

# Game Idea Proposal

## Game Description

Our game takes place in medieval times setting combined with some fantasy aspects. You control in a standard 3rd person fashion a hero, whose task is to protect the kingdom from a series of attacks on different cities of bloodthirsty creatures. The attack is continuous but sometimes offers some time where the soldiers of the city can defend on their own while you prepare some additional defenses to assist you when the attacks intensify again. Smaller and larger enemies of different types have different targets like defeating your defensive forces or simply destroying the buildings. Don't let the enemies take over the mystical power source of the village, or the village is doomed and you're forced to retreat because you might still be able to win the war in a future fight. But the task of the hero is way beyond only protecting the heart of the city: The hero has to keep the casualties as low possible.

In the beginning and during the quieter phases of the attack stream the player can come up with crazy and clever ideas on how to defend the city. The core idea of this game is that the player needs to use the destructible and buildable buildings/environment to maximize the efficiency of the defense. The hero is able to place spike-fields to block roads, position barrels of black powder, setting up oil fields to slow the enemies down and optionally also ignite them to assist them in the defense. But due to the fact that constructing defensive objects is so expensive, the hero is also able to destroy houses to block roads, set corn fields on fire to hinder the advancing enemies or blow up the local bridge to block direct paths to the center and thus potentially sacrifice some buildings for the greater good. But be careful which buildings or structures you destroy. Some of them have special functionalities (and if they are gone, you can't replace them).

Special building include:

- Barracks, where you can spawn fighters which will fight by your side. You can control your fighters by ordering them to defend specific strategic points on the map
- Smithy, which will periodically provide you with equipment upgrades
- Factories, that will provide you with valuable resources for building your traps
- Watchtowers, which will provide you with aurally information about incoming enemies

But the enemies won't always drip in in a small stream. During the mass attacks you have to use all available resources and also participate in defending the city. As a mage you have special abilities to aid you: throwing fireballs to damage enemies and ignite oil or black powder and an AOE spell to fight off the creatures. But you can also help the fighters, which are fighting by your side, with a healing spell. It is important to note that some of these spells can also do harm to the village you would like to keep alive!

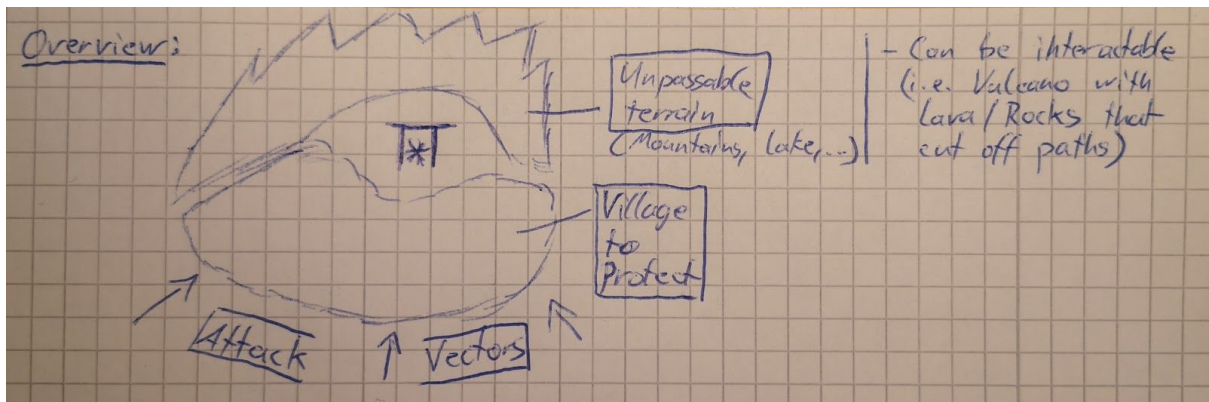
The enemies only goal is to overtake the village with its mystical power source and kill and destroy everything and everyone along their paths. There are three types of enemies which behave differently and thus have to be tackled using different approaches.

1. The fast dogs are sprinting through the village to find a way to the center and try to kill all humans in their path. Their main goal is to fight against your troops and clear the way for the others. An effective approach against these enemies is to group your units to fight them and to hinder them from advancing. This small and fast enemy type is not capable of destroying things.
2. The giants' goal is just destruction. They try to clear the way for the soldiers by destroying the defensive structures and houses where units could find cover.
3. Last but not least, there are the regular soldiers. These units fight against your soldiers but also can destroy your buildings.

