Game Design Document

Dark Wave (Codename: *TBD*)

Version: 0.0.7

(major release patch – major patch – minor patch)

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Note: EVERYTHING on this document is not set in stone. Suggestions can be made to change any and all features documented here.

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# Change Log

## February 22, 2016

* Updated team members list.
* Added High Concept description (finally).
* Reworked Story description under Game Overview.
* Reworded some of the text in The Golemancer under Game Overview.
* Fixed Type in Controls under Gameplay.
* Changed a word in Difficulty under Gameplay.
* Combat section renamed to Combat Overview under Gameplay.
* Reworded some phrases in Combat under Gameplay.
* In Weapons under Combat Overview, changed the descriptions of unlocking weapons from investing in the Weapons attribute to simply leveling up.
* Added a new Effects section under Combat Overview, explaining what effects are and describing each buff and debuff in the game.
* Added information about dying and revival to Combat Overview under Gameplay.
* Reworded some descriptions of weapons in Weapons under Combat Overview.
* Noted that players nor undead can perform any action or movement during a grapple in Grapple under Combat Overview.
* Reworded some descriptions in Win and Lose Conditions under Gameplay.
* Reworded some descriptions in all parts of Phases under Gameplay.
* Added a suggestion for shards being collected by simply walking over them in Shards under Gameplay.
* Added reasoning behind the choice of having shards collected by one person being copied to other players’ stockpile of shards in Shards under Gameplay.
* Changed the visual of the statement that suggests having to pay an upkeep for preparations after each successful defense so that is reads more like a suggestion rather than a requirement in Abilities under Gameplay.
* Updated List of Abilities by Character under Abilities to terminology introduced in Effects under Combat Overview.
* Reworded Golemancer’s Diehard ability in General Abilities under Abilities.
* Reworded some statements in Entity under Gameplay.
* Added the Heads-Up Display section under Game Overview.

## February 17, 2015

* Added controls to scroll through abilities left and right for console and pc.
* Added a third factor to the difficulty of the game: the level.
* Clarified that only up to four undead can grapple a player at a time.
* Clarified that each character can have up to four weapons by simply leveling up.
* Revamped the Attribute Point System. Players can only allocate new point and reallocate old points before the beginning of a level.
* Removed mention of having a large amount of attribute points in Onslaught, as player level will determine attribute points.

## November 23, 2014

* Vice is officially replaced with pre-level difficulty adjustment settings. Red text removed. New section called Difficulty added to focus on this in-depth.
* Diehard Ability is officially overhauled. Red text removed.
* Added adjustments to win conditions in the case of multiple Life Crystals.
* Renamed some of the ACM members’ jobs from “Something” to appropriate titles. Contact Samuel, Nicoli, or Clive to suggest a change to your job title, or even push the change yourself using Github!
* Death has been adjusted.

## November 16, 2014

* Rearranged the change log such that the newest changes are above the older changes.
* The Preparation Phase will not start until every player finishes spending attribute points or enough time passes. It's sort of like a phase after Defense but before Preparation.
* Clarified how attribute points affect the player.
* Changed how increasing Dexterous Arms improves the Consecrator's weapons.
* Added controls.
* Any action that hinders the undead (not just damage) will raise aggro.
* Made a notion that bunny-hopping could be a faster means of travel as an unlocked ability.
* Replaced the term "resource" with "charge" in Abilities.
* Noted that golems can fill a controlling role in place of defensive.
* Flanking Zeal deals heavy damage, and Exposed Prowess inflicts controlling effects.
* Updated the Golemancer's Sentry and Miner.
* Added details to Jiangshi.
* Moved Lich to boss.
* Added that preparations need shards to continue existing after a Defense Phase.

## November 1, 2014

* Updated the story by a little bit.
* Added additional details to Combat.
* Added additional details to Weapons, including details about reloading.
* Removed Vice from Attribute Point System. Red text explains why as well as an alternative to increasing difficulty.
* Added clarifications to Preparation in Phases.
* Renamed Basics of Shards to Shards.
* Added a clarification that golems cannot be walked through by the Undead, as well as information on Symbols, to Preparations-by-Character Overview.
* Bolded an important statement in Preparations-by-Character Overview.
* Added clarifications to Spotter, ideas for the Wall, the turret's overall damage-over-time, the Tower's expensiveness, and Burst of Rage's effects for each weapon in Abilities.
* Added an alternate, simpler idea for Diehard in General Abilities.
* Added ideas to Death.
* Added visual qualities and new ideas of the Undead in Entities.
* Moved the change log to the top to emphasize the importance of viewing the change log.

## October 15, 2014

* Added some suggestions to Diehard, but is missing some notes from the preceding meeting.
* Added some suggestions to Death.
* Added some suggestions to Draugr armor color under Draugr.
* Added a phrase describing Vampire tactics under Vampire.
* Added some suggestions to Jiangshi.

## October 8, 2014

* Added regular and italicized details in Combat, including movement and the fact that there's no weapon carry limit.
* Replaced nearly all first-person words with third-person words ("you" changed to "the player"). The rest are part of flavor text.
* Added thoughts on Vice and what could replace it in Attribute Point System. APS also has an idea on a choice of abilities when reaching an attribute line threshold and a contingency plan for when the player doesn't put any points in when the Preparation Phase ends.
* Renamed Tough to Toughness and Vital to Vital Spirit.
* Added explanation for having more shards spawn near the Dark Zones in Basics of Shards.
* Added the fact that preparations cost shards in Abilities.
* Added the fact that players are healed at the end of the Defense Phase in Defense.
* Added the fact of repairing structures in Preparation and the suggestion of having the Consecrator pay an upkeep to keep existing symbols from fading away after the Defense Phase ends and the following Preparation Phase ends.
* Added a new section under Abilities called Preparations Overview.
* Added facts to Onslaught.

# Project Overview

## Executive Summary

Dark Wave is a game about defending and expanding your final bastions against hordes of the Undead. The players fight as humanoid bunnies with guns and melee weapon and build powerful defenses to help defend the Life Crystal.

## High Concept

Three humanoid bunnies armed with weapons, machines, and magic defend grand crystals from waves of undead hordes of mythology to save a dead planet.

## Core Gameplay

One to three player cooperate first-person shooter and base building, defending one or more objectives from waves of enemies.

## Genre

First-Person Shooter, Strategy

## Target Audience

Teens and Adults unless we include at least moderate gore, in which case very young teens may also be excluded. Not for young children.

