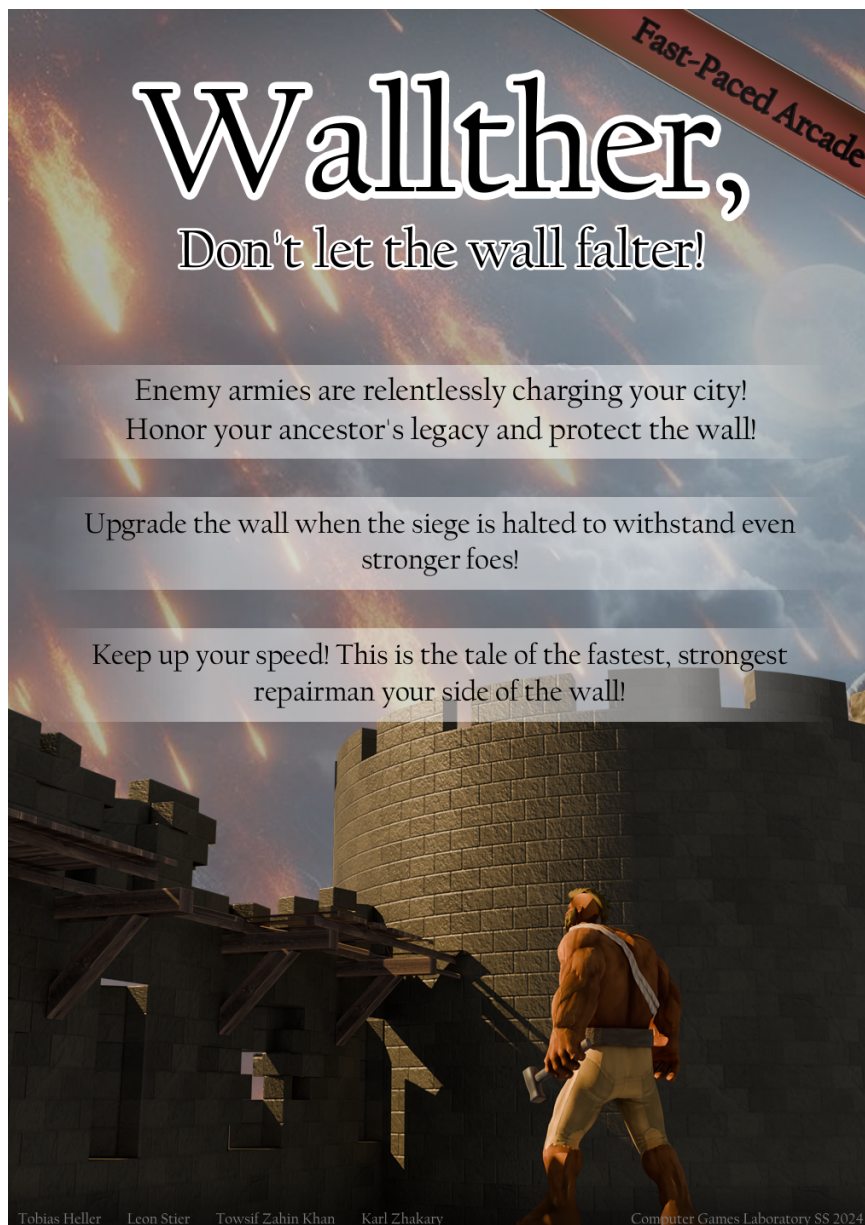


Final Release Document
Wallther, don't let the wall falter!

Tobias Heller, Leon Stier, Towsif Zahin Khan, Karl Zakhary

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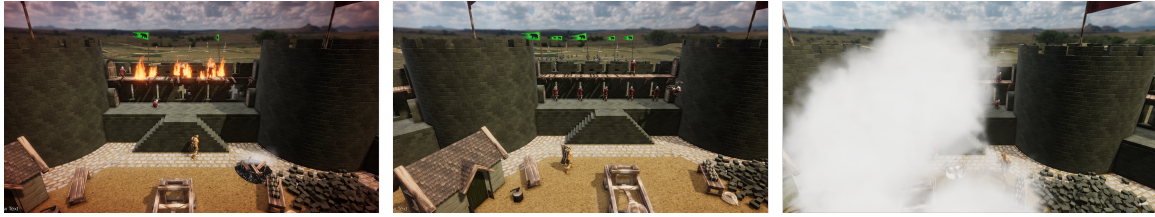


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1 Description of the Game Contents

1.1 Premise



Get ready to defend the wall at all costs in **Wallther: Don't Let the Wall Falter!** In this adrenaline-fueled arcade game, you're the last line of defence as enemy forces unleash relentless fire arrows, trebuchet strikes, and a barrage of obstacles to break your spirit. Dodge tar barrels that slow you down, and avoid flour barrels that cloud your vision. Only your lightning-fast reflexes can keep the wall standing long enough for your crossbowmen to drive back the enemy horde. And when night falls, use the precious moments of calm to upgrade your wall, making it stronger and more resilient for the battles ahead. Hold the line, reinforce your defenses, and whatever happens: don't let the wall falter!



