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Usability Analysis

This prototype is based on how players will get harder or easier levels depending on how much time they took on each level. There were three difficulties: easy, medium and hard; and three levels per difficulty. Blue levels were easy, purple levels were medium and red levels were hard; there wasn't an AI that procedurally made levels in this build. For this playtest I didn't speak to any of the playtesters beforehand, so they went off the instructions within the game. They all reported that the instructions were clear, and they understood what to do from the beginning. Movement was one of the comments I got that could be improved but was good enough to go through. Some stated that it as a little rigid, but it was good, and others said that a continuous movement could have been better. Movement issues could be solved by adding different movement options and letting players decide how they want the player to move, options could consist of holding the keys down to move the player, or tap the keys, also having the option to use a mouse rather than the W, A, S, D keys to move the player. Level design was another comment made about this prototype. Also changing the camera to orthographic was a suggestion made by a playtester. Although the game is supposed to be in 3D on playtester stated how there really wasn't a reason for the camera to be in 3D. A solution to that might be to have levels that take advantage of 3D objects and a perspective change in order for the players to solve certain puzzles.

Although the game is meant to have procedurally made levels, the levels created for the prototype weren't that hard in comparison from each other. Level design could be fixed by making an AI that procedurally makes levels depending on the rank and level the player is on. Repetitiveness was also a question I asked the playtesters. They all said it could get repetitive after some time since there were only nine total levels for this version of the prototype. One player reported that they got the same level three times in a row. This would be solved by adding a script that doesn't select the current level the player is on when deciding what level to load next and will be solved when the level making AI is added to the game, since it will always make a different level from the one the player is currently on. The tasks the playtesters had to do were clear enough which was to get through the obstacles and reach the green door to move on to the next level. Both playtesters said "go to the green door" and "well it's a maze I don't know how much you couldn't understand".

The audio in the game seemed to work for the playtesters but all agreed that the audio should change depending on what level the player is on. Audio could be improved by having different beats and tempo depending on the difficulty and tier the player is on. Easier levels could have more mellow beats like the one that is currently in the game and as levels get harder change the audio to be more upbeat and put the player under stress, so the different levels don't seem too easy to solve. Having a variety of songs in an array could also help since levels will be made from an AI; as there are different levels for each difficulty, the AI would be able to choose from random songs that are placed in different arrays in each difficulty. So there is no repetition, there could be a script that ignores the current audio that is playing when creating or loading a new level.

Some bugs that players encountered were movement bugs, and level loading bugs. Before releasing the playtest, I felt the movement a buggy so made some changes but there were some bugs for the playtest. If done right players could find an exploit that would let them clip through some walls, and also sometimes user input wasn't recognized; although none of them reported that they could do that, I did notice it through one of my personal playtests. This was fixed by changing the way the player moves. I changed the players input from a Fixed Update, to normal Update function to resolve the input delay that there was and that managed to fix the other bug of players being able to clip through walls. Also, players weren't supposed to get repeated levels, but they still managed to get the same level they were on, so it seemed repetitive for some. This could be solved by adding a parameter to the function that calls the level loading that ignores the current level the player is on as result only taking into the account the eight other levels. This also shouldn't be an issue when the full game gets build since levels will not be premade, the AI would be in charge of building the levels.

Feedback consisted of positives and negatives. Some of the positives consisted of having movement that worked and felt good. After the feedback on the difficulty of the puzzles, I felt that the puzzles should be relatively different from each other, so they don't feel as repetitive as they did. Players didn't feel they were challenged as much I wanted them to feel, they could easily go up in rank and their problem-solving skill were challenged as much as I wanted. One of my questions regarding the audio in the game, where answered by the playtesters which was to add different music to each level and difficulty, so players feel in what rank they're on. Regarding the bugs, the majority could be fixed by adding parameter to the current script which ignores the level and loads the others in the array. Regarding the movement, I would have to mess around with different movement scripts and find one that feels appropriate to the theme of

the game or have multiple movement scripts and let the player choose within an options menu. I could solve the movement “issues” by making different movement scripts and playtesting with the different ones and asking playtesters which ones where their favorite movement mechanics and take the top three and added to the options menu as a choice. With all this feedback I could be able to make a second version of this playtest without many bugs, and possibly an AI that is able make levels, so levels don’t seem as repetitive as they were.