Crystal Caverns Design Document

# Overview:

Crystal Caverns will be a turn-based rogue-lite RPG with a focus on crafting your own cards(gems) and upgrading them to create interesting synergistic effects and using these gems out of combat to traverse the environment and avoid large groups of enemies. The world will be built on a diamond shaped grid

# Gems & Combat:

Gems will be a main concept in the game, they will be usable during the turn-based combat and also out of combat to traverse the terrain. During combat the player will select the gem and the target they want to use it on. Gems can heal, damage, de-buff and create all sorts of effects. They will have rarity, colour groups, level and cost. Some gems may also have a cooldown (TBD)

Colour groups will be used to determine what family the gem belongs to. Common gems will be named the colour group name and will be the main flavour of that gem.

For example, a Pink Gem would be part of the pink colour family and could heal the target for X health.

(This means the pink gem family has the flavour of restoring health)

Then a (uncommon?) Lilac Gem would be part of the pink colour family and could apply regeneration X to a target for X turns.

Colour families will be:

Black, Gray, White, Red, Orange, Yellow, Green, Blue, Purple, Pink, Brown

The gem rarity tiers would be Common -> Uncommon -> Rare -> Epic -> Legendary

Naturally, every tier up would be less common and the player would only be able to equip one legendary gem at a time (TBD)

The rarer a gem is, the more it leans into the family’s effects. uncommon or common gems should be usable and effective to an extent even if there are no other gems of that family in the player’s deck. E.g. deal x damage and apply x poison could be an uncommon gem

Rare or legendary gems can be entirely effective based on if the gem’s status is applied or other gem terms e.g.: trigger a target’s poison could be a rare green gem

The player can have a maximum of 8(?) gems equipped and must have at least 5 equipped at any given time. The player can swap gems out in their inventory when out of combat.

The player starts the game with 3 light grey gems which deal flat damage and 2 random common gems.

At the start of combat, each gem will shuffle 3 copies of itself into the draw pile. Each turn the player will draw 4 gems and has gains 3 energy for playing gems. Gems can cost 1, 2, 3, 4, 5 or X energy. Energy is conserved between turns up to a maximum of 10 energy

Gems can have energy-cheat effects and draw effects.

When a gem is played, it will be put in the discard pile unless it’s single-use which then it will be put in the exile pile.

At the end of the player’s turn, all gems in hand are also put in the discard pile unless otherwise stated.

When the draw pile is empty, the discard pile is shuffled into the draw pile.

When the player’s turn is over, the enemies will take their turn.

There will be mini-bosses and bosses with unique and challenging effects that would be too powerful on basic encounters.

There can be up to 3 enemies in an encounter.

# Items:

Items will be rare rewards for defeating mini-bosses and bosses or found rarely around the caverns.

Items will follow the same rarity tiers as gems (1)

Items will have synergistic effects with specific gem colour families and also have universal effects.

An example could be:

Your regeneration effects trigger twice

Or:

You gain +1 energy each turn but draw one less gem.

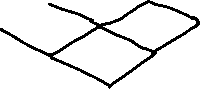
The player can have as many items as they find equipped. The player cannot unequip items but can sell them (TBD) or re-roll them to one of the same rarity at specific stations

# Out of Combat:

When the player is out of combat, they move around the grid by clicking on the space they want to go to, or moving with the arrow keys. The player cannot move over gaps unless they are flying (TBD)



The grid will be diamond shaped as shown below



Every time the player moves across a square, enemies on the floor also move. If they have detected the player, they move towards the player, otherwise they move to a random adjacent diamond (TBD)

They player can use the gems’ out of combat effects (if they have them) an example could be:

Create a stone wall at the chosen location within 5 spaces.

Or:

Teleport to a chosen location within 5 spaces.

Or:

Become invisible for 5 turns. (A turn would be moving a square or using a gem)

When using a gem, the enemies will move equal to the out of combat ability’s cost.