1.2 Overview

Using a Gamepad, the player manoeuvres Wallther from an angled bird-eye's view. The player can jump, run, pick up resources to repair the respective wall pieces and even use a catapult to launch themselves on the wall. Meanwhile, the enemy throws a variety of projectiles at the castle, some damaging the wall, some only aimed at slowing down Wallther. The crossbowmen in red armour on the wall will act autonomously. They man the intact spots at the wall and repeatedly loosen deadly crossbow bolts into the enemy ranks. Each crossbow bolt will kill one enemy soldier until the army is defeated. The player can see how many enemies are left by looking up over the wall into the battlefield, where the soldiers approach on foot. The number of soldiers is easily readable by the amount of big green flags since every tenth soldier carries one of them. Depending on how well Wallther does, the game has two outcomes:

Outcome 1: You did well, the enemy is defeated

You kept up the repairs long enough and fast enough for your crossbowmen to do the dirty work. All enemy footsoldiers have perished and the siege is halted. Now, a peaceful night will fall and Wallther will have the opportunity to upgrade the wall using various upgrades. The night sky will furthermore show you how well you did during the day in an out-of-three-star rating. After placing the upgrade, Wallther will sleep in his hut and the next day will commence. The wall will now be upgraded but the enemy will also appear in higher numbers and with faster attack frequency. This cycle will continue until the second outcome occurs.



Figure 1: After a long day of battle, the serene night scene offers a moment of peace. The crossbowmen drink and relax while Wallther can place upgrades on the walls (More on upgrades in section 1.3). In the sky, a star rating shows how well Wallther did. If defeat was close, fewer stars are awarded. To start the next day, Wallther can interact with the invitingly glowing open door of his shed on the left.

Outcome 2: You let the wall falter. If Wallther wasn't quick enough to keep up with repairs and the wall gets damaged above a certain threshold, the game is over and you lose. The closer the wall gets to that threshold, the more intense the sounds will become and a red vignette will show on the border of the screen.

1.3 Features



Figure 2: **At the Masonry** on the right, the player can pick up stones. He can carry 5 at a time and use each to repair stone wall pieces for 5 health total. When picked up, the stones will appear on Wallther's back as a diegetic indicator of Wallther's current inventory.



Figure 3: At **Wallther's shed** on the left, the player can pick up wooden planks. Similarly to the stones, he can carry 5 at a time and use each of them to repair a wood scaffolding piece for 5 health total. When picked up, the planks will appear on Wallther's back as a diegetic indicator of Wallther's current inventory.

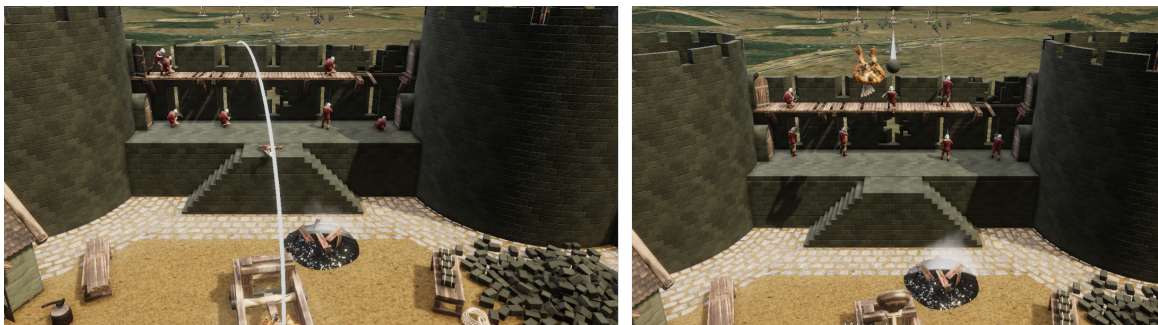


Figure 4: **The Catapult** in the centre can be used as a mode of transportation for Wallther. Upon interaction, he sits in the spoon of the catapult, ready to be launched. the player will then fire Wallther on any part of the wall, which is faster than walking up there if done correctly.



