**Ridgehold**

*Game Design Document*

**Ridgehold** is a 2.5D single player ***tower defense game*** set in ***medieval*** times. The player has to defend a castle against waves of huge ***insects***.

1. **General Overview**
2. **Main concept:**

In **Ridgehold**, the player will be able to take command of a small ***castle***. The castle will be attacked by ***waves*** of different types of ***insects***.

The defender starts with a ***Town Hall***, which has to be defended throughout the game, ***walls*** around it, and a handful of ***defender*** units.

The game's only objective is to keep the ***Town Hall*** intact until the end of the last wave. If it gets destroyed, the game is lost, otherwise the player can go on to the next level.

1. **Target Audience: Casual**
2. **Target Platform: PC**
3. **Game Engine: Unity**
4. **Look and feel:** A very basic 2.5D look with a medieval feel to it.
5. **Gameplay**
6. **Game progression:**

**The game** moves between a series of ***preparation*** and ***wave*** phases.

***Preparation*** stages are usually short, giving the player a little bit of time to get prepared for the next wave.

The core of the gameplay happens in the ***wave*** stage, where different types of ***insects*** rush towards the castle with the intent of knocking down the ***walls***, killing the ***defenders*** and destroying the ***Town Hall***.

The player has to use all the tools provided to keep the defenses up.

The ***waves*** will gradually get harder as ***more insects*** will attack and they will approach from more sides.

1. **Main objective:**

The ultimate goal is to ***survive*** all the attacking waves and progress through the ***levels***. After completing the third (last) level, the player will be awarded with a ***win screen*** and a ***win message*** (a congratulation for defending the castle).

1. **Gameplay mechanics**
2. **Movement in the game:**

The player will be able to move the ***units*** and place defenses with the mouse buttons. For moving the screen, the player can either use keyboard or the mouse.

The only game objects the player can move are the ***units***. Additionally, ***siege engines*** can be placed on certain points of the wall and castle ***upgrades*** and ***repairs*** can be bought via the user interface with a ***click and place*** method.

1. **Actions the player can take:**

A grand total of ***five buttons*** will be placed on the screen for the player, available all the time:

* Three for the ***three types of units***. Pressing any of these will ***produce*** the corresponding unit as a reinforcement, given the player has enough points to do so.
* Two for the ***two types of siege engines***. Pressing any of these will give the player the option to ***place*** the corresponding siege engine on the wall, given the player has the resources to do so.

***Additional buttons*** will also be placed for ***wall repairs*** (on each side of the castle), for wall upgrades (also on each side) and for the Town Hall upgrades.

These buttons will only be available via ***hovering over*** the corresponding game objects.

1. **Combat system:**

The ***combat*** starts when the game initiates a ***wave of insects***. The player can use two types of attacks: ***ranged*** and ***melee***.

* All of the siege engines use some form of a projectile (rocks and scorpion bolts), which they can hurl to great distances.
  + ***Scorpions*** are ***precision*** machines which means they always hit their target.
  + ***Onagers*** on the other hand have ***area attack*** and are rather inaccurate, but can knock down more than one enemy at once.

***Siege engine abilities*** (max 1 per machine, MUST DEFINE LATER!)

* The ***Archer*** is the only unit type capable of using ranged attack via ***bows and arrows*** at a medium distance. The damage caused by individual arrows are rather low, it is advised to use them in mass.

The other two unit types will engage the enemy in melee.

* ***Pikemen*** are lightly armored, but equipped with ***long pikes***, which they can use to hold chokepoints (usually breaches on the wall).
* ***Swordsmen*** on the other hand are armed with ***swords*** and ***shields*** and armored well. They are the main body of the defending force and can be deployed anywhere to plug the holes in the defensive line.

***Unit abilities*** (max 1 per unit, MUST DEFINE LATER!)

The ***insect*** attackers have three different type of units: a ranged and two melee.

1. **Game economy:**

Resource collection is very simple in this game: ***kill insects to earn points***.

These points can be spent on new ***units*** and ***siege engines***, wall ***repairs*** and ***upgrades*** and Town Hall ***upgrades***.

The stronger the insect, the more points the player will receive after killing it.

1. **Interface:**
2. **User interface:**

The ***HUD*** contains:

* ***Five*** ***buttons*** for buying ***units*** and ***siege engines*** (each type has its own button).
* ***Nine*** ***buttons*** for buying the ***upgrades*** and ***repairs*** (pop-up buttons)
* During the "preparation" phase, a ***timer*** will be placed on the screen, which shows the remaining time until the next attack.
* The ***size*** and ***composition*** of the next attacking ***wave*** will also be shown.
* A button for calling up the ***Main Menu***

1. **Control system:**

* ***w,a,s,d* keys and the mouse:** Pans the screen.
* **left mouse click:** 
  + Selects a unit. With holding down the left mouse button and moving the mouse, more units can be selected (selection box).
  + Selects a unit or siege engine to be called or placed.
  + Selects an upgrade or repair.
* **right mouse click:**
  + Orders a unit to move if clicked on the ground.
  + Attacks an enemy if clicked on an enemy unit.
* ***p* key:** Pauses the game.

1. **Audio:**

One, maximum two different music (maybe one for each phases).

Each insect unit type will have their own walking/flying and attacking/dying sound effect.

Defender units will all have walking, attacking and dying sounds.

1. **Help system:** Hovering over - ***pop-up*** descriptions.
2. **Additional information:**

* The player will be able to change the general volume of the game.
* It won’t be possible to save the game manually, but instead, after clearing a level, the player will have the option to replay that level. If the game is lost before completing the level, it has to be started over.
* No backstory is available yet. There will probably be no important characters.
* The game comes with three levels, the next level is only available after completing the previous one.
* A short tutorial will be available for the first preparation and attack wave.
* The game is single player only.
* There will be three different types of maps for the different levels:
  + Mountainous map
  + Grassy map (mainly plains)
  + Map with rivers