

## **CONCEPT:**

An idea I want to explore for my final project is perhaps a platformer game, like the game Geometry Dash, but obviously not being Geometry Dash. The game would have mechanics that I can actually implement and are doable. The player will be using the arrow keys to move and you will be needing to avoid obstacles, and other mechanics. There will be 'powerups' that will give the player randomized attributes such as but not limited to; faster speed, jumping higher and allowing the player to decrease in size to be able to avoid obstacles where you wouldn't be able to in normal size. I would have varied obstacles where some are stationary, some following you, or even moving at random directions. Example; be it with spikes on the floor. Implementing special effects for different scenarios. A main menu screen showing off the game in detail, as well as a screen on how to play. There will be a scoring system like a high score. The high score is going to calculate how long you've been alive for and how much distance you've travelled that will be displayed at the 'game over' screen. There will be sounds for many different inputs in the game such as but not limited to; jumping, dying, pickups, background music. The game will have many levels, with very colorful symmetry to make it feel like the game is alive and not boring to look at. Also, in-game hints will be applicable. Implementing easter eggs where for example you enter a hidden room somewhere in the level, and you have to find a way out before the walls cave in on you.

Another idea I had in mind was everything from my first idea, but this time you are trying to escape the rising water that is coming up from the bottom of the screen and you have to keep moving up the y-axis onto the different platforms to avoid drowning, while avoiding the many obstacles and mechanics in your way. Adding some trap floors will be fun as well to implement and as the player. Obviously, this idea would require an increased viewing area of the level so it looks like you have to travel a fair distance in order to beat the level, as well as, this idea will be more of a challenge to get done, rather than my first idea.

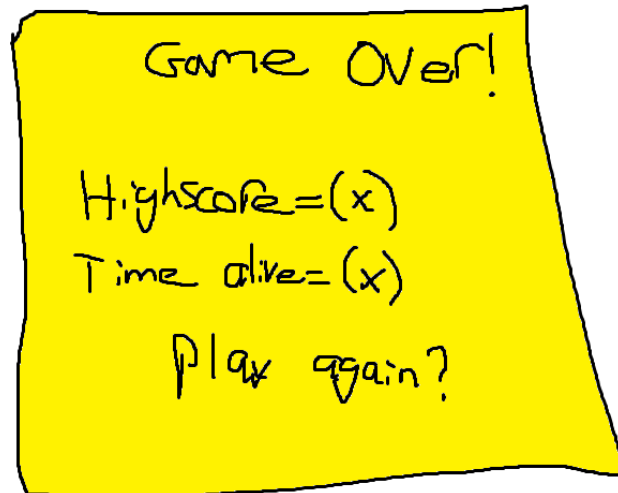
## **TECHNICAL CHALLENGES:**

Some challenges I would like to see implemented would be a way to like have the screen continuously generate the level the further you go like any other Platformer game, instead of having each level on a stationary canvas. Another challenge that I will encounter will be finding the right sound for each input. Something that I've always have a tough time trying to figure out is how to calculate the distance between anything other than circles. Maybe implementing some effects like when you get caught in a spike, some special effect occurs? Implementing a high score system that displays on the 'game over' screen will be a challenge. If I go with the second idea, implementing the actual water will be a challenge, as I can make the water rise over time, but the actual physics of the water will probably not be doable. Figuring out what I want the player to look like. As well as how to actually allow the player to stand on top of a platform? I can see myself implementing all other mechanics in my game, as in it's all doable with the knowledge I possess, but I am sure down the line I will be encountering a hiccup, which then I will be seeking help where necessary.

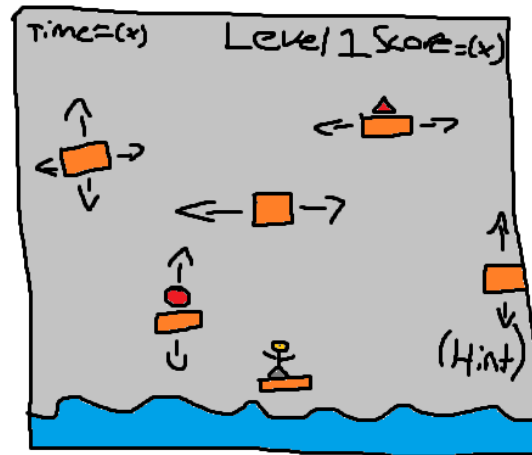
A rough idea of the title screen. Nothing is final, only a concept.



A rough idea of the Game Over screen. Nothing is final, only a concept.



A rough idea of what a level would look like in the second platformer game. Nothing is final, only a concept. The shapes represent the powerups. The player sprite is still unknown to what it's going to be.



A rough idea of what a level would look like in the first platformer game. Nothing is final, only a concept. The shapes represent the powerups. The door represents the next level. The player sprite is still unknown to what it's going to be.