Figure 5: **Trebuchets** positioned in the distance will fire large stone projectiles damaging one of the 10 wall pieces by 1 health and killing any crossbowmen in that spot. This requires the player to pick up stones from the masonry on the bottom right, approach the wall piece and interact with it to repair it for 1 health. The player can carry up to 5 stones at once and repairing a wall piece for one health requires one stone.



Figure 6: **The Firearrows** occur less frequently than trebuchet rounds but they do more damage at once. They will set 2-5 of the five wooden scaffolding pieces at the top ablaze, damaging the scaffolding and killing all crossbowmen in these spots. The player then needs to pick up wood from the shed on the bottom left, approach the wall and interact with it to repair it for 1 health. The player can carry up to 5 wooden planks at once and repairing a wall piece for one health requires one plank.

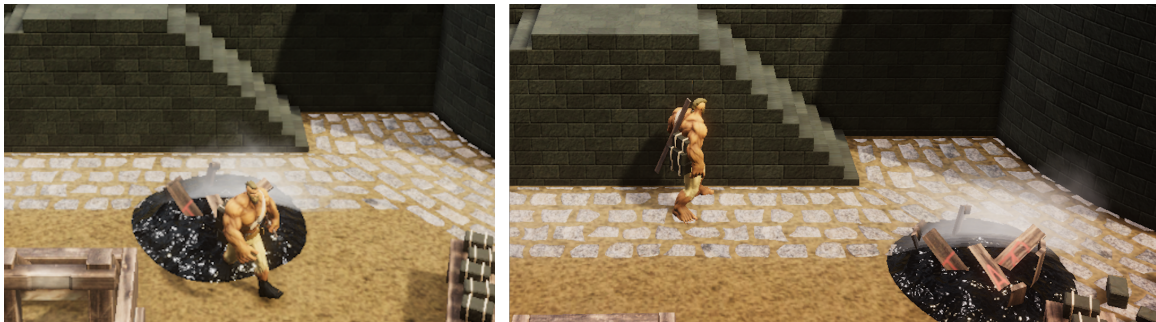


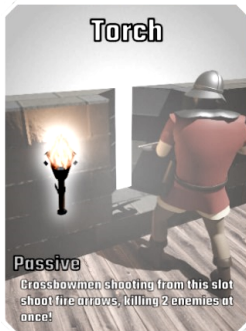
Figure 7: **Tar Barrels** are wooden barrels filled with hot tar that shatter on impact, covering the floor in boiling, sticky goo. If Wallther runs through a tar patch he will get sticky black feet and significantly slower for 5 seconds. These tar barrels are to be avoided at all costs since 5 seconds of slow movement can mean Game Over at later stages of the game.



Figure 8: **Flour Barrels** are less harmful twins of the tar barrels. They also shatter on impact, but release a harmless but annoying plume of flour, partially obscuring the player's vision for a few seconds.



Figure 9: A Wall with many upgrades at a very late stage of the game. Also visible here: the crossbowmen will turn into physics-based ragdolls after being hit, giving the whole battle scene a macabre but very entertaining sense of fluidity.



Torch

The Torch

is a common upgrade that doubles the damage of a crossbowman in one spot.



Passive

Crossbowmen shooting from this slot shoot fire arrows, killing 2 enemies at once!



Reinforced Wall

Reinforced Wall

is a common upgrade that makes the wall more durable, giving it 4 instead of 2 health points at the start of each day.



Passive

Makes one piece of the wall more durable, giving it 2 extra health points at the start of each day.



Reinforced Scaffolding

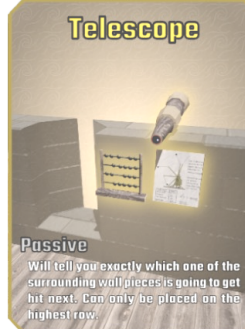
Reinforced Scaffolding

is a common upgrade that makes the wooden scaffolding more durable, giving it 2 extra health points at the beginning of each day.



Passive

Makes one piece of scaffolding more durable, giving it 2 extra health points at the start of each day.



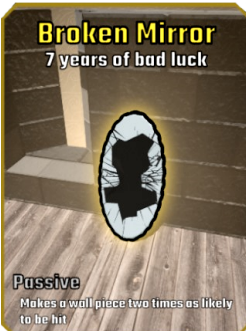
Telescope

The Telescope

is a rare Item that was intended to telegraph enemy attacks better, making it easier to see what wall piece was going to be hit next. Unfortunately, due to time constraints it was culled from development

Passive

Will tell you exactly which one of the surrounding wall pieces is going to get hit next. Can only be placed on the highest row.



Broken Mirror 7 years of bad luck

The Broken Mirror

is a rare upgrade that increases the likelihood of a certain wall piece being hit by a trebuchet.



