



Spellforged Survival

DESIGN DOCUMENT

Made for the 2024 Pirate Software Game Jam by:

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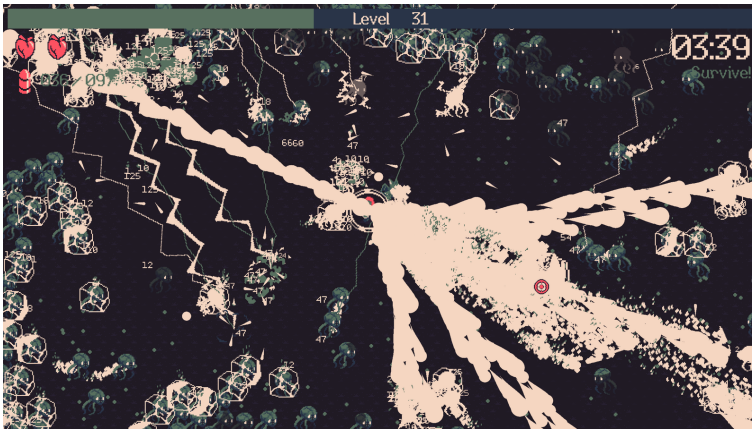
Introduction	3
Game Summary Pitch	3
Inspiration	3
Player Experience	3
Platform	4
Development Software	4
Genre	4
Target Audience	4
Concept	4
Gameplay overview	4
Theme Interpretation (Shadows + Alchemy)	4
Primary Mechanics	5
Secondary Mechanics/Optional to implement	5
Spell System	7
Art	8
Theme Interpretation	8
Design	8
Audio	8
Music	8
Sound Effects	8
Game Experience	9
UI	9
Controls	9
The Future	9
Inventory	9
More Wands/Equipment	10
Aesthetics	10

Introduction

Game Summary Pitch

Spellforged Survival is a wave-based survival game like vampire survivors however instead of gaining lots of different attacks you have 1 attack that you can upgrade in many differ

Inspiration



Vampire Survivors + 20 Minutes till Dawn

Vampire Survivors and 20 minutes till dawn are major inspirations for the **wave based mechanics** and **level up system**, slaying waves of enemies to get exp to level up your character to fight off tougher waves of enemies.

Noita

Noita is the inspiration for the **spell building system**, combining spells and spell modifiers to create crazy outcomes.



Player Experience

The player has to fight swarms of enemies that increase in difficulty. As the game progresses, the player will have to make decisions **on what gems to**

keep, and to choose what order these gems would be in. **Every death is a learning experience.**

Platform

The game is developed to be playable on the web.

Development Software

- Bevy 0.14
- Aseprite for graphics and UI
- FLStudio

Genre

Singleplayer, survival, roguelike

Target Audience

This game will target more **hardcore players** who enjoy perma-death and survival mechanics.

Concept

Gameplay overview

The player fights endless hordes of enemies, while leveling up their wand with gems, or leveling up their player with stackable effects. As the game progresses, the Enemies become more difficult to defeat.

Theme Interpretation (Shadows + Alchemy)

'Shadows' interpretation - The player has to fight against hundreds of shadowy figures.

'Alchemy' interpretation - The player has to combine gems on your wand to enhance its power.

Primary Mechanics

Mechanic
<u>Movement</u> Top Down movement in all directions.
<u>Shoot spell from wand</u> See #Spell System
<u>Leveling up</u> A choice of X wand components will appear which the player can attach to their wand (or get rid of) to upgrade their spell with new effect
<u>Wand Components</u> Place components in wand to combined effects
<u>Kill enemies</u> Killing enemies gives exp

Secondary Mechanics/Optional to implement

Mechanic
<u>Sacrifices + Upgrading</u> Destroy gem to make shards to buy upgrades for other gems

Mechanic
<u>Inventory/Buffer</u> A place to put gems that are not in use.
<u>Player Upgrades</u> Buffs to the player - Add wand slots - Increase exp pickup range

Spell System

The Spell System for UNNAMED WIZARD GAME is similar to noita. Your wand stores a sequence of spells, when you fire, it executes each spell in order with a slight delay between each execution.

Some spells are “Meta” spells, they don't cast a spell themselves, instead manipulating the following non-meta spell.

E.g. +x Damage, +x Radius,

Some meta spells group different spells together. E.g. The next 2 spell are cast together, or When the next spells' projectile ends, execute the following spell effect.

Say you had the following spell effects:

- 1 - When the spell core finishes, it casts the next spell core
- 2 - Zap Core (simple projectile)
- 3 - Immediately cast the next two spell effects at the same time
- 4 - Explosion Core (Aoe at target)
- 5 - Zap Core

When you fire the spell, it will fire a zap out. When the zap projectile expires, it will immediately fire the next spell. In this case it's 2 spells that are grouped together.

So your wand only fires 1 “spell” per cast, but that spell explodes into more things.

You could group it as follow 1(2,3(4,5))

Art

Theme Interpretation

To keep the theme of Shadow + Alchemy, we decided to have the enemies all undead. We made sure that all the enemies were a purplish color to make sure that they stood out from the background.

Design

We are going to keep the art simplistic, but colorful. Making sure that the enemies and the character pop out of the background in order for the player to not be too overwhelmed by the swarms of enemies.

For the colour palette we used Chasm by [dysphoriaa](https://lospec.com/palette-list/chasm) on lospec.com.

<https://lospec.com/palette-list/chasm>.

This palette had a nice range of bright colours for the spell fx and 2 darker colour ramps, which we used one for the player and 1 for the enemies and environment.

Audio

Music

Music will be chiptune-like to match the style of the game and the art. The music will be hype and fast, to fit the theme of a fast-paced roguelite

Sound Effects

Most sound effects are done by foley, then bitcrushing them to make them all fit with the chiptune music.

Game Experience

UI

UI will be used to indicate both what level the player is and how much more experience is needed in order to level up. When the player levels up, the game will pause. The player will then have a choice between (2? 3?) gems, and each one will have descriptions of what it does. The wand is the inventory for the gems.

Controls

Keyboard

Arrow keys / WASD to MOVE

Mouse

Cursor to aim, Left Mouse to shoot

The Future

As the game jam concludes, we wanted to include a section of what we were to do if we continued development on the game. There were a lot of things that we were talking about that had to get cut either due to time or due to technical gaps in our knowledge. Some of these things include:

Inventory

I (Kain) wish that I could have a good inventory system. Unfortunately due to gaps in my knowledge with using the Bevy UI system, I felt there was no way I could do it in the allotted time. With infinite time however, I think I could do it. Having an Inventory would give the player more control for wand management.

More Wands/Equipment

I (Ryn) wish we could have added more wands or equipment, allowing you to attach each spell upgrade to different items that trigger in different ways.

E.g. a wand for left and a wand for right click that trigger their spells “on use” or a sword that triggers its spell “on-hit” or stuff like armor/accessories that trigger on-tick or on-receive-damage, etc..

Could expand it out into a more rpg-like roguelike, with interesting procedurally generated maps and loot.

Aesthetics

There was a lot I (Ryn) wanted to get done aesthetically for the game but wasn't able to in time. I made a cutout-style lighting shader but could not get it working on the web, so had to leave it out of the final release. I also wanted to do much more with the spell fx instead of the basic particle system we have now.

Another lighting system with Normal maps and sprite shadows would have also been great to really sell the darkness/shadow atmosphere of the game for extra theme interpretation but unfortunately due to both time and ability constraints, wasn't able to get that done either.