**TP2 Update:**

Working on my project for TP2 I have decided to make it a bit less like spelunky in terms of level generation and gameplay. I have never played spelunky myself and did not fully realize what was meant by a remake of it.

Instead, the stage will be a lot larger and all the dirt will be unchangeable, making gameplay more heavy on finding an exit path by a set time / before the torches burn out. There will be helpers to assist this, such as markers the player can set down to remember his path, or a help mode that lets him scroll through the cave using the mouse.

Randomly generated enemies, obstacles, traps, items, etc will be auxiliary features implemented in TP3 if I have time.

I have attached images of a sample level generation, using my own implementation of cellular automata, along with the lighting and climbing features I added. Hopefully this will help you visualize what I have in mind.

For the generation, with each (step) the pictures are ordered, the original randomly generated array undergoes a check of a certain set of rules, ultimately making the stage more and more “uniform.” The only thing I have left is that I am still working on a method to connect the rooms, so not all paths are dead ends. After that, however, do you think this plan will be complex enough for MVP? Later on, I can generate other blocks (item chests, hazards) based on more specific cellular automata rules, but as I said I want my main focus to be the maze-like nature of my stage.