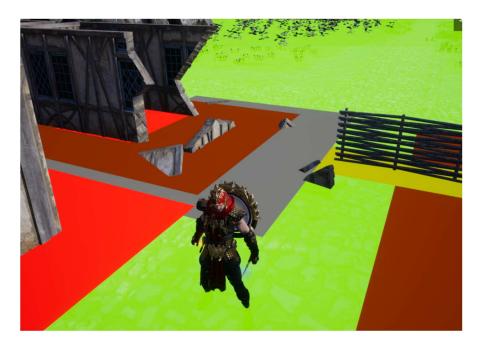
# **Playtesting**

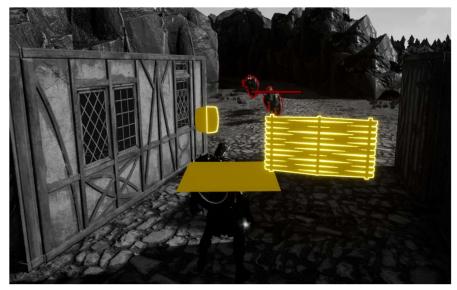
# **Changes before Playtesting**

Most importantly we managed to implement the path blocking of the destructed buildings. If a building is destroyed the debris blocks the area for the enemies. This encourages the player to think about his moves and he can try to block paths with the buildings. We also changed the level/village layout a little bit to give the player more possibilities to form the enemies' path.



Another major addition to the game is the mage vision, which can be activated by pressing the Tab key. With the mage vision the player is able to see the outlines of the enemies and all of his placed traps through the walls of the buildings. This way the player is always aware of the location of the enemies and doesn't feel lost in the process of defending the city or placing traps.





Finally, we again fixed some bugs (character was permanently slowed from oil fields while using the mage vision) and improved visuals (added grass and effects).



We also adjusted the individual enemies sight range. The bigger and tougher ones (the spiders) have now a shorter sight range than the faster units. That way it is more likely to be attacked by the smaller units, than by the tank units. This also reflects their unique goal of attacking structures or the player.

# **Playtesting Report**

#### Setting

We sat down in the Magistrale and asked our friends and some people walking by to play our game. We also got some help to find more participants. We managed to get 9 participants who were willing to try our game and to take on the challenge of defending the village. All participants played roughly 30 minutes or 3-4 rounds. After the play session most of the participants filled out our questionnaire. Therefore, we collected 6 responses and took some notes about our discoveries and how to improve our game.

#### Questions

### Demography

- Gender [Drop-down]
- How old are you? [short answer]
- How experienced are you with digital games? [linear scalar]

### General Gameplay

- Was the goal/objective of the game clear? [multiple-choice]
- Where you able to save the city? [multiple-choice]
- What was your goto strategy? [short answer]
- How difficult was the game? [linear scalar]
- Why do you think the game was too easy/difficult? [short answer]
- How did you like the pace of the game? [linear scalar]

- How skill or chance based do you think the game is? [linear scalar]
- In which way does the game challenge the player? [linear scalar]

# Environment and Trap Usage

- Did you use any traps? [multiple-choice]
- If yes, were the traps helpful? [multiple-choice]
- Would you do any changes to the traps, and if yes, which ones? [short answer]
- Did you know, that you can use your surroundings/buildings to block roads and to kill enemies? [multiple-choice]
- Were you able to use your surroundings/buildings to help you with the defense?
  [multiple-choice]
- How impactful is the interaction with the environment and the usage of traps?
  [linear scalar]

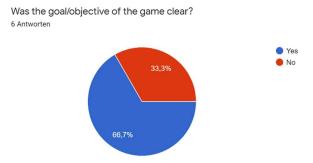
### Controls, Interface and Level Design

- Rate how good the controls felt. [linear scalar]
- Would you change anything about the controls of the game? [short answer]
- Where the UI elements clear and gave you a better understanding of the game and the events happening? [linear scalar]
- Was there anything about the interface you would change? [short answer]
- Are there any controls or interface features you would like to see added? [short answer]
- Had the city a clear structure for you? [linear scalar]

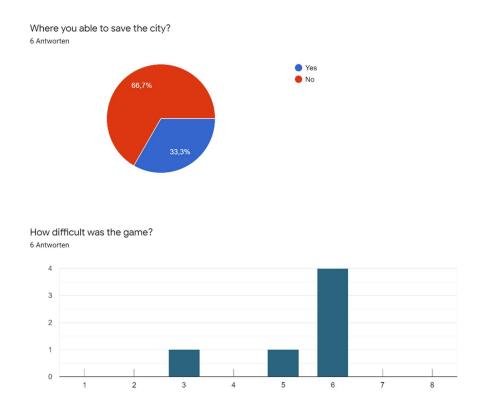
#### Final Feedback Questions

- Rate your overall game experience. [linear scalar]
- Did you especially like something? [short answer]
- Did you especially dislike anything? [short answer]
- Do you have suggestions for improvement? [short answer]
- If you have any other remarks which did not fit to any questions above, please state them here. [short answer]

