



# What factors make video games an enjoyable and fun experience?

Dexter Camp

## Research Question:

What factors make video games an enjoyable and fun experience?

## Introduction:

Many people find video games fun. But why do people consider them fun? I decided to try to figure that out for my research project this school year. I am an IT student currently enrolled in Game Design, and I have always aspired to one day become a game developer. I have played many video games, and I've always wondered why exactly people enjoy them as much as they do.

## Background:

Determining these factors was a challenge for me, as there are very few articles on this subject. Alongside this, the articles that do discuss this question tend to go in a much more psychological direction, determining how it impacts the brain. However, I wished to determine these factors from a gameplay perspective, showing how these factors can impact a game and its overall enjoyability. I have determined these factors after playing many games and determining that many games revolve around reaching goals in many ways. The goal can be different in every game, such as Celeste, where the goal is to reach the top of a mountain through difficult platforming, or in Enter the Gungeon, where the goal is to descend deep into the Gungeon to obtain an artifact, going through increasingly difficult bullet-hell challenges. This reaching of objectives seen in video games is where my factors stem from, as each game has some objective that you must reach. Alongside this, often there are many ways to reach this goal, through techniques that you, as the player, may be able to perform. The game may teach these techniques to you directly, or they may be found out by the player by themselves. Finally, there is often some difficulty with these objectives, with failure resulting and consequence and success resulting in rewards. These have helped me to determine my factors of Freedom and Control from how the player may be able to reach the goal and what they can control, Difficulty and Problem-Solving from how the player reaches the goal and how difficult these objectives are, Rewards and Consequences for succeeding and failing in these objectives, and Discovery and Knowledge from how the player learns about what they can do as a player.

## Utilization:

I am utilizing these factors to create a game with my colleagues in Game Design. The game is a platformer where you must defeat enough enemies to reach a goal in every level, with each level having progressively harder and harder enemies. The game will have multiple characters that you can use, with each one having unique abilities and movesets. It will use the factors as a baseline. It utilizes Freedom and Control by having each character have unique movesets with special abilities, being able to use them in many ways. Difficulty and Problem-Solving will revolve around the enemies that you need to defeat to get past these levels, progressively getting harder. You will have many attacks that you can utilize to defeat these enemies. Rewards and Consequences will be shown with the game punishing you by sending you back to the start when you are defeated, allowing you to use a different character. Discovery and Knowledge will be based around using each character, figuring out how to use them and how they work.

## Games Tested:



## Citations:

Dodge Roll, & Devolver Digital. (2016). Enter the Gungeon [Video game].  
Extremely OK Games, & Maddy Makes Games. (2018). Celeste [Video game].  
Project Moon. (2018). Lobotomy Corporation [Video game].  
System Erasure. (2023). Void Stranger [Video game].

