

# Interim Demo

## Wallther, don't let the wall falter!

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## 1 Abstract

In order to model our game loop and drill down on a precise interaction model we built a paper prototype representing one level of our game. Playing through the prototype several times made us realize important things about the game. In addition with the provided feedback of other teams we changed and tweaked some aspects of the game loop like inventory space and the capabilities of the catapult, but did not change the initial vision, which came through as quite fun and rewarding in the prototype.

## 2 The Paper Prototype

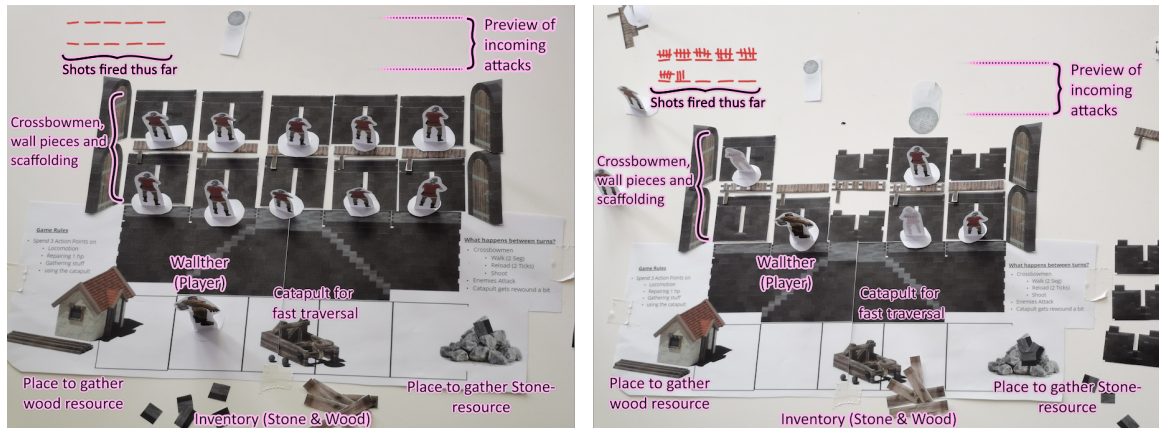


Figure 1: Two possible game states. Left: The initial state of the game with all wall pieces intact and no shots out of 50 fired (50 enemies remaining). Right: A possible game state after a few rounds where the wall is heavily damaged and Wallther has trouble keeping up with the repairs. The crossbowmen have thus far fired 33 Shots out of 50 (17 enemies remaining).

### 2.1 Compromises for the Prototype

To make the game playable as a board game, we agreed on a turn-based approach in the paper prototype to model the limited time a player has to react to threats. Wallther has 3 action points every round that he can spend on locomotion, repairs or replenishing resources. After every turn, crossbowmen will reload/shoot and the enemy army will charge their next attack. We also implemented a grid based system for movement and interactions, to compensate for the lack of scaled geometry and to work better with the turn based locomotion system.

## 2.2 The Game Level

The prototype is made up of several movable pieces. Some of the obvious movable elements are Wallther and the soldiers themselves. Both Wallther and the soldiers are designed to stand upright, for easy manipulation. The lower part of the level including the stairway and the ground squares as well as the four doors do not move.

10 wall pieces make up the destructible, upper areas of the wall. These pieces have 3 variations each, showing the current health of the wall in three stages: Full Health, damaged and completely destroyed, just like the scaffolding on the higher row. Wallther's movement in the paper prototype is grid based.

## 2.3 The Enemy Army

After the player is done with his turn, the enemy can shoot a trebuchet round or a rain of fire arrows. Fire arrows will damage the scaffolding and crossbowmen on the higher ranks while trebuchet rounds will damage the stone wall. A trebuchet shot will take 2 rounds to arrive with an indicator showing how long the player has until impact. The fire arrows work similarly but take only 1 round to arrive.

## 2.4 The Friendly Crossbowmen

Every crossbowman will shoot every second turn. Every crossbow bolt fired is noted in a tallycount. If that tallycount reaches 50, the player wins. In the game, this would translate to the crossbowmen shooting down 50 enemy soldiers. Crossbowmen will die upon impact of any projectile on their tile, fire arrow as well as trebuchet round and only get back into position once the wall is repaired fully and the scaffolding is at least half intact.