When an enemy moves to the same space as the player, combat triggers. If any other enemies are within range when this happens. They will be called to join combat. Enemies could be in groups already e.g. a swarm of rats which will take up one grid space and move together. (TBD)

If there are more than 3 total enemies, they will be queued and will join combat when there is space.

This gives some strategy when using the gems out of combat in order to try and pick off enemies instead of just running in.

# Stations:

Across the out of combat terrain there will be stations which the player can interact with.

This could be:

* recycling a gem into one of the same rarity
* restoring health
* levelling up gems
* combining gems in different ways
  + Gem fusion -> Combine two gems into one that combines both their effects
  + Gem tinting -> Combine two gems to give a gem an additional colour family
  + Gem recrystallization -> Combine two gems to keep one’s combat text and one’s out of combat text

-This would give more synergy options with items or other gems

* Obtaining a gem from a choice

# Out of Combat World:

The place the player starts the game in will be a constant area separate from cavern runs.

There will be places to spend the permanent currency and ways to upgrade your character with this currency while not in a cavern run.

Examples of an upgrade would be:

* You start the game with +10 maximum health
* You start the game with 3 common gems instead of 2
* Your rare gems shuffle an extra copy into your draw pile
* Choose from one more option when discovering a gem

The cavern will be a series of small, randomly generated from set restraints rooms with enemies, stations and secrets in them. After defeating all the enemies in the room, the doorways to the next room will open, the doorway will show an indication of what type of room the player is about to enter, what difficulty and what reward the player will get upon room completion. This gives the player more choice on how their rewards and run will play.

These rewards could be:

* Currency:
  + Currency unique to that run
  + Currency to be spent in the out-of-run world
* A gem of a specified colour family
* Health upgrades
* Healing

The room types could be:

* Default Encounter
* Shop

After defeating the boss of the area which will be a set number of rooms deep, the next area will open.

Each area will have a different visual theme and will have mostly different enemies to make each area more engaging and unique.

# UI:

The UI will be dark and like Hades’ UI.

Whenever something mentions a status effect such as Regeneration, when hovering over the item or card that mentions it or the player or enemy that is afflicted, a window explaining that effect will open to the right of the item. Like Hearthstone explaining keywords.

There will be icons for each status effect.

The inventory to manage the gems you have equipped will function like Minecraft. Being able to hold gems on your mouse and click to swap or place them in your deck, this also means you can organize gems to your liking in both your deck and your inventory

Health and status effects will be displayed above/BELOW the character (TBD) (Depends on view and I have not decided 😊)

The view for the combat will be side-on or slightly above and side-on. The player will be on the left and the enemies will be on the right, like Soda Dungeon.

The view for out of combat will be similar to Hades, I hope to make a grid similar to isometric drawing paper to make the world buildable in 3 dimensions despite being 2D.

I will make walls and the floor like pixel dungeon (TBD) but right now I am not sure if I want to have black to represent empty space and I’m not sure how much empty space I want the player to actually be able to see.

The main menu of the game will have 3 save slots with unique rogue-lite progression.

TODO: figure out how the permanent upgrade GUI will work.

The Gem combination stations will have 3 slots for gems in total. The slots will have visuals to display how the gems will be used I.E., which gem will be sacrificed, and which gem will be primarily used.

The 3rd slot will be the output slot and will function similar to a Minecraft crafting table:

* When two gems are put in the input slots, the result will appear but will not be crafted until the player takes the gem
* The player will be able to hover over the result to read about what the result will be without having to create it, this give the player more understanding of how the gems will combine and what effects changing the primary and secondary gem will be.

# Enemies:

Enemies will also follow the same rarity tiers as items (1) and will also have levels. This means the same enemy can be more difficult as the player progresses in an area. When enemies take their turn, they will have a move set and chance to use a specific move. If the enemy is rarer, it may have more intelligence on the moves it uses. For example, a boss who inflicts a multi-turn status effect may be smart enough to not use that status effect inflicting move until the player is no longer afflicted with that status effect.