*\*Manly voice\* Rated T for Teen.*

## Team Members / Jobs / Contact Info

* Clive Hoayun / Lead Coordinator, Lead Programmer / [clive.hoayun@knights.ucf.edu](mailto:clive.hoayun@knights.ucf.edu)
* Nicoli Williams / Lead Designer, Programmer / [williamsnsjx@knights.ucf.edu](mailto:williamsnsjx@knights.ucf.edu)
* Taylor Bangs / Programmer / [tabangs@knights.ucf.edu](mailto:tabangs@knights.ucf.edu)

### Former Members

* Samuel Cosgrove / Former Lead Coordinator / [doctor.hope@knights.ucf.edu](mailto:doctor.hope@knights.ucf.edu)
* Russell Campbell / Former Artist / [rcampbell2108@knights.ucf.edu](mailto:rcampbell2108@knights.ucf.edu)
* Mark Behler / Former Member / [behler.mark1@gmail.com](mailto:behler.mark1@gmail.com)
* Andrew Guillard / Former Member / [andrewguillard@knights.ucf.edu](mailto:andrewguillard@knights.ucf.edu)
* Austin Peace / Former Member / [guitar12amp@aol.com](mailto:guitar12amp@aol.com)
* Kayden Wilkinson / Former Member / [kwilk95@aol.com](mailto:kwilk95@aol.com)
* Alexander Scheiner / Former Member / [AlexScheiner@knights.ucf.edu](mailto:AlexScheiner@knights.ucf.edu)
* Kaitlin Black / Former Member / [kaitlinb@knights.ucf.edu](mailto:kaitlinb@knights.ucf.edu)
* Trung Ho / Former Member / [trungvinhho@knights.ucf.edu](mailto:trungvinhho@knights.ucf.edu)
* Bruno Franco / Former Member / [brunothebeast@gmail.com](mailto:brunothebeast@gmail.com)
* Jose Soberanis / Former Member / [jsoberanis94@knights.ucf.edu](mailto:jsoberanis94@knights.ucf.edu)

# Game Overview

NOTE: *Italicized* text is a very base description, flavor text (usually from the Architect’s point of view), or filler text.

## Overview

*Like* [*High Concept*](#_High_Concept)*, but more detailed.*

## Story

Earth has two intelligent races: humans and <humanoid bunnies> (doesn’t have name right now). These bunnies developed technology that utilizes life energy. During the 21st century, the entire universe is infused with high levels of negative energy, killing all living creatures. Some days later, a Life Crystal – one of the room-sized life energy batteries created by the bunnies – activates on Earth and resurrects three <humanoid bunnies> from death. It them begins reverting the effects of the catastrophe, albeit very slowly. The Undead that have risen during those few day soon come for the bunnies and the Life Crystal, so the three use their weapons and abilities to defend the Life Crystal to give it time to expand its influence. From there, they will also activate the other Life Crystals across the world in a final effort to undo the catastrophe, as well as try to figure out who or what caused the catastrophe and why.

## Characters

### The Architect

The Architect is relatively tall and skinny <humanoid bunny> with exceptional aim and civil engineering skills. With these abilities, he can build tall walls and turrets to defend key areas while spotting and shooting the Undead from all sorts of ranges with his powerful rifles: automatic and three-shot burst mid-range rifles as well as a long range bolt-action rifle.

The Architect is a light-hearted yet focused individual, and often takes charge if needed be. However, he is secretly terrified of the Undead – in contrast to the Golemancer – and tends to panic if the horrors get uncomfortably close. He dons large gloves when building structures and switches them off for sleek hunter gloves when fighting.

### The Golemancer

The Golemancer is one of the strongest <humanoid bunny> to ever live. She carries up to four heavy weaponry: a minigun, a flamethrower, a large axe, and a huge hammer. All of her weapons don’t do well at large distances, so she fights near the Undead. Unlike the Architect, she is not too afraid of the Undead and enjoys destroying them. Her skills as a chemical engineer allows her to construct and animate golems that perform specific tasks based on its model.

The Golemancer is generally proud and brash, but not dumb. On to contrary, she’s a very intelligent individual much like the others, even if she usually doesn’t sound like it. She wears a large piece of cloth around her neck when fighting and over her head when building golems.

### The Consecrator

The Consecrator is a bit shorter than the other two <humanoid bunny>, and not as strong as the Golemancer (in terms of muscular strength). His occupation as a nuclear engineer and studies of ancient tomes allow him to easily manipulate positive and negative energy. This gives him the abilities to consecrate the ground with proximity-triggered symbols, and see the vulnerabilities of negative-based creatures such as the Undead and exploit them through flanking attacks with his handguns and empowered dagger.

The Consecrator was an acquaintance of the former two siblings before the catastrophe. He’s usually quiet and keeps to himself when there’s nothing to say, but loud and direct when an important matter needs saying. He wears a dark hood over his head while fighting, but removes it from his head while marking symbols on the terrain (*the force would fling it back anyways*).

# Gameplay

*Italicized* text is a very base description, flavor text (usually from the Architect’s point of view), or filler text.

## Controls

* Xbox One controller
  + Jump – A
  + Reload/Interact – X
  + Use Super Ability – B
  + Use Revive Ability – Y
  + Move – Left Thumbstick
  + Look Around – Right Thumbstick
  + Zoom Weapon – Click Right Thumbstick
  + Pause – Start
  + Display Weapon and Abilities Information – Back
  + Select Weapon – Directional Pad
  + Fire Weapon – Right Trigger
  + Use Selected Ability – Left Trigger
  + Scroll Abilities Left – Left Bumper
  + Scroll Abilities Right – Right Bumper
* Personal Computer
  + Jump – Space
  + Reload/Interact – R
  + Use Super Ability – F
  + Use Revive Ability – E
  + Move – WASD
  + Look Around – Move Mouse
  + Zoom Weapon – Right Click
  + Pause – Esc
  + Display Weapon and Abilities Information – ~
  + Select Weapon – 1234
  + Fire Weapon – Left Click
  + Use Selected Ability – Q
  + Scroll Abilities Left – C
  + Scroll Abilities Right - V

## Difficulty

The difficulty on of the level depends on several factors:

* The level
* Number of players
* Difficulty Settings

The more players that play together, the greater the number of enemies that will be on the map at a time as well as increasing the chance of spawning more powerful enemies. The difficulty settings will initially be a choice of easy, normal, and hard, and will affect a variety of player and enemy attributes that will make the game easier or harder just before the level begins.

Much later down the development line, the difficulty settings may be replaced with a more customizable system that allows the players to vote of what difficulty boosters are turned on or off. These difficulty boosters change a part of the game that generally makes the level harder. For instance, a booster could spawn enemies with double their max health, and another booster could have vampires spawn with maximum blood.

## Heads-Up Display

While playing the game, each player will have information displayed to them on the screen.

At the bottom center, the player’s health and ongoing effects are displayed as a bar and a horizontal list of icon timers respectively.

The bottom right corner displays what weapons the player has access to, which weapon is currently equipped, the current ammunition (if any), and the level of heat (if applicable).

The bottom right corner of the screen displays abilities that can be cycled through and activated, as well as their cooldowns or charge.

The center of the screen displays the reticle for aim assistance.

The top-right corner of the screen displays the terrain and visible enemies within a fixed radius.

The top-left corner of the screen displays the timer for the current defense phase, the number of shards the player has, and the health of the life crystal.

## Combat Overview

Players will fire guns and swing melee weapons at Undead by aiming with the mouse. Damage done will reduce the Undead’s health until it is zero, after which that particular Undead is destroyed. The Architect’s and Consecrator’s projectile weapons have unlimited reserve ammunition, but the weapons’ current magazine must be reloaded when empty. The Golemancer’s minigun and flamethrower can be fired continuously without worry of ammunition, but will overheat if fired for too long without much pause. If a weapon overheats, the Golemancer cannot perform any actions other than moving until the weapon stops burning her hands. The Golemancer’s axe deals heavy damage, and her hammer weakens foes it strikes, reducing their speed and damage*.* Both of her melee weapons cleave in a horizontal arc.