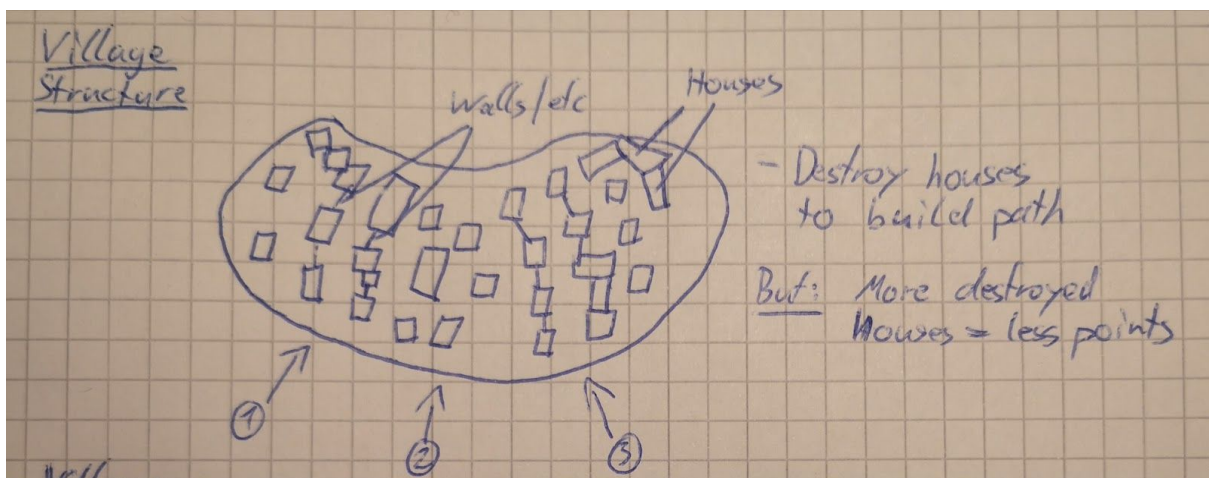
If an enemy unit reaches the power source and captures it the game is lost and you have to retreat to maybe hold the next village in your desperate attempt to not let the enemy become too strong.

The main goal is to survive until a critical point, where either the reinforcements arrive or the enemies give up and retreat. By winning the battle you will achieve great success and a score will be calculated based on several parameters. To encourage strategic thinking and keeping the casualties as low possible one of the parameters will be the amount of standing buildings.

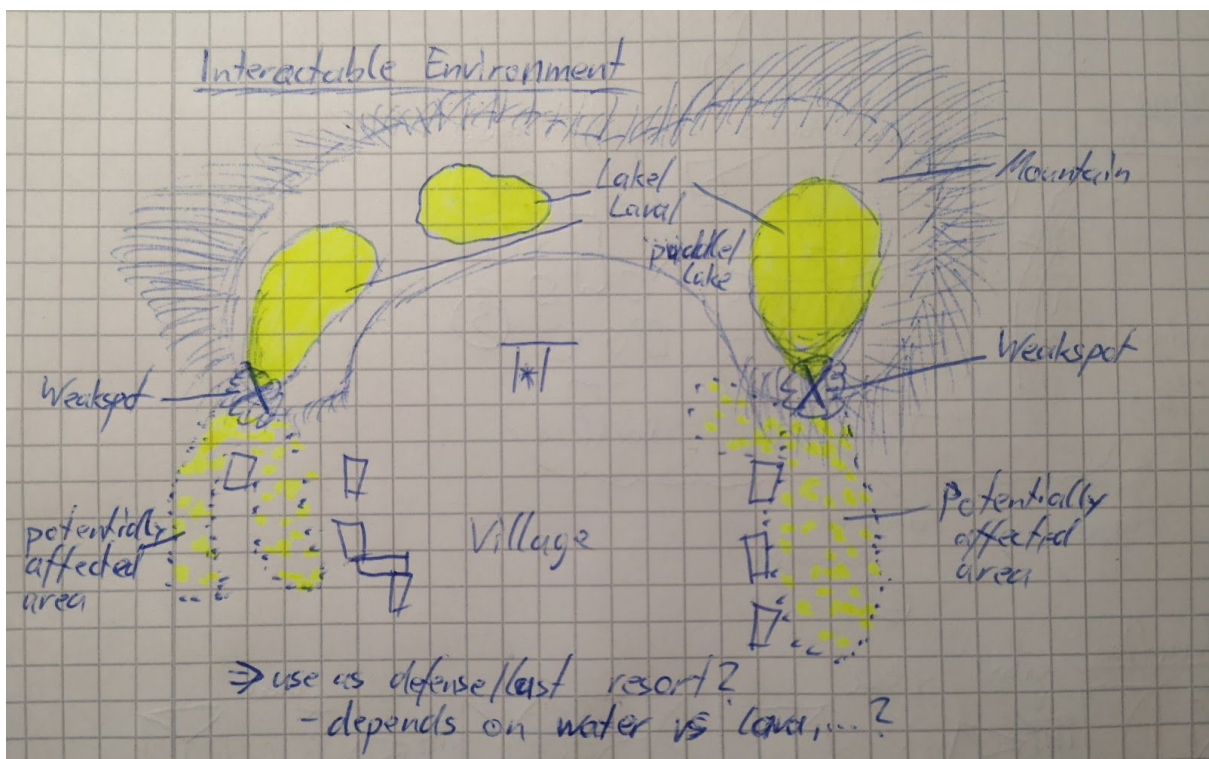
General overview showing the impassable terrain in the back, the village in the middle and the approaching enemies from the front.