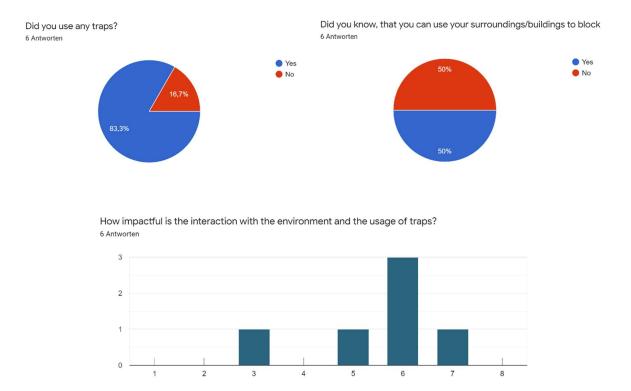
#### Observations



The next two graphs show, that the testers perceived the game as difficult and challenging, which was exactly our goal. Only two participants were able to save the city, in which one of them had some luck with the AI being buggy and getting stuck in a wall.



Also, we observed that the player started to develop strategies using the traps and the environment after several rounds. Still, for many of the participants it wasn't clear, that they could use the destruction of the buildings in an effective way. One of the key reasons for this is the lack of time spent reading the tutorial. This issue has been tackled in further development.



### **Results and Changes**

Due to the feedback and our own observation of the people playing the game, we made many slight changes to the interface, balancing and other aspects of the game.

### *Interface*

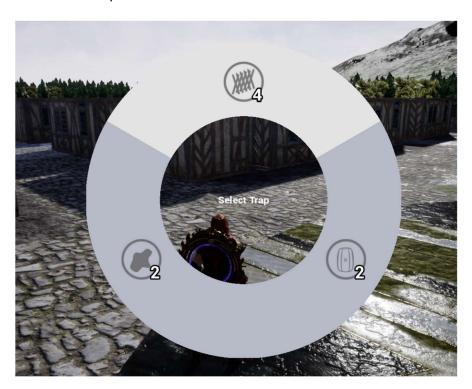
During the playtesting we found out, that no one reads the tutorial messages. Absolutely no one. Therefore, we increased the show time of the tutorial messages and added a bar to show how long the message will be shown. Another possible and probably better solution would be to force the player to press all the control buttons once to get to the next tutorial message. But this solution is not implemented yet because of time restrictions.

Additionally, we added tutorial messages to give the player a better understanding of the game mechanics and the controls. From the survey we learned, that many participants didn't know they could use their surroundings and buildings to block roads and to crush enemies and therefore help them to defend the city. That's why we added some additional tutorial messages, which explicitly tell the player that there is the possibility to do so.

Many participants got a better understanding of the game after several rounds. As in the beginning of every round the tutorial should be completed, we added the feature to skip the tutorial by pressing the 'P' key.

Another problem arising in the playtesting was, that the testers weren't able to see the hp bar of the core very well and lost, as they did not realize quickly enough that the core was damaged. To fix this, the position and size of the status bar has been adjusted. Further the tester remarked that it is hard to tell when enemies will break through barricades, making it hard to plan strategically ahead. The solution for this issue was to simply add a health bar to the spike walls.

One major critic point of the play testers was the trap selection and the lack of information how many traps the player has available. We added a label showing the number of the remaining traps. We further are planning to change the selection and placement of the traps to make it more intuitive.



### **Balancing**

We observed that when are spawned after fixed amount of time, often the enemies accumulate too much and the player doesn't have enough time to plan an according strategy for the next incoming wave. To fix this issue, we now spawn the waves after all enemies of the previous wave died.

Further we realized, that for a successful defense of the city and better strategic opportunities require a larger number of traps. Thus, we gave the player more traps in the beginning as well as provide him with additional traps after each successful wave. The test showed also, that the path cost of the oil field was too high and therefore the enemies would always choose to not pass the oil field and instead walk a much longer distance to the core. We balanced this by reducing the path cost.

### Bug fixing

During playtesting we observed several minor bugs, which we mostly fixed during the testing. One of these bugs was that the core was regenerating after being already exploded.

We also found a critical soft lock bug, which denied the player to progress further in the game. This was caused by occasionally spawning an enemy outside of the ground plane. This causing him to fall infinitely into the abyss of gaming hell and therefore never die. Spawns were adjusted to avoid this problem.

Another bug we discovered was that the fireball didn't collide with the barrel. Thus, we make the barrel collide with fireball.

Something else which we realized was the unlimited curiosity of the players thriving them to go the absolute edges of our world. To avoid this, we added a bounding box which kills the player if he should go too far from the village.

The playtesting further showed that there was a bug with the oilfields, enabling the player to permanently slow down enemies and himself. This has been fixed.

#### Additional feedback

- The ability to change camera position
- Increased camera angle on teleport
- Gradient slowdown for stamina meter
- More traps and spells
- Range for setting traps should be increased
- Better interaction between traps (E.g. Ignited oilfield should explode barrel)
- Clarify the use of traps
- Clarify goal of the game
- The tutorial should be in the center to put more focus on it
- The player should not be invulnerable to the traps
- Teleport through walls and traps
- Less mana cost for the fireball but also less damage per fireball

Feedback will be incorporated in further development.

Most of the participants liked out game after a few rounds, which is reflected in their ranting in the end.

Rate your overall game experience. 6 Antworten

