. For stage 2 we added some heavy flickering to the

all lights a second before the lights deactivate. In addition we automated the flashlight, it now activates half a second after the lights deactivate, and deactivates when the light returns.

The last major issue was players not understanding the interactions with items. We minimized the help text displayed when the player interacts with the item (e.g., “(E) Use” for first-aid-kits). Combined with the usage of trigger volumes for the interaction—which allows interacting with an item even if not looking at it—this led to players not understanding the usage of items at all. For stage two we changed the help texts to include the name of the item with which the player can interact (e.g., “(E) Use first-aid-kit”).

## **Stage 2**

Again we also gathered information by watching the participants play. We were able to determine whether the changes which were made after stage 1 did work. We also discovered new issues.

Unfortunately the goal of the game was still unclear to the players. While most players now understood that they were moving from floor to floor, this realization took a while since they did not always notice the floor labels on the walls as they were placed outside the player’s view when entering a level. In addition, during the early floors players were unsure if the objective was to get to floor 0, i.e. the surface, or if they were supposed to kill all enemies they encountered. We plan to make the floor labels more obvious, e.g, by placing them directly in front of the player (diegetic) or by adding them to the player’s HUD (nondiegetic). As the players understood the objective after they saw that they were moving up in the building without having killed all enemies this should make the objective clear in all cases. We also plan to add more hints to the starting level but we are not yet sure how to do this in a diegetic way.

Improving the presentation of the power loss hazard fixed all problems concerning the player’s comprehension. It now works as intended.

Rephrasing the item interaction hints improved the player’s understanding of the items somewhat but it is not on a desirable level yet. The problem seems to lie in the interaction volume. The players are now required to roughly look at the item to interact with it, this also makes it possible for us to place items in close proximity.

A new problem we discovered is that base enemies are not a threat to players. At the start players still tried to avoid them, but after some time some players just ran past them. The collision area of the enemy groups presented a bigger challenge than their attacks. We plan to increase their attack damage and speed, but we may have to consider bigger changes to make them threatening.

In contrast to the base enemies, explosive enemies were the nearly the sole cause of death for the players. We added fall-off to the damage of the explosion which will prevent most instant deaths from it.

We learned that clipboards as story devices do not mesh well with fast-paced gameplay and the constant threat from enemies. While the clipboards in the starting level (which does not contain dangerous enemies) were read by many players, clipboards in the main levels were often ignored and even if not, enemies and lighting made reading them difficult for the players. For this, we have to find a different method to present our story.

The players either stockpiled ammunition or it quickly ran out, depending on whether the players tried to kill enemies or they were just running through the levels. We could make killing some enemies mandatory for progression or/and spawn ammunition depending on the player's ammo reserves.

Players got lost in level 3. Level 3 is much bigger than level 1 and 2 and contains three possible exits. While we could add floor plans or other maps to the level, the best approach is likely a reduction in size.

Players which had considerable experience in playing first person shooters were quick in identifying strategies to use the core mechanic to their advantage. They backed into corners when reloading and used walls to cover their backs. We expected this behavior and will have to find ways to discourage it.

A general desire amongst the players seems to be more content. Players expected more weapons, more levels and more enemy types. While we could provide more content this would take more time than is available.

Finally, there is currently no progression in difficulty when playing. Level 1 spawned as the first floor behaves exactly as level 1 spawned as the last floor. We plan to increase the difficulty of the game when players get closer to the surface, e.g., by increasing the enemy count and adding more hazards.

## Conclusion

In general our game was well received by the participants. Despite that, we had some issues with communicating mechanics and especially objectives. Our chosen method of storytelling does not work and will need to be revised if possible. Balancing is also an area which requires further tweaks. Finally, implementing progression in terms of difficulty will be very important for the final release.