The village with houses walls and paths the enemies could take.

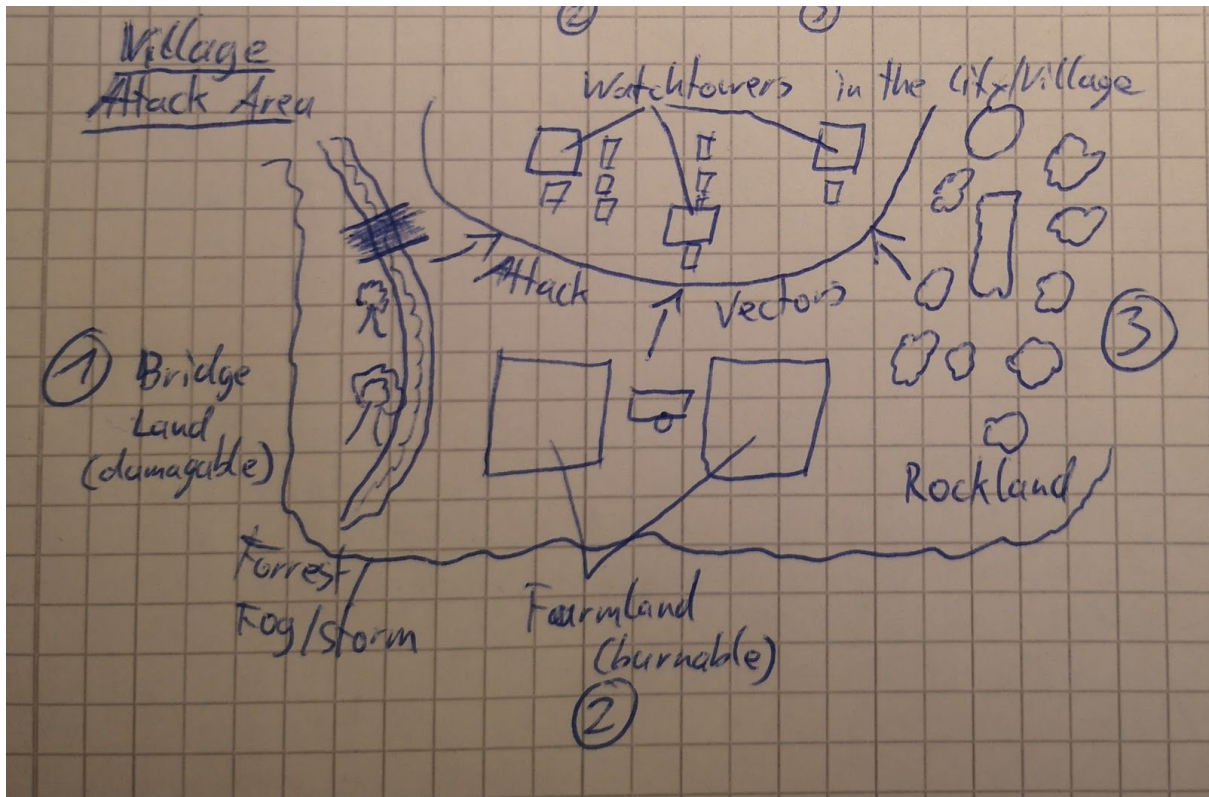


The village was built next to a volcano that can be used to emit lava at certain points.