*Ammunition is unlimited since the weapons use a conversion battery that coverts the plentiful amounts of negative energy into projectile-based (combustive for flame thrower and glowing force for melee weapons) positive energy. Positive energy heals the living and harms the Undead, but weapon attacks only harm the undead (a bullet fired at an ally would heal and damage at the same time, with a net gain/loss of zero health).*

Most [abilities](#_Abilities) used by players also assists them in combat through a variety of means, often applying buffs to allies and debuffs to enemies. The Undead also has the ability to apply the same effects to themselves and players.

The Undead will try to kill the players, destroy structures and golems, and annihilate the Life Crystal with a variety of attacks dependent on the kind of Undead. Most of the Undead focus on the Life Crystal over other targets. The Undead use an aggravation system to decide which target to attack: the Life Crystal is at the top of the list, and players and preparations may rise above the Life Crystals aggravation level by being too close to the Undead or hindering them. Some of the Undead prioritize the players or preparations by default, such as Vampires and some Witches. Many of their attacks damage health like the players’ attacks, but some are abilities that hinder the players in different ways, such as reducing the player’s movement speed or accuracy. The type of Undead plays a large part in the abilities it can use to fight, as well as their weaknesses.

Health is very slowly restored to players over time. It is more efficient to avoid damage rather than receiving and healing damage, but the players constantly face situations where they’ll have to risk their health to stop the Undead. Players standing near the Life Crystal will gain health slightly faster, but it won’t be enough to out-heal damage taken during a fight. Two effects, regeneration and degeneration, restore or take away health respectively. Lastly, revival abilities can restore a significant amount of health to other players at the cost of the user’s own health.

If a player loses all of their health, they are set to a dying state during they gain a constantly draining second health bar, reduced movement, and a weak backup weapon. If the player loses all of their health while dying, they die and later respawn. Another player can bring a dying player back to their normal state by using a revival ability on them.

Movement is done using the keyboard (or joystick for consoles). The speed of movement is close to a hustle. Most Undead that aren’t aggravated towards the players move just slightly slower, but will move a little bit faster than the player when the Undead goes for them. Players can also jump roughly five to six feet high, but horizontal movement remains the same (or slightly slower?) while jumping to avoid jumping (or bunny-hopping) being a faster means of travel (unless we want that as an unlockable ability).

### Effects

Many weapons and abilities used by the players and undead bestow effects to entities in the game. Positive effects are called buffs, and negative effects are called debuffs. These effects change one or more statistics of the entity affected by them, such as health, movement speed, or damage inflicted or taken.

If an entity who has an effect gains the same effect, both with either stack in duration – additively increasing the time the effect lasts on the entity – or in intensity – additively increasing the magnitude of the effect’s consequences. For example, obtaining a speed buff while affect by another speed buff will increase the duration of your current speed buff by the duration of the second speed buff, and being afflicted by degeneration while already suffering from degeneration will cause the entity to lose health twice as fast. An entity being affect by degeneration twice at the same time means the entity has two stacks of degeneration. A third instance of degeneration applied while affect by the first two means the entity now has three stacks of degeneration. If the first two expire and the third one still exists, the entity now has one stack of degeneration. There is no limit to how many times an effect stacks.

#### List of Effects

|  |  |
| --- | --- |
| **Buff** | **Effect on Entity** |
| Empowered | Increases outgoing damage by a percentage of the original damage. Stacks in intensity. |
| Focused | Reduces the spread of projectile weapons and increases the number of foes hit by melee weapons by one per stack. Stacks in intensity. |
| Armored | Reduces incoming damage by 50%. Stacks in duration. |
| Regeneration | Restores health over time at a rate of x hitpoints per second. Stacks in intensity. |
| Speed | Increases movement speed by a percentage of the original movement speed. Stacks in duration. |
| Haste | Increases the rate of fire for projectile weapons, the rate of attack for melee weapons, and the speed of actions with an activation time. Stacks in duration. |
| **Debuff** | **Effect on Entity** |
| Weakened | Decreases outgoing damage by a percentage of the original damage, and decreases outgoing effects by a percentage of the original effect’s duration. Stacks in duration. |
| Slowed | Decreases movement speed by a percentage of the original movement speed. Stacks in duration. |
| Stunned | Decreases movement speed to zero, and prevents any action from being performed. If an action was in the process of being performed when this debuff is inflicted, the action is interrupted. Stacks in duration. |
| Dazed | Decreases movement speed by a small percentage of the original movement speed and prevents any action from being performed. If an action was in the process of being performed when this debuff is inflicted, the action is interrupted. Stacks in duration. |
| Blinded | Increases the spread of projectile weapons. Melee attacks have a high chance of missing. The screen darkens to the point of almost no visibility. Decreases movement speed by a small percentage of the original movement speed. Stacks in duration. |
| Frozen | Action speed slowed by a percentage of the original action speed, including rate of attack and performing abilities with activation times. Decreases movement speed by a percentage of the original movement speed. Stacks in duration. |
| Degeneration | Damages health over time at a rate of x health per second. Stacks in intensity. |
| Burning | Heavily damages health over time at a rate of x health per second. Increases the spread of projectile weapons. Stacks in intensity. |
| Vulnerable | Increases incoming damage by a percentage of the original damage. Stacks in intensity. |

### Weapons

Weapons are the primary way for the players to deal damage to the Undead. Ammunition is unlimited, but the weapons must either be reloaded or kept from overheating. All players start with one weapon and can unlock more by leveling up. There is no limit to the number of weapons a player can carry, but only one can be wielded at a time.

The Architect and Consecrator do not reload by swapping magazines or inserting bullets into empty chambers. Instead, they pull back a lever on the gun that opens a hole in the gun. While it is open, the gun generates ammunition at a steady rate. Ammunition generated is immediately ready for firing. The emptier the gun, the longer it takes to refill the gun to full.

When the player levels up enough times, they will automatically unlock a new weapon. Each character starts with one weapon and can unlock three more for a total of four weapons to switch between.

*The weapons use similar technology that allows the Life Crystal to convert negative energy to positive energy. For the weapons, that positive energy is used as ammunition.*

