Dungeon Scroller
Game Dev Document

I) Design's intentions

1) Gameplay

The game is a dungeon crawler, with deckbuilding elements and some randomness.
The player goes through a dungeon, fighting enemies in each room. In this purpose, they have a spell list that they can use from a random hand, like in a card game.
After each completed room, they can get a new spell, and money, along with the ability to progress further.
The main objective is simply to reach the boss, at the end of the dungeon.

The most basic actions are moving, a panic action, and casting one of the three available spells. The panic action would be a dodge, or a weak attack that would repel a close enemy.
Casting a spell should take a bit of time, and have some cooldown before the next one, as a way to reinforce the impact, and force the player to look at their spell and the current situation before casting, instead of spamming everything they've got.

In the context of the project, the spells and enemies will be really simple. This means dumb enemies that run toward the player and/or have a simple shot. As for the spells, they'll be some close ranged attack, straight shots with or without a twist, and maybe a few utility ones.
More complex spells and foes would come later, in a more complete version of the project.
Still in the theoretical part, a more complete version would need quite a large spell pool, in order to make the deckbuilding more important and synergistic, with more thoughts to the build.
This would be in the context of a longer game loop, since the player needs enough time to build their deck by adding/removing things and adapting to what they find. This would also allow up to ramp up the difficulty, by making it progressive along the way.

Boss design :
A boss should be a test of the player's skills and understanding of the game.
Here, the main skills are dodging, chosing the right spell, and optimizing the deck.

Pattern ideas for a first boss →
-Launching crystals and later recalling them. (note : add a limit to the number of crystals, so that he can't spam everywhere)
-Area under the player that pops out and damage them.
-Damaging blast around it if the player stays too close.
-Hitting the ground in front of it (area of damages) + some things fall from the ceiling, with a shadow indicating where it'll land.
-Summon turrets. Note that this needs to add more targets. As such it would be better to make it a sub phase during which the boss can't be targeted/hit.

Random notes :
-Have a second phase at mid life where it gets a new attack.
-Have it stop sometimes and be slow enough that the player can cast.

2) Sound Design

The main intent is to use 16-bits like sounds, to fit with the aesthetic.
The musics will be made with beepbox, a chiptune tool, whereas the sounds are made with chiptone.

The sounds must be clear and recognizable. Each action and feedback must have a unique sound that the player can identify.

As for the music, the main theme must be light and happy. It should put the player in a positive mood, while still having enough rhythm to go with the game.

The boss' theme should be more powerful, to underline this foe's size and strength.
It's a fight, so it should also be a bit fast, despite a slow bass and a low melody.

3) Visuals

The game will be made in 2D, with 32x32 pixel art sprites. The general ambiance is one of a dungeon or a cave.
The game should be somewhat coloured, as to not seem oppressive.
The characters and attacks should clash with the background, to be more easy to see.
The particle effects will also be made with pixels, with colour and transparency to make them pop while not making them bothersome.

II) First version

In the game's first version, the player has to select the spell then manually aim before casting.
The game was made to be faster, but also happened to be way more complex to play. Using a controller was really hard when trying to move, aim, and choose at the same time.
The player also had a weak close ranged attack to make the closes enemies go away.

As for the art direction, nothing is done. The main idea is to make some simple med-fan context. The enemies can be recognized by their dark palettes, with green veins or growth.

III) New Direction

The tests didn't work, so the game was partly rethought.
An auto aim has been added, letting the player focus on moving and choosing their spells.

The game was also made slower, with a low amount of enemies per room (close to what The binding of Isaac does), which are aggressive but with clear flaws in their pattern. As such, the player has to focus on dodging then cast when the enemy is open.
In the same vein, the spells now have a casting time, during which the player can't move and thus is highly vulnerable. The player have to stay calm and read the situation before deciding if the time is right for a spell.

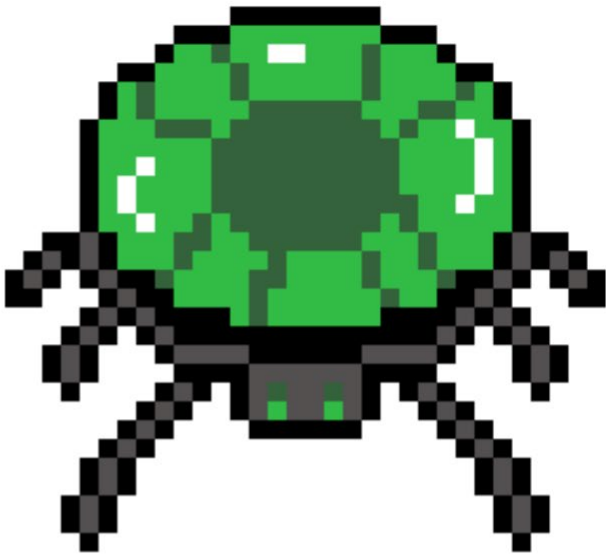
Rather than an HP system, we decided that the player would only be able to take one damage. That first attack would send their hat flying away. Without the hat, the character dies if hit. However, the hat can be grabbed from the floor, getting back the protection it implies.