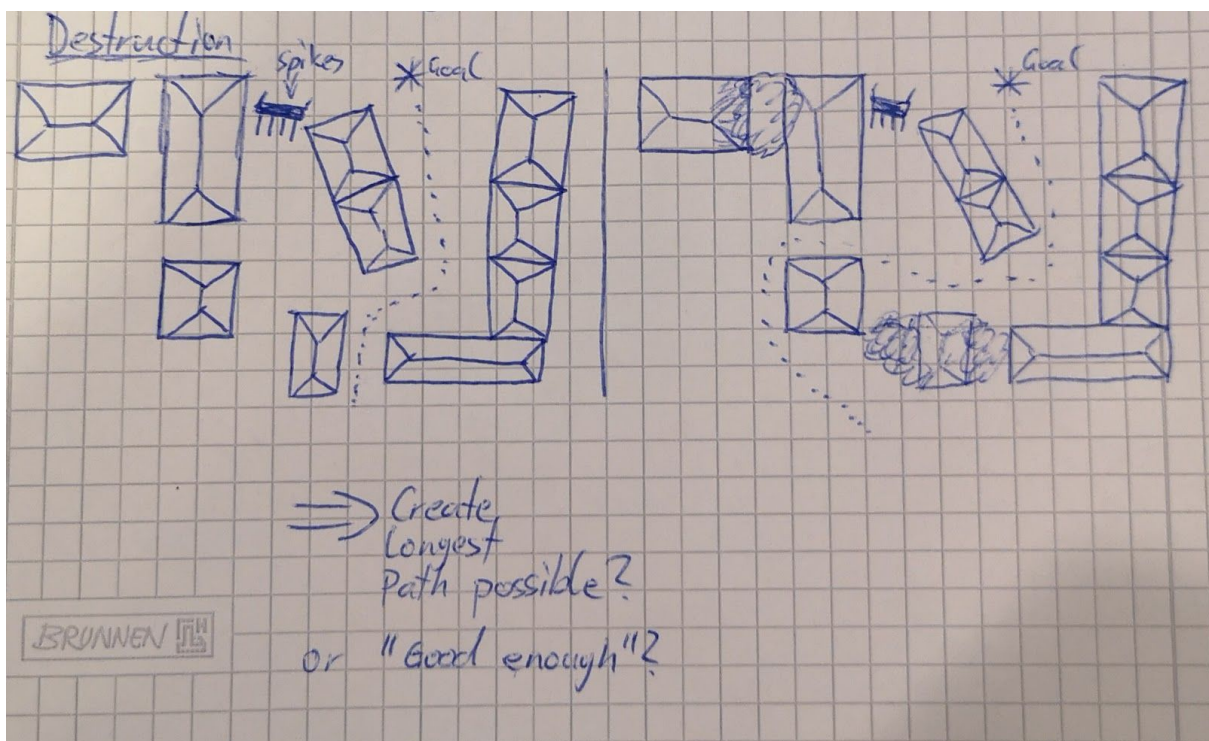


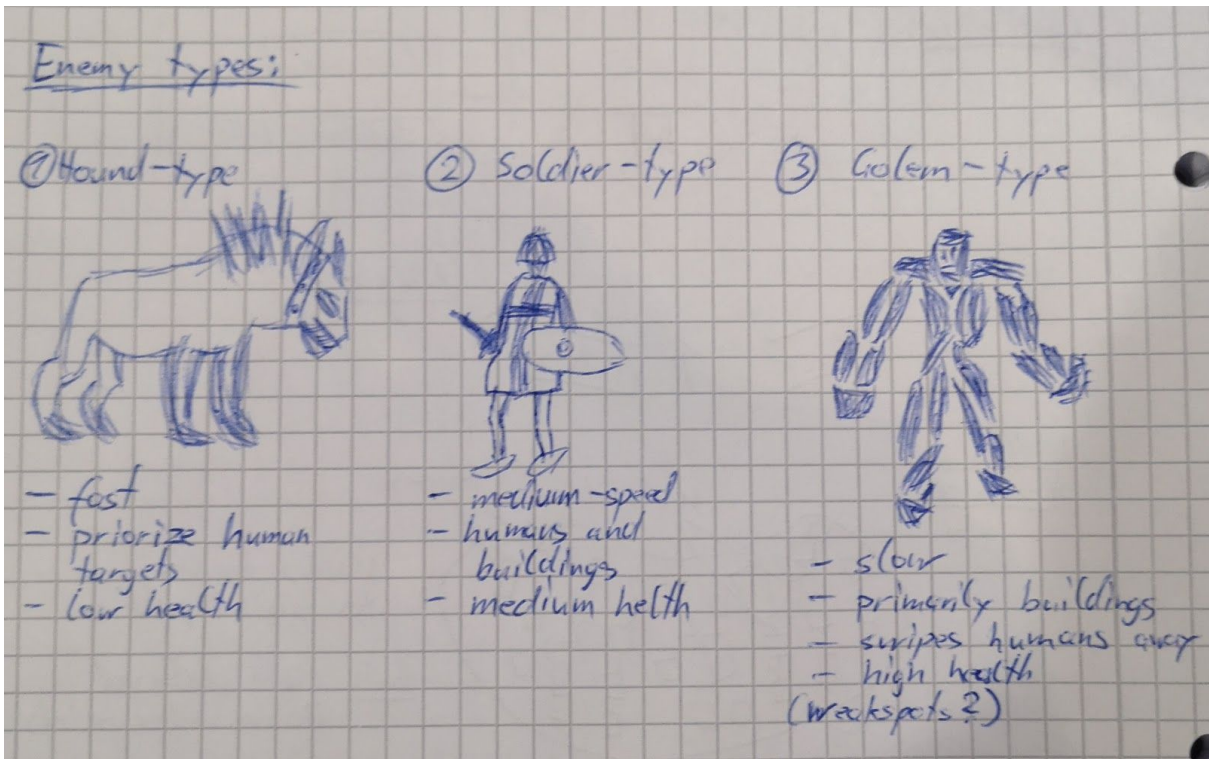


The village is attacked from very distinct sides and when an attack comes from one direction the watchtowers tells the player which side he or she should focus. Some sides also feature a tactical component like a destroyable bridge or burnable farmland.