## 2.5 Player Mechanics

Wallther has 3 action points every round. Any sort of locomotion requires 1 action point, with which Wallther can move to any adjacent tile, but not diagonally. One exception is jumping down, Wallther can jump down from any height using just 1 action point. Repairing also costs 1 action point. Gathering resources take 1 action point, but Wallther resource pack is maxed out with only 1 action point. Using the catapult also requires 1 action point.

Along with action points, repairing walls costs 1 stone resource, while repairing scaffolding takes 1 wood resource. To repair walls the player has to stand right in front of the specific wall segment. To repair a scaffolding, the player can stand on, next to, or even below the scaffolding. Scaffolding repair ideas takes special consideration as certain game states may make it impossible for Wallther to repair the scaffolding otherwise.

Using the catapult, Wallther can launch himself to any game area with just 1 action point. But the catapult itself takes a 3 rounds to rewind after each use.

## 2.6 Win/Loose State

If a trebuchet round targets a segment that is already completely destroyed, the player loses immediately on impact, as the trebuchet round would fly straight through the wall, wreaking havoc on the population inside the city.

If 50 crossbow bolts are fired and the enemy number reaches 0, the player wins instantly, as the army is defeated.

# 3 Playing Experience

Playing the paper prototype was more fun than we expected because the game play translated really well. We were able to play our game using basic props and find aspects that we should iterate upon. It was a really useful tool to get a sense of what is fun and what works.

## 4 Findings and Iteration

### 4.1 Prototype Learning

- Scaffolding should be fixable from adjacent areas including from beneath because Wallther can't walk on broken segments.
- Wallther should start with full resources. If he doesn't the player would have to repeat the same cycle of filling up resources first.
- Indicating incoming projectiles helps the player to make more strategic decisions.
- The balancing of the different actions and difficulty works well
- Gathering resources should be fairly quickly
- Having a bigger inventory for resources is more fun and enables more strategic.

### 4.2 Challenging and Trivial Aspects

- Simulating the timing and speed of the gameplay turned out to be easily solved by playing the prototype turn-based.
- Keeping the flow was challenging because the computer had to go through a lot of steps in between turns to progress the game state.

## 5 Feedback

### 5.1 Incoming Attacks Indication

One feedback we received criticized the lack of indication for the incoming projectiles making it harder for the player to anticipate where they need to move next.

### 5.2 Avoid Repetitive Gameplay

A major issue that emerged from the feedback was that the gameplay could get repetitive and thus boring, especially when considering the replay value. It was mentioned that this might be amplified by a lack of story and progression.

### 5.3 Longer Survival Rewarding

A suggestion was made to integrate an element of competition that is often a fundamental aspect of infinitely played games.

### 5.4 More Player Actions and Dense Backstory

The set of actions allowed for the main game character is rather small and there is not much of a backstory about the game context.

### 5.5 Catapult Integration

In the initial pitch the level blockout included the catapult at the far right, away from where the main game flow would take place. This was criticized as it could limit the catapult's use by the player or force the player into the repetitive action of running to it.

## **6 Feedback Iterations**

### **6.1 Attacks Indication**

We agree with the feedback. However, we found that directly showing the player the impact position makes the game too predictable and reduces the fun of having to react to sudden changes. Therefore we included a mechanic in our paper prototype where incoming projectiles will appear above the wall shortly before impacting, indicating the column of where it will hit. In the actual game this will be done by animating the actual projectiles so that the player can see them being fired before they leave the camera's field of vision and impact shortly after.

### **6.2 Repetitive Gameplay Avoidance**

The player is intended to get upgrades for their skill set, hence the player needs to make decisions, such as what aspect they'd rather upgrade given the current game state. This ensures having different flavours for the gameplay progression in terms of which actions Wallther can do more efficiently than others.

### **6.3 Longer Survival Rewarding**

This feedback will be addressed in the form of a score system and a leader board which enables players to compete for high scores.

### **6.4 More Player Actions and Dense Backstory**

We are planning on implementing an item system that allows the player to upgrade Wallther's stats but we decided against adding new abilities, especially ones that involve Wallther in the fight itself. We want to keep the core gameplay compact and limit it to repairing the wall while providing variety through the upgrades. Involving Wallther in the fight would go against our story pillar and open up an entire new dimension of gameplay that we don't want to focus on in this project.

### **6.5 Catapult Integration**

We decided to make the catapult in the game flow more central by placing it in the middle of the ground. We also split the required resources into wood and rock with each of the sources being at either side of the level. This organically adds incentive to use the catapult for the player.