|  |  |  |
| --- | --- | --- |
| Architect Medium range and long range rifles that deal great and accurate damage. Weapons must be reloaded to continue firing. | Golemancer Short range weapons that deal high cleaving damage. Weapons do not have to be reloaded, but the Minigun and Flamethrower can overheat if fired for too long, preventing the Golemancer from performing any action other than movement until it cools down. | Consecrator Medium range handguns and a melee range dagger that deals great damage with low rate of fire, making every attack count to keep overall damage high. |
| Assault Rifle Always unlocked. It has a high rate of fire, decent accuracy, and a relatively large magazine, allowing continuous fire for roughly seven seconds at a RPM similar to modern assault rifles. | Minigun Always unlocked. It deals high damage at short ranges, but the wide spread means foes take very low damage at higher ranges. | Revolver Always unlocked. It has a rate of fire higher than the Hunting Rifle but lower than the Burst Rifle, and deals very great damage with decent accuracy. Small magazine size. |
| Burst Rifle Must be unlocked. It has a relatively lower rate of fire and magazine size than the Assault Rifle, but higher accuracy. | Flamethrower Must be unlocked. It deals high damage, its range of attack is limited to short ranges. Undead hit by the flames will start burning, dealing damage over time for a certain time. Flames cannot be blocked by shields or other means of defense. | Handcannon Must be unlocked. Functions like the revolver, but it has a rate of fire almost as slow as the Hunting Rifle, but with lower accuracy. However, it deals even more damage than the Revolver and destroys Undead who are at low health. |
| Hunting Rifle Must be unlocked. It only fires one shot at a time, has a very small magazine size, but the highest accuracy of all weapons in the game. The bullets also deal very high damage and pierce foes. | Greataxe Must be unlocked. It deals very high damage and cleaves foes in front of the player. Striking a foe who is low on health destroys the foe. | Dagger Shard Must be unlocked. This dagger deals less damage over time compared to any other weapon when visible, but deals massive damage when invisible, and even more when attacking from behind the foe. |
| TBD | Hammer Must be unlocked. It deals significantly less damage than a Greataxe (still very high damage), but can daze and weaken foes. | TBD |

### Grapple

The Undead will occasionally try to grapple the players in melee. During a grapple, the player must press the fire key at timed, irregular intervals shown quickly on the screen to move a visible, vertical red line within a horizontal bar above the grapplers to the right end of the bar. The line will periodically move to the left as the grappling Undead tries to overpower the player. If the bar moves all the way to the right, the player win the grapple, knocking the Undead away from the player and stunning the Undead. If the Undead wins, it kills the player. While grappling, the player nor the undead can do anything else, including movement.

Most grapples are easily won, but up to four Undead can grapple a player at a time. If that happens, it’s usually impossible to win. In contrast, allies can kill or interrupt the Undead to break the player free. It is harder to win a grapple if the player is grappled from behind.

## Attribute Point System

New players start the game at level one. When a player completes a level (all dark zones converted to light zones) whose ordered position is equal to or higher than the player’s level, the player levels up by one. For example, if a level 3 player beats level 3, they level up to 4. If the level 4 player beats level 6, they level up to 5. Each level gives the player an attribute point to spend on attribute lines. Up to fifteen attribute points can be acquired.

The player can reallocate all points before the start of the level. Players will be visually notified of unspent attribute points during point allocation.

There are three attribute lines to spend points in: Weaponry, Engineering, and Spirit. Every point in one of the three attribute lines slightly improves core action and abilities based on it. Weaponry improves the use of weapons, increasing damage and another weapon stat as well as abilities related to Weaponry. Engineering improves preparations, improving numerical stats such as turret damage and symbol radius as well as abilities related to Engineering. Spirit improves abilities inherent to the character that are not directly tied to weapons or preparations. Improving Spirit depends entirely on the character, improving a core passive ability tied to that attribute line: The Architect’s Spotter ability, the Golemancer’s Toughness ability, and the Consecrator’s Fading Light. Other abilities related to Spirit are also improved, but the aforementioned abilities are improved much more.

Each point spent in any of the three lines also gives the player abilities. These can be new weapon modifications that perform better in specific situations, new preparations to support allies and stop enemies in new ways, and powerful abilities that reflect the skills of the character. Every point expect the third, sixth, and ninth in a single line unlocks a passive ability that improves base abilities that the character started with or an action related to the attribute. Every three points unlock an active ability slot with three different choices. These choices can be changed during point allocation before starting a level.

Weaponry, Engineering, and Spirit are general names that change based on the character played. The Architect has Marksman, Structures, and Perception. The Golemancer has Heavy Weapons, Golems, and Will. The Consecrator has Dexterous Arms, Symbols, and Energy Manipulation.

|  |  |  |
| --- | --- | --- |
| Architect Attributes | Golemancer Attributes | Consecrator Attributes |
| Marksman Each point slightly improves weapon damage and accuracy. | Heavy Weapons Each point slightly improves weapon damage and their secondary effects. | Dexterous Arms Each point slightly improves weapon damage and reload speed. The dagger can strike more rapidly. |
| Structures Each point slightly improves structures’ health and either damage or another stat. | Golems Each point slightly improves golems’ health, damage, and movement speed. | Symbols Each point slightly improves symbols’ base effects and radius of effect. |
| Perception Each point slightly improves [Spotter](#_Spotter_–_Passive), increasing the radius of its effect. | Will Each point slightly improves [Tough](#_Tough_–_Passive)ness, improving her damage and control resistances. | Energy Manipulation Each point slightly improves [Fading Light](#_Fading_Light_–), reducing the time it takes to become invisibility and allowing the character to stay invisible while within sight of the Undead longer. |

## Win and Lose Conditions

A level can be broken down into territories called Light and Dark Zones and periods of time called the Preparation and Defense Phases.

At the start of a typical level, each player appears next to the large Life Crystal that they must defend. There are two Phases that cycle back and forth: Preparation and Defense. During Preparation, the players prepare for onslaught by spending Shards on their preparation abilities. During Defense, the players achieve one of three win conditions that results in either entering the next preparation round or finishing the level, all while avoiding the lose condition of having their Life Crystal destroyed by the Undead. Players do not lose by being killed, but player death is detrimental to winning.

The win conditions are destroying all Undead, stalling the Undead long enough to run the timer out, or taking territorial control of the Dark Zones.

In the case of multiple Life Crystals, the win conditions are adjusted. If one is destroyed yet at least one remains, the timer increases. Levels with multiple Life Crystals are usually won by stalling out the timer. Losing all but one Life Crystal means the first two win conditions will take a similar amount of time to complete. The third win condition will always be the fastest if done without error.

## Phases

### Preparation

During the Preparation Phase, the players spend their separate Shards on preparation abilities and repairs to existing preparations (*Idea: players must spend shards to renew existing preparations for the next round at a cost near the original needed to create them*). Nearly all preparation abilities are great defensive tools, no matter what character is used, but there is a limit to how many preparations each player can have active at a time. This limitation is always displayed during Preparation.

Although Preparation automatically ends after a set time, the players can end it sooner by pressing the ready button. All players must press the ready button to end the Preparation Phase early. (Idea: Preparation Phase timer is less for each consecutive round) Once this Phase ends, players cannot use their shards and the Defense Phase begins.

### Defense

During Defense, the players must protect the Life Crystal by keeping the Undead from destroying it, or they lose the level. To complete Defense, the players can destroy all of the Undead in the current Defense Phase, time it out and have the Life Crystal wipe out the remaining Undead, or take total control of all active Dark Zones.

Destroying all of the Undead will be the most common course of player action. The players can destroy the Undead by attacking them with guns and melee weapons alongside their built preparations and abilities. Players that focus on impenetrable defense (turtling behind preparations) will often win by stalling, although most the Undead will die from the defenses in the process and thus this method may roughly take the same time as the first win condition, but is still the longest. The last win condition comes from a heavy offense by taking initial control of the active Dark Zones and managing a wide defense by holding those Zones for a lengthy period of time *and* keeping the Life Crystal safe. Due to the relatively higher difficulty of the third win condition, the time it takes to trigger the win condition after taking control all Dark Zones should be significantly less than the previous two win conditions unless the players lose and restart the Phase.