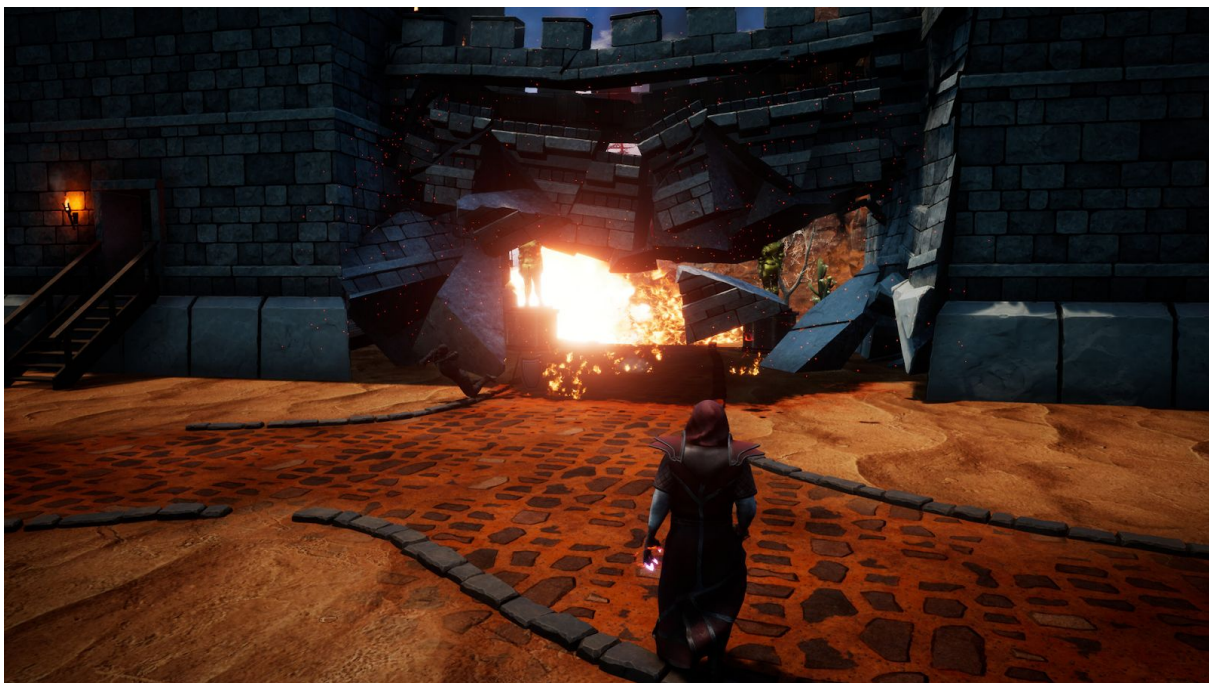


The debris of destroyed buildings and walls will block the path enemies in such a way that they need to take a different road.





The game is played from a third person perspective similar to the game called "Fictorum" seen below.



# Technical Achievement

Our technical achievement is that objects in the environment will interact with each other for example caused by the ability of the player to destroy the environment which affects the objects surrounding the destroyed element/structure. Further flying or rolling parts of the destroyed buildings cause damage. The destroyed buildings and debris create new obstacles for the enemies in such a way that they have to adapt their path to the center.

Talking graphics we will implement a special blending shader that blends the edges of specific objects with the ground, to improve the impression of a continuous terrain and increase immersion.

## "Big Idea" Bullseye

The highlight of the game is destructible environment, which has also an ingame purpose and isn't just a gimmick. This will be our primary feature which will lead to a unique game experience, and enables the player to make strategic decisions to achieve his goal of surviving.

## Development Schedule

### Layered Task Breakdown

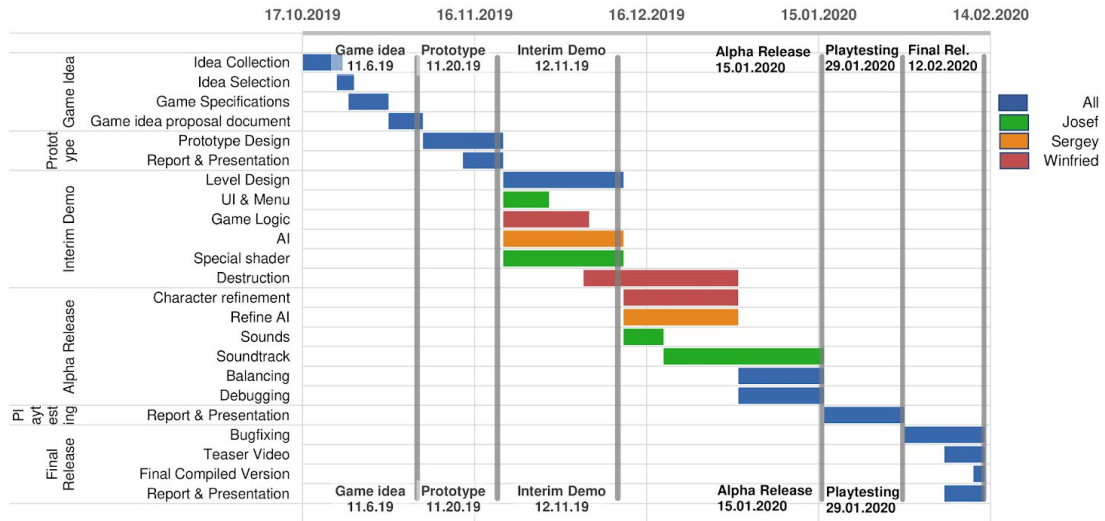
1. Functional minimum
  - a. Controllable character (walking around and shooting fireballs)
  - b. Attacking enemies
  - c. Win/Lose condition: mystical power source
2. Low target
  - a. Structures (houses, trees, etc) can be destroyed
  - b. The destruction is controllable in such a way that the path the enemies take to the center can be shaped by the players will
  - c. Level/City design
  - d. Smart enemies (path planning)
  - e. Score system
3. Desirable target

