**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*** alive 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 move to the next ***levels***. After completing the third and last level, the plyer will be awarded with a ***win screen*** and a ***win message*** (a congratulation for defending the castle).

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

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

The only gameobjects 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 to be 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 with ***hovering over*** the corresponding gameobjects.

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 rather inaccurate, but can knock down more than one enemies 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 get after killing it.

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

The ***HUD*** contains five plus nine additional ***buttons*** for the corresponding unit/siege engine types and upgrades/repairs.

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.

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).

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:**

Pop-up descriptions.

1. **Additional information:**

* The player will be able to change the general volume of the game.
* It will not be possible to save the game manually, rather 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 tutorials will be availabe for the first preparation and attack wave.
* The game is purely single player.