Passive

Makes a wall piece two times as likely to be hit



L.S.D. Levitated Spring Defense

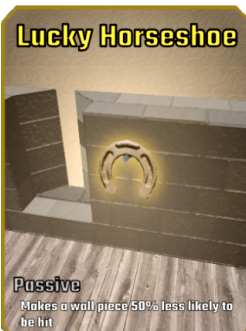
The Levitated Spring Defense

is one of two epic and rare upgrades. It's a huge spring-loaded trap that bounces a trebuchet shot back into the enemy, killing 5 footsoldiers at once.



Cooldown: 10s

Bounces back trebuchet shots, dealing massive damage to the enemy army! Up and away!



Lucky Horseshoe

The Lucky Horseshoe

is a rare upgrade that reduces the likelihood of a certain wall piece being hit by a trebuchet



Passive

Makes a wall piece 50% less likely to be hit



A.S.S. Automated Self Service

The Automated Self Service

Is the second of the two epic and rare items. When recharged, it repairs one piece of the wall on its own, buying Wallther more time to focus on other things.



Cooldown: 10s

Repairs scaffolding and wall in this slot by itself (1hp each activation)

Figure 10: An overview of all Upgrades Wallther can place on the wall with descriptions and in-game screenshots.

1.4 Main Menu

The entry point to our game is the main menu. We embraced our design philosophy of diegetic elements early on: The way the player chooses options is by shooting the appropriate sign with a crossbow. Using the movement controls makes it sway to aim at the right sign. The player can enter the Tutorial, go into Free Play or quit the game by shooting the appropriate sign. As a fun little easter egg, the player character sitting on the right side of the screen will get startled when the player releases a bolt. This Menu screen shows our dedication to detail and grounds the player in our game’s universe early on. It was also a potent eye-catcher at the DemoDay.

1.5 Tutorial

The tutorial guides the player through the controls narratively. We made sure to go over every mechanic in the game but allowed every player to learn at their own pace. If a player was quick to learn, the tutorial took no longer than a minute. Other learners took longer but were prepared nonetheless for the battle ahead.

2 Experiences

2.1 Initial Design vs. Final Game

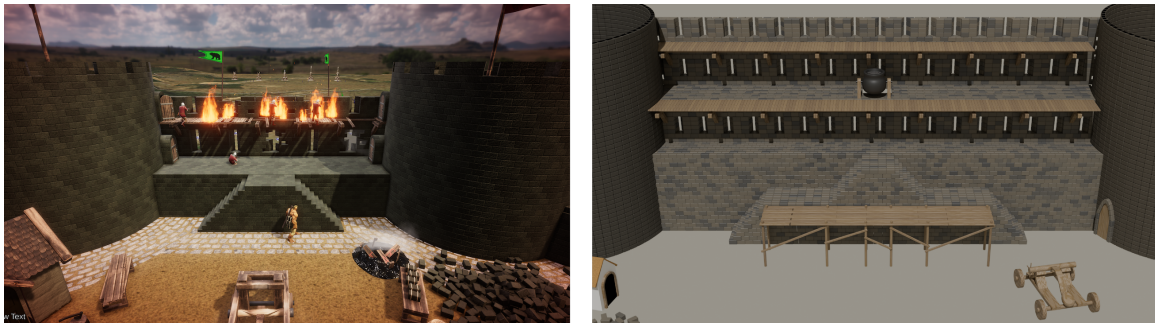


Figure 11: A side-by-side comparison of the final game and our first mockup render. The wall got significantly smaller in time and the arrangement of the interactables on the ground and the scaffolding changed. The camera angle and general layout however stayed roughly the same.

On the initial pitch, we announced a fast-paced arcade-style game about Wallther, the medieval repairman keeping a wall intact while under attack. The Game "Wallther, don't let the wall falter!" went through many iterations on smaller features and little design choices but we are happy to say that we remained satisfied with the overall design and scope from the start.

2.2 Schedule Deviations

The clear milestone deliverables ensured a steady pace of overall development and reduced crunch time significantly compared to other projects we had experienced. There were however some notable points in the development that skewed the pace unfavourably.

When the game was already in a generally playable state, after the playtesting milestone and after letting people outside of the standardized tests play, we regretted learning that our game by then was too one-dimensional and got repetitive very fast. In that version, all the player could do was play the same level again and again with ramping enemy numbers. This pushed us to decide on the wall upgrades as a must-have feature with only one month of development. That choice challenged all of us to re-think some paradigms we had in place and work hard to achieve a feature that would hopefully defeat the vicious repetitiveness.