- a. More possibilities of shaping the path of the enemies by placing oil traps, spikes etc.
  - b. Some functional buildings (like factories)
  - c. Enemies with different priorities (destroy buildings or find path to center)
4. High target
- a. Different enemy types (Fighter/Destroyer)
  - b. Controllable minions fighting on your side
  - c. Additional spells (aoe and healing spell)
  - d. Additional strategic possibilities
    - Blow up the bridge
    - Let lava flow from the mountain into the city
5. Extras
- a. Campaign where the outcome of previous defenses influence the upcoming attacks
  - b. Multiple heroes
  - c. Skill trees
  - d. Customization (Hats, ...)
  - e. Multiplayer



# Timeline

## Defend the City: PROJECT TIMELINE



Project Start		10.16.19		columns used to create the chart							
CATEGORY	TASK	START	END	COLOR	Start	Blue	Red	Green	Brown	Orange	Purple
<b>Game Idea</b>	Idea Collection	10.16.19	10.23.19	Blue	10.16.19	8	0	0	0	0	0
	Idea Selection	10.23.19	10.25.19	Blue	10.23.19	3	0	0	0	0	0
	Game Specifications	10.25.19	10.31.19	Blue	10.25.19	7	0	0	0	0	0
<b>Prototype</b>	Game idea proposal document	11.1.19	11.6.19	Blue	11.1.19	6	0	0	0	0	0
	Prototype Design	11.7.19	11.20.19	Blue	11.7.19	14	0	0	0	0	0
<b>Interim Demo</b>	Report & Presentation	11.14.19	11.20.19	Blue	11.14.19	7	0	0	0	0	0
	Level Design	11.21.19	12.11.19	Blue	11.21.19	21	0	0	0	0	0
	UI & Menu	11.21.19	11.28.19	Green	11.21.19	0	0	8	0	0	0
	Game Logic	11.21.19	12.5.19	Red	11.21.19	0	15	0	0	0	0
	AI	11.21.19	12.11.19	Orange	11.21.19	0	0	0	0	21	0
	Special shader	11.21.19	12.11.19	Green	11.21.19	0	0	21	0	0	0
<b>Alpha Release</b>	Destruction	12.5.19	12.31.19	Red	12.5.19	0	27	0	0	0	0
	Character refinement	12.12.19	12.31.19	Red	12.12.19	0	20	0	0	0	0
	Refine AI	12.12.19	12.31.19	Orange	12.12.19	0	0	0	0	20	0
	Sounds	12.12.19	12.18.19	Green	12.12.19	0	0	7	0	0	0
	Soundtrack	12.19.19	1.15.20	Green	12.19.19	0	0	28	0	0	0
<b>Playtesting</b>	Balancing	1.1.20	1.15.20	Blue	1.1.20	15	0	0	0	0	0
	Debugging	1.1.20	1.15.20	Blue	1.1.20	15	0	0	0	0	0
	Report & Presentation	1.16.20	1.29.20	Blue	1.16.20	14	0	0	0	0	0
<b>Final Release</b>	Bugfixing	1.30.20	2.12.20	Blue	1.30.20	14	0	0	0	0	0
	Teaser Video	2.6.20	2.12.20	Blue	2.6.20	7	0	0	0	0	0
	Final Compiled Version	2.11.20	2.12.20	Blue	2.11.20	2	0	0	0	0	0
	Report & Presentation	2.6.20	2.12.20	Blue	2.6.20	7	0	0	0	0	0

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MILESTONE LABEL	DATE	Margin Bottom	Margin Top
Game idea	11.6.19	5%	95%
Prototype	11.20.19	5%	95%
Interim Demo	12.11.19	5%	95%
Alpha Release	1.15.20	5%	95%
Playtesting	1.29.20	5%	95%
Final Release	2.12.20	5%	95%
Demo Day Presentation	2.15.20	5%	95%



## Assessment

The main strength of the game is that it will feel very open in terms of what the player can do to achieve the goals (e.g. destroying buildings, building traps, supporting the defending units, ...) but also the immersiveness that this interaction creates with the world.

This game is targeted at players who like tower defense style games like "Orcs Must Die!" with an additional tactical layer on top and a not so restrictive environment. The world should reflect that the village is under siege and an action of the player really matters.

Critical for this game idea is the interaction between the player, world and enemies that makes the world feel very dynamic and responsive to the player's actions.