Once a win condition is met, the Defense Phase ends, current Undead are destroyed, and the active Dark Zones become Light Zones. All players are fully healed. Either new Dark Zones appear and the Preparation Phase begins, or the entire level is complete. All Shards that haven’t despawned will still be there until their timers despawn them normally.

However, if the Life Crystal is destroyed during the Defense Phase, all players are immediately killed as the Light Zones fade into Dark Zones. By vote, the players can restart from the beginning of the Defense Phase, the beginning of the Preparation Phase, or the beginning of the first Preparation Phase (start of level).

## Light and Dark Zones

Dark Zones are territories controlled by the Undead. The Undead spawn from the Dark Zones and move into the Light Zones where the players, Life Crystal, and Shards reside. The Dark Zones that border the Light Zones are active Dark Zones and are the only Dark Zones the players can move into and capture. Other Dark Zones are inactive, pitch black, and drain the players’ health rapidly. When a Defense Phase is complete, active Dark Zones become Light Zones and the bordering, inactive Dark Zones become active Dark Zones. When all Dark Zones on the level become Light Zones, the entire level is complete.

## Shards

At the very beginning of a level, the players start with their own stockpile of Shards that is kept tracked of on their screen. The starting amount is enough to build merely a few preparations. Shards in the players’ possession has no physical presence on the map, and only spawn during the Defense Phase. When they spawn, they can be collected by moving next to it and interacting with it (*or simply walking over it*). Collected shards are copied to every players’ stockpile to prevent unhealthy competition. Shards on the map disappear after a set time and are necessary to keep up preparations, so balancing the time spent collecting shard and killing Undead is important. More shards tend to appear near Dark Zones, so staying near the Life Crystal all the time and missing too many Shards will make later Defense Phases harder to beat.

*Shards stem from the Life Crystal as it grows through the earth. Since the Life Crystal is removing negative energy, shards tend to bunch up near Dark Zones. The glowing shards that are visible above ground are already full of positive energy, so removing them does not make any difference to the rate at which the Life Crystal clears out the zones.*

## Abilities

Players have three types of abilities: Passives, Actives, and Preparations. Players start with only a few abilities, but can unlock new abilities or improve current ones with the Attribute Points System. All abilities also belong to one of the three attribute lines. Passives function automatically either all the time or under certain conditions. Actives are activated manually by the player, and have either a cooldown period during which the player cannot use it, or a charge that must be filled before the ability can be executed.

Preparations are abilities that cost Shards to use, can only be used in the Preparation Phase, and are used to create character-unique defenses. There is a limit to the number of preparations each player can build. (*Preparations that survive a Defense Phase need more shards to keep for the next Defense Phase, or it will disappear.)*

### Preparations-by-Character Overview

The Architect’s structures are immobile, but are harder to destroy than golems and are better at area-of-denial. Although walls and turrets aren’t as versatile in their effects compared to golems and symbols, nearly all Undead cannot pass through them unless they’re destroyed. Structures with unique attributes such as a healing safe-haven can be built at the tradeoff of being easier to take down and using more shards.

The Golemancer’s golems are mobile and versatile, but easier to destroy than structures (but aren’t flimsy). Depending on the type of golem built, it can fill an offensive, controlling, and/or supportive role. Some actions include killing Undead, collecting Shards, and healing. Even though walls can completely halt enemy advancement with ease, golems are great at heavily slowing down enemy advances in multiple frontlines and are just as viable. Furthermore, the Undead cannot simply pass through golems, but instead could move around them.

The Consecrator’s symbols are immobile, but are invincible to nearly all attacks. Symbols are marked on walkable terrain and any creature can walk over them. Symbols deal negative effects to groups of enemies that enter its trigger range while simultaneously aiding allies. Some symbols create stronger effects at the price of versatility or another constraint, such as triggering only when vampires come near. Although symbols don’t usually completely halt enemy advancement, the additional effects they bring can still heavily slow them down or even completely wipe them out.

As stated before, all three characters’ preparation types are excellent in keeping the Undead away from the Life Crystal, and **players should be able to solo levels with any character if they start a level solo** since the difficulty of the level scales with the number of players that start it.