Additionally, due to personal and study-related reasons not all members of the group were able to contribute to their fullest potential, leading to an increased time investment for other parts of the team. In the end, we completed all the features we set out to complete but had failed to bring the polish and balancing to a level that satisfied us all.

2.3 Impact of development cycles

The monthly deliverables helped the team structure the overall development significantly. The prototyping phase seemed long at the time but it made us engage in all the little questions and choices our grand vision had overlooked. This ensured a backlog of questions already answered about a shared vision that we could always come back to later in the process. The testing phase however seemed too short and did not give us enough time to gather insightful statistics about what players thought about our game. As discussed in chapter 2.2, an earlier testing phase would have made us rethink our game loop earlier, potentially leading to a more polished game in the end. We therefore think that an earlier alpha release would have been helpful in that regard.

3 Personal Impressions

3.1 What was the biggest technical difficulty during the project?

A challenge that surprised us in its technical difficulty was giving Wallther a satisfying range of animations that react properly to jumping, falling, landing and repairing all at different animations for different walking speeds. The resulting character controller was quite advanced including inverse kinematics and some procedural animation paired with 2D blend trees of Wallther's base animations. We are pleased with the result and believe overcoming this challenge was crucial for Wallther's controls to feel dynamic and fluid.

Initially, we feared that our collaboration over Git as version control would be prone to errors and cause for frustration. But as it turned out, this was not the case at all. It was however not always easy to work together on the same code as each member brings their own coding philosophy and style. Due to the nature of Unity's script system, it was sometimes needed for one developer to modify the code of another which could lead to sub-optimal solutions without the proper communication.

3.2 What was your impression of working with the theme? Do you think the theme enhanced your game, or would you have been happier with total freedom?

We were happy that there was a theme because it makes brainstorming easier and provides more of a challenge because we as a team have to use our skills to produce something that fits it. "The Wall" was a good fit because it gave this common theme but was still vague enough to leave many directions open in which it could be applied. It was also exciting to see how the other teams implemented the theme and how it differed from our own work. While we're aware that our interpretation of the theme appears blunt, especially compared to the interpretations of the other teams, the simplicity and easy-to-understand premise is part of what makes "Wallther, Don't Let The Wall Falter" great.

3.3 What would you do differently in your next game project?

There is always a lack of communication of some sort so in the future we will make sure that everyone is on the same page all the time with consistent progress updates. It would also help to use the early phases of development to create more management structures like task boards and timelines that give a single source of truth about what each member has to do and is doing. Another smaller thing is to structure the brainstorming process better. In the beginning, we went back and forth often, not setting concepts in stone, which led to an unfocused pitching of ideas.

3.4 What was your greatest success during the project?

Our greatest success was that we set out to make a fun and visually clear game while relying completely on diegetic elements to guide the player. We achieved this while mostly sticking to our original plan that we devised during the planning stage through great visuals that paint a complete picture of the game state.

3.5 Are you happy with the final result of your project?

We chose to commit to an almost completely diegetic interface halfway through development. Diegetic interfaces are great for storytelling and immersion, but in the realm of fast-paced arcades, it is debatable whether those two are worth sacrificing readability and concise information flow.

3.6 Do you consider the project a success?

Yes. Although there were some hick-ups in the end we managed to deliver a fun game with great visuals according to our plan.

3.7 To what extent did you meet your project plan and milestones?

We were mostly able to follow our project plan. We implemented all the pillars we set out in the proposal which means a smooth platformer, the ability to repair the wall, upgrades, friendly crossbowmen that defend the city, and difficulty progression. Some unexpected difficulties in the development meant that while the upgrades were all implemented, the final integration into the gameplay was only completed after the demo day, despite a last-minute crunch (specifically the challenge of carrying over changes from one scene to another).

3.8 What improvements would you suggest for the course organization?

More concise feedback would be much appreciated. While peer reviews are a great way to connect to fellow students and get the opinions of like-minded people, we had hoped for a little more guidance regarding development goals and practices.

4 Conclusion

We committed to a simple yet achievable premise that could be executed effectively within our time constraints. "Wallther, Don't Let The Wall Falter" offers a fun, easy-to-understand, and action-packed experience. Our original concept — where the player is only indirectly involved in the war as a construction worker, with Wallther portrayed as a badass pacifist — was well-received by our target audience. Overall, we're pleased with our game as a fast-paced arcade experience. While there are some shortcomings in gameplay depth and story that leave room for improvement, we believe our focus on making the game fun and visually appealing, rather than overly complex and logical, was the right choice. We're happy with the end result and will carry the many lessons learned from this project into our future endeavours.