Finally, to go along with this dodging and moving gameplay, the close ranged attack has been replaced with a dodging jump, a bit like in Enter the gungeon. The player can't change direction during this move, but the first half of the jump makes them dodge any incoming attack.

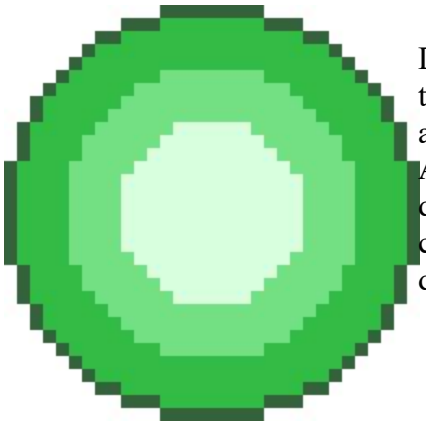
As for the art direction, the setup has been changed. Instead of a normal cave or a castle, the action now takes place in a crystal cave. This makes for more interesting visuals.
The enemies fir this new background, with a change in their appearance, to make them more rocky.

The sounds start appearing, following the 16 bits guideline.
The music is though of as happy and energetic, to fit with the main character, who is supposedly clumsy.

IV) Concepts and content's evolution



The first version of the enemies were mostly green, without a paarticular theme. Green was chosen as the general magic color.



Due to the possible confusion in using the same color for two things (magic and enemies), we chose to change it. Around the same time, the game's direction changed for the crystalline cave, which needed new enemy designs.

V) Technical aspect and the possible future.

Currently, the game is made using GameMaker Studio 2, due to being a practical tool for 2D games. This allowed a fluid development, where another engine may have been slower. However, with this choice came a problem. Currently, Owen Davies is the only member of the team that knows how to program with GMS2, which is a problem during the development and the addition of mechanics. As such, the group would need another person that master the software.

The visual assets were made using piskel, for simplicity and uniformity reasons. Due to the choice of pixel art, and a fixed size, it was easier to make sprites that fit together, despite having multiple people working on them. However, a future version would need more coordination in the guidelines and palettes department.
Also, the problem with 2D games, compared to 3D, is the fact that we have to manually create each animation frame, which is a long task.

For the sound design, the software is working well enough for what we need.
However, we may have to make more guidelines, for the same reasons as the sprites.
The biggest problem may come from the choice of 16 bits itself. The sounds are pretty "typed", which makes them look like another in the same category, and some types are hard to create. Yet, it may still work.

As for the musics, BeepBox worked for what we wanted, it's easy to use and "quickly" let us make musics.
However, we may lose the chiptune for an future version and make some more complex music, using FruityLoops or Reaper.

VI) The game's future

Right now, the first step would be to add the boss, in order to complete at least one floor.

Since most of the team left, the game would be remade in Unity, for a second version.

There is also a need to remake the floor and walls tilemaps, to make it more beautiful and cohesive.

As for the sound, a new music should be made, at least for the main theme, due to the current one not really fitting.
With more time, the objective would be to have more content in all the departments.
This comes with a lot of work on visuals, sounds, and balancing.
Some ideas that didn't make it for the prototype could be tested. For instance, status effect, bonus for the next X scrolls/seconds, or effects depending on the rest of the deck or the enemies.

The cast system is also being remade.
There will be 3 spell classes :

-Instant. They are immediately casted.
-Mobile. There is a cast time, but the player can move at a reduced speed.
-Static. There is a cast time, and the player can't move. It would mostly be the most powerful spells.

In addition to this, the choice system is changing. Instead of choosing one of three spells and then discard all of them, the player would have a full hand, and individually chose the spells.
When pressing a certain key or if the hand is empty, they can discard everything left and draw a new one. However, they have to stay immobile for a few moments when doing this. The duration augments the more spells are left, in order to avoid players repeatedly cycling their hands until getting a specific combination.

We will also have to work on the game's lore, in order to have a more solid basis for the art direction and the gameplay.

In the long term, if we want a "complete" game, we would need a floor system. A lot more enemies and rooms. A bunch of spells, with synergies. Going away from layouts and add a procedural generation for the floors.
Maybe add some passive items and different characters (with a passive ability, a different starting deck, and maybe some statistical difference).
More musics too, probably using VSTs instead of chiptune.