### List of Abilities by Character

|  |  |  |
| --- | --- | --- |
| Architect Abilities | Golemancer Abilities | Consecrator Abilities |
| Focused Perception – Active (Perception; Charged with Kills; Always Unlocked; Super Ability) The Architect and all allies can see all Undead through any terrain and invisibility, and gain several stacks of empowered. All Undead are revealed on the minimap. | Burst of Rage – Active (Heavy Weapons; Charged with Kills; Always Unlocked; Super Ability) The Golemancer performs a devastating attack based on the weapon used. The charge does not dissipate all at once, but simply drains over time after the initial attack. While it is draining, all attacks are improved, but the player is locked into the weapon she initiated with.  The minigun rate of fire multiplies dramatically and reduces enemy movement to a crawl. After the burst, it only continues suppressing movement. Cannot overheat until charge is gone.  The flamethrower jets a massive fireball that flies in a small arc towards her aim and detonates on collision, dealing heavy damage to enemies within the blast and burning them. After the burst, the range, arc of attack, and damage increases. Cannot overheat until charge is gone.  The greataxe allows the Golemancer to leap a significant distance to her target and strike it and adjacent enemies, destroying them instantly if they’re not bosses and destroying bosses if enough of their health was missing. Otherwise, it deals near fatal damage. After the burst, attacks with the greataxe are faster and have a chance to destroy nonbosses regardless of health.  The hammer allows the Golemancer to leap a significant distance to her target and strike it and adjacent enemies, dealing massive damage and stunning them for several seconds. After the burst, attacks with the hammer will interrupt and weaken enemies, and stun weakened enemies. | Quickened Symbol of Death’s Bane – Active (Symbol; Charged with Kills; Always Unlocked; Super Ability) Unlike other symbols, the duration of this one is finite, costs no Shards, and can only be used during the Defense Phase. The Consecrator slams his hand into the ground and creates the symbol. The symbol pulses as soon as it is created.  With each pulse, Undead on the symbol are immobilized and heavily damaged, and Undead near the symbol are heavily slowed and moderately damage. Undead that are destroyed on the symbol explode, damaging other Undead and healing allies. With each pulse, allies on the symbol are invulnerable to all damage and abilities, and allies near the symbol are invulnerable to only damage. Invulnerability lasts a time equal to the period between pulses. |
| Mark Target – Active (Marksman; Cooldown; Must be Unlocked) Marks an Undead with his next shot, causing it to glow brightly and receive several stacks of vulnerability. | Taunt – Active (Will; Cooldown; Must be Unlocked) Most nearby Undead are forced to attack the Golemancer mindlessly, preventing affected Undead from using most of their abilities during her ability’s effect. (Ideas: conical effect has a much better chance of affected Undead (100%?)). | Living Aegis – Active (Energy Manipulation; Charged over Time; Must be Unlocked) The Consecrator solidifies energy to blocks attacks in place for just under a second by using a percentage of the ability’s charge. This charge is replenished slowly over time. Additional effects may trigger if an attack is successfully blocked. |
| Life Bolt – Active (Marksman; High Cooldown; Always Unlocked) The Architect drains his own health based on how long he holds the button (this cannot drain him past one health) with a special bolt. It initially takes a significant chunk of health. Upon letting go, the player loads the bolt on a crossbow and readies aim as any other rifle. Pressing fire will fire the bolt. If it strikes an ally, they are healed in proportion to the amount of health the player sacrificed. If the ally was dying, they are revived and healed in a smaller proportion. If it strikes an Undead, it takes massive damage in proportion to the amount of health the player scarified. If it strikes the terrain, it heals allies and damages Undead in a small area of effect by a small proportion to the sacrificed health. | Life Blood – Active (Will; High Cooldown; Always Unlocked) The Golemancer can only use this ability next to a player or undead. When used on the player, the Golemancer yanks a large cord out of her side and inserts it into the other player by holding down the ability. The longer it’s held, the more health the Golemancer sacrifices from herself to heal the other player in addition to the initial chunk of health loss. The Golemancer cannot move, but the player can (the cord will lengthen or shorten based on the distance between the two) and the Golemancer’s Toughness ability is significantly improved. If used on an Undead, the Golemancer grapples the Undead. If she wins, the player holds down the button to plug the same cord into the Undead and sacrifice health. The Undead takes massive damage in proportion to the amount of health sacrificed. If the Undead is destroyed during the process, the player stops sacrificing health. If the player lets go, the Golemancer jumps off the Undead. In any case, the player cannot go past one hp. *Normally, Vampires would be into this, but the cord is lined with a substance that makes the blood dangerous to all Undead, but perfectly harmless to living creatures (if she knows what she’s doing).* | Quickened Symbol of Life Transfer – Active (Symbols; Long Cooldown; Always Unlocked) Unlike other symbols, the duration of this one is finite, costs no Shards, and can only be used during the Defense Phase. The Consecrator drains his health based on how long the ability is held. When the player lets go, the ability is contained in the Consecrator’s hand. When the player presses the fire button, the Consecrator slams his hand into the ground and is immobile until the symbol finishes, a time based on the health sacrificed.  Allies except for the Consecrator near and on the symbol are healed in proportion to the amount of health sacrificed. If there are two allies, the health healed is split between them. Undead near and on the Symbol are completely paralyzed until the healing is done. If no one is being healed, the paralysis length still depends on how long it would have taken to heal allies based on sacrificed health. |
| Spotter – Passive (Perception; Always Unlocked) The proximity that an Undead has to be in order to appear on the minimap and lose invisiblity is extended for the player and all allies, making it harder for the Undead to get close while undetected. Allies lose this benefit while the Architect is dead. | Toughness – Passive (Will; Always Unlocked) The Golemancer takes less damage from attacks and is harder to control, including grapples, control debuffs, and special abilities such as being enthralled by a Vampire. | Fading Light – Passive (Energy Manipulation; Always Unlocked) When the Undead loses line of sight of the player, the player’s life force fades after a short time, causing him to be mostly invisible to the Undead. The Undead typically cannot target invisible players. Being within line of sight of the Undead for too long while invisible or simply attacking will break invisibility. |
| Primal Fear – Passive (Perception; Always Unlocked) If an Undead is at least almost next the Architect, the character’s weapon will shake and lose accuracy, but the Architect gains pulsing speed and haste. This lasts for a short time after the Architect is no longer near an Undead. | Vital Spirit – Passive (Will; Always Unlocked) The Golemancer is so full of life that it mocks the Undead almost as much as a Life Crystal, causing the Undead to attack the player more often than other characters. This effect diminishes based on the player’s current health. | Flanking Zeal – Passive (Dexterous Arms; Always Unlocked) All attacks made by the Consecrator that strikes an Undead’s sides or back deals increased damage. |
| Wall – Preparation (Structures; Always Unlocked) The Architect builds a wall piece on a tile. The wall connects with other walls, some structures (explicitly stated in other structures’ descriptions), and impassible terrain. Players that jump on the wall’s side can press the jump button to jump directly up again, making it easy for players to climb on top of them. Most enemies cannot pass through or over the wall, and will likely try to destroy it to clear a path to the Life Crystal. Walls can support a turret on top of it.  *Alternate Idea: Instead of building a single pillar of a wall at a time, the Architect builds a starting node and an ending node. The ending node must be within a set distance from the starting node and within the starting node’s line of sight. Once the ending node is placed, a wall is formed between the nodes.* | Sentry – Preparation (Golems; Always Unlocked) The Golemancer builds a golem that patrols a selected area and fights with ranged and cleaving melee attacks based on the distance of the Undead to it. Enemies cannot move through golems and are knocked away from the Life Crystal if struck in melee. If the golem survives to the next Preparation Phase, the player can change its patrol area. | Exposed Prowess – Passive (Dexterous Arms; Always Unlocked) Undead that see the Consecrator prevents him from using Flanking Zeal on them. However, if the player attacks these Undead, they inflict vulnerability on them. |
| Turret – Preparation (Structures; Always Unlocked) The Architect builds a turret on a tile. It can also be placed on top of a structure that can support it (the turret will share the structure’s health). The turret will lock on the closest Undead within line of sight and area of attack and fire upon it until the target or the turret is destroyed, or the target leaves line of sight or area of attack. Turrets have unlimited ammunition and deal significant damage. A Turret’s overall damage-over-time is less than a player’s, but a few turrets will surpass that. | Miner – Preparation (Golems; Must be Unlocked) The Golemancer build a golem that does not attack, but instead moves relatively faster around a given region of the map to gather shards. Collected shards are copied to all players as normal. The Golemancer can restrict where the Miner can move on the map during the Preparation Phase. | Symbol of Positive Energy – Preparation (Symbols; Always Unlocked) Consecrates the selected terrain. When triggered by Undead proximity, it pulses until no Undead are within proximity. With each pulse, Undead on the symbol are damaged and slowed, and Undead near the symbol are slowed. With each pulse, allies on the symbol gain several stacks of regeneration, and allies near the symbol gain less stacks of regeneration. |
| Tower – Preparation (Structures; Must be Unlocked) The Architect builds a tower on a tile. They’re only slightly taller than walls. Walls can connect to towers, but towers cannot connect to towers. They are hollow and can be entered by passing through a door of positive energy that enemies cannot cross. The tower reveals Undead up to a certain distance, allowing players to see them through invisibility and on the minimap. Additionally, players inside the tower gain regeneration. Players can climb internal stairs up to the roof. The tower has significantly less health than a wall, and players will die if they’re inside while the tower collapses (delayed time?). Players will be notified of a tower’s health at all times while near or inside it. Towers cannot support a turret. Towers are very expensive to build. |  | Symbol of Blood – Preparation (Symbols; Must be Unlocked) Consecrates the selected terrain. When triggered by Vampires, it pulsed until no Vampires are within proximity. With each pulse, Vampires on the symbol are immobilized and drained of sucked blood, and Vampires near the symbol are slowed and try to flee. With each pulse, allies on the symbol steal the Vampire’s lost blood as power – gaining stacks of empowered – and cannot be targeted by Vampires’ attacks, and allies near the symbol cannot be targeted by Vampires’ attacks. |

### General Abilities

These abilities can be used by any character, but some abilities may change in functionality based on the character using it.

#### Diehard – Passive (Spirit; Must be Unlocked)

When a player reaches zero health, one of three effect will occur in place of dying for **only a couple seconds** (5-7?) before they begin dying:

* Architect – The Architect falls to the ground and can only move by crawling slowly. He can remain still and hold his fire to improve the aim and damage of his shots for the rest of his Diehard time, or shoot immediately at reduced accuracy. If firing at an enemy standing right before him, he’ll automatically kick them to push the enemy away. If the Architect is struck once, Diehard immediately ends.
* Golemancer – Continues to play normally, and is immune to damage and control effects – including being grappled, but movement and accuracy deteriorate over time. Damage done is greatly increased.
* Consecrator – Invisible unless he attacks, after which he is permanently visible. His next attacks turn a number of Undead of a set number equal to their total max health (prevents bosses from turning). Turning works by converted damage done into turning damage. When turning damage taken by enemies equals their max health, they are turned and attack other Undead for a brief time, even after Diehard ends. Movement and accuracy deteriorate over time at a rate faster than the Golemancer. If the Consecrator is struck once, Diehard immediately ends.

## Death

A character begins dying when the player health reaches zero. While dying, the character falls to the ground, cannot move, and can only fight by firing weak pulses of medium-ranged energy from their arm-brace. The character gains a secondary health bar that overlaps their original health bar and quickly drains to zero (ten seconds on its own, and minus one second when struck?). If it reaches zero, the player dies. Other allies can revive the dying player by using their revive abilities. If the player is killed, they cannot be revived by other players and will respawn at the Life Crystal after their death timer finishes or when the Defense Phase ends (fifteen seconds + extra time per death?). The player also loses some shards. If the player is revived before being killed, they stand up and can play normally.

*Idea: lose x or x% shards upon death.*

[Banshees](#_Banshee) will alert other players that an ally’s health is critically low or is dying.

*Idea: When a player is dies, their HUD (goggles) shuts down like an old television set, after which the camera moves to spectator mode overlooking another player, the life crystal, or a structure.*

## Entities

Detailed descriptions all the non-player entities in the game world.

### Corporeal Undead

Humans who have died either from the event or in the past that have returned from the dead to destroy all remaining life.

*Common traits of the Undead with a body.*

#### Revenant

Revenants are common Undead. They attack in melee with their hands or weapon, or at range with arrows or guns. Their health and damage is fairly low, but they are very numerous. Occasionally, Revenants will try to grapple the players.

*The general bad guy. Kind of slow but pretty tough. They are usually not a problem. Just don’t get mobbed by them. Technically, all of these silly Undead are Revenants, but these guys are so plain that no other label fits them.*

#### Zombie

Zombies are Undead that have been reanimated and placed under control of another creature. They’re about as powerful as Revenants (not very), but will cooperate as a unit. For instance, they may all try to grapple the same target.

Zombies visually differ from revenants by the distinct glow in their eyes or eye sockets. Zombies under the control of an enemy will all share the same glow color, and will differ from another group of Zombies under the control of a different enemy. The master of the Zombies is enveloped in a shining aura of the same color as its Zombies’ eyes.

*There is actually a difference between a Revenant and a Zombie. Revenants return from the dead with the intent to haunt or harm the living. Zombies are brought back from the dead from some outside force and are usually forced to do that force’s bidding. Usually witches. It’s important to note this distinction because Zombies are under a command of an intelligent force, and will be harder to predict as a result. Destroy that command and the Zombies will just mindlessly go for the Life Crystal or us, whichever is closer.*

#### Draugr

Draugar are Undead with powerful abilities. They have significantly more health and damage than Revenants, which is visually expressed from their metal armor and weapons.

If their health falls to zero and they were not shot in the head or attacked with a melee weapon, they’ll fall to their knees, and later stand up again with some of their health restored if not dealt with by using the aforementioned attacks.

Draugar possess one of several abilities that makes them more even dangerous than Revenants, made apparent by the color of their armor:

##### Wisp Form

Allows the Draugr to turn into a wisp after concentrating for a time, allowing it to pass through impassible terrain and the Architect’s walls. Used by blue-tinted Draugar.

##### Curse-Bearer

When the Draugr’s health falls to zero but is not destroyed, it will destroy itself after channeling a loud curse on the nearest player. Red magic circles will appear around the Draugr and the target player until the curse is complete or the Draugr is destroyed. If the curse is completed, it will inflict multiple debuffs upon the player for a significant period of time. Used by red-tinted Draugar.

##### Plague-Bearer

If the Draugr strikes a player, that player will become afflicted by one or more debuffs. Used by green-tinted Draugar.

*This is what we get for living in Northern Europe. Even tougher than regular Undead, and they’re also intelligent. They usually have one or more strange abilities like phasing through terrain, shapeshifting, or uttering a final curse on us before they’re destroyed!*

#### Vampire

Vampires are Undead that will usually stalk and attack the players over other Undead objectives (*Idea: Invisibility)*. If a Vampire initiated a grapple on a player, the Vampire drains the player’s health as it sucks their blood through the player’s neck or guts (*yes, they can bite your guts for blood*). Sucked blood increases the Vampire’s movement speed, health, maximum health, damage, grapple power, and may unlock additional abilities. Without blood, they’re dealt as easily as a weaker Draugr with lesser abilities. Vampires use hit-and-run tactics to sneak up on the players with murderous intent, and flee if the player survives the attack.

Vampires don’t look as rotted as most of the Undead. They are very pale without blood and become ruddier as they gain more blood. Their hair (if any), nails, and teeth are noticeably long.

*They tend to go for us rather than the Life Crystal. They’re much like Draugr such that they have strange abilities, but they’re usually initially weak and need to feed on life force. Fortunately they cannot feed on our structures that is power by life force, except the Life Crystal. Unfortunately our blood is a good source of life force, vitamins, and minerals. Not usually a problem, but they can be very cunning. I would also like to note that most of these monsters aren’t charismatic and pale. They’re ugly, ruddy when full and as blackened as any other Undead when empty, and all of their teeth, nails, and hair are just simply very long. A few fit your Dracula, but I’m still trying to figure out if I was simply enthralled during that time.*

#### Ghoul

Ghouls are Undead that are about as strong as a Vampire without blood or cunning. They will scavenge and devour the bodies of destroyed Undead and dead players to gain bonuses similar to Vampires that suck blood as well as their own unique abilities such as expelling acidic bile. If a ghoul eats a dead player, they gain even more bonuses as if they had consumed a large number of defeated Undead.

They look very animalistic compared to other Undead, and always have bloody, dirty mouths and limbs to reflect their eating habits.

*It eats other bodies, destroyed Undead and bunnies alike, to gain power. Like Vampires, they’re usually initially weak, but they’re VERY hungry. It’s always disgusting fighting the Undead, but Ghouls are on a different level.*

#### Jiangshi

Jiangshi are Revenants that hobble with stiff limbs. However, they can jump very high. If a player is jumping, a Jiangshi may try to intercept them mid-air and grapple them. They also have higher resistance to damage.

*Revenants that suffer from Rigor Mortis and pearl-white hair. They’re weird and more research (ideas) must be done. Jumping over obstacles towards the life crystal. Intercepting players in mid-air.*

### Incorporeal Undead

The spirits of dead humans that have returned from the dead to also destroy all remaining life. Most attacks have a good chance of passing through them without effect.

*Common traits of the Undead without a body.*

#### Ghost

*A rare sight. Ghosts are incorporeal, so you would think that they can’t do diddly squat. Wrong. Apparently they can harm the living, but the living normally can’t harm it. Good thing we don’t use regular bullets, but it always seems like half of my shots simply passes through them. Some Ghosts aren’t on the same side as most of the Undead and actually help us, if only for a brief moment. I guess that means some humans can be saved after all. This needs more research (read: ideas).*

#### Wraith

*A rarer sight, thank goodness. Something corrupted these once living men and women to something horrible. Its touch is extremely fatal, and worst of all, it can turn us into it! I wish I could keep the cool cloaks they seem to wear.*

*Ideas: If a wraith kills a player, another wraith spawns at that location. If changed with a difficulty option, that player cannot respawn until the spawned wraith is destroyed.*

### Bosses

Creatures that are harder to deal with than their normal variants. Usually followed by standard Undead. Banshees will warn the players when a boss is about to spawn from the Dark Zone.

#### Lich

*Idea: Hidden servant (Zombie or Witch?) reconstructs their slain Lich with a phylactery it possesses unless it is also destroyed.*

*Idea: Possesses either a wide array of debilitating spells of a different theme compared to the witch, or less spells but with a large army of Zombies at its disposal and the ability to reanimate destroyed Undead as new Zombies.*

*We had very few Liches before this catastrophe, but they like negative energy so this is pretty much heaven for them. They retained the intellect they had in life, and they’re all bloody evil mages! They cannot be permanently destroyed, and may return soon. This needs more research (ideas).*

#### Named Draugr Boss

Leads a force of Draugr soldiers with siege. Siege deals substantial damage to structures and golems, and massive damage to players. Siege equipment do not trigger symbols. Draugr soldiers are armored and armed a mix of swords and bows, whereas the boss wields a massive blade and is a large Undead compared to others.

#### Named Vampire Boss

Leads a force of vampire underlings. Can perform a spell that immobilizes a player and drains their blood from range, although it takes a while to finish casting and can be interrupted with control effects, or breaking line of sight.

### Other Creatures

Some creatures aren’t Undead.

#### Banshee

Banshees do not attack the players and cannot be harmed. When encountered for the first time, a notification will tell the players that it is neutral, cannot be attacked, and why it appeared.

Banshees appear some determined time before an Undead boss enters the map, emitting a short and loud wail to warn the players, but not so much that it completely distracts them. The Banshee will spawn high above the area the mini-boss will come from, making itself visible enough to anyone on the level.

Additionally, Banshees will appear high above a player and *sing* a grave tune when that player is dying and shortly after death as a warning to other players.

*In human cultures, banshees are fairies that wailed before or right after a person’s death. If the person was exceptionally great, multiple banshees would wail. Some banshees may even wail because of their own death in the past. In some other cultures, including today’s, banshees are incorporeal undead whose wail can kill.*

#### Witches

Witches are powerful, evil humans that can cast spells and rituals that may hinder players and bolster the Undead. Spells are cast after a small period of time, and rituals are performed over a longer period of time. They aren’t Undead, but their witchcraft makes them immune to negative energy and vulnerable to positive energy like the Undead. Witches only have a small selection of random spells, rituals, and one familiar from a pool of available abilities and familiars.

*They’re LIVING humans that bolster the Undead and cast horrible spells in our direction!*

##### Withering Plague – Spell

Targeted player is weakened and has a harder time winning grapples.

##### Menacing Tentacles – Spell

Targeted area erupts, sprouting massive, rotting tentacles that grapple nearby players.

##### Wells– Ritual Type

Red magic circles appear around the Witch and a dead player’s body while the ritual is being performed. If the ritual completes, the dead player’s body is destroyed (not pretty), leaving behind a massive magical well (not a literal well, but similar to symbols) that inflicts a constant effect for all players and Undead within its radius. It disappears after a time. A Witch may even take its own life to create a Well at its location.

###### Well of Darkness - Well

Players are slowed and blinded while in the well. The HUD gets really scary and uninformative. **Really** scary.

*Might be uncomfortable if using the Oculus Rift, but that needs testing.*

###### Well of Negative Energy – Well

Players take damage and are more vulnerable to damage while in the well. Undead gain regeneration while in the well.

##### Impundulu – Familiar

When the Witch is threatened, this familiar may come to its aid. This Vampire is a red bird that flies near the ground. In addition to regular Vampire traits and tactics, it can slow movement and disorient aim with a thunderous cry and call down a delayed lightning bolt that stuns and deals massive damage. It is weak to fire-based damage.

##### Curse Device – Ritual

Targeted structure, golem, or symbol is destroyed. During the ritual, red magic circles appear around the target and the Witch.

##### Rift – Ritual

The Witch opens a purplish rift of darkness and tentacles, swarming the level with a single type of Undead. These Undead do **not** count to the maximum number of Undead a single Defense Phase can summon. In other words, killing these Undead will not count towards the “Kill All Undead” win condition. The Witch must concentrate to keep the rift open, so damage or control effects can interrupt it, such as the Golemancer grappling with the Life Blood ability. During the ritual, red magic circles appear around the targeted terrain and the Witch and a Banshee will sing until the ritual and rift is stopped (*ignoring rifts for too long is extremely dangerous*).

# Menu Layout

## Color Scheme

Needs information.

## Game Title Screen

Needs information.

## Legal Info

Needs information.

## Menu Screen

Needs information.

## Tutorial / Instructions Screen

Needs information. *The beginning of the first level will gradually introduce game mechanics to teach the player intuitively. For instance, players start with no attribute points, one weapon, and few abilities with some being passive.*

## Credits Screen

Needs information.

## Game Win Screen

Needs information.

## Game Over Screen

Needs information.

## Level Select Screen

Needs information. *In multiplayer, the group leader can select the highest unlocked level of any one person.*

# Game Layout

## Camera Setup

Needs information.

## Game Controls

Needs information.

## Game Modes

### Campaign

Progress normally through by achieving the win conditions until all Dark Zones are gone. Then progress to the level next. Elaborated more in [Gameplay](#_Gameplay).

### Conquest

Destroy the Undead’s Death Crystal while defending your Life Crystal. The level is split into even Light and Dark Zones with no inactive Dark Zones. During the Preparation Phase, the Undead can also build within their Dark Zones. During the timed Conquer Phase (similar to Defense Phase), the players try to claim Dark Zones while the Undead try to take Light Zones in the same manner. Only Zones that border enemy Zones can be taken. If the timer runs out before all Zones (including the Crystal) are taken or lost, the Undead retreat and the players are teleported to their respective Crystals, and the Preparation Phase begins again.

### Onslaught

The goal is to defend as long as possible. The furthest Dark Zones can never be taken, and inactive Dark Zones immediately become active when a Light Zone borders it. Players start with a large amount of Shards. There is only one Preparation Phase. Once the Defense phase begins, it never ends until the players lose or quit the game. The Undead become more difficult to keep at bay as time progresses.

## Player Count

One, two, or three players can play at the same time.

## Gameplay Hours

Needs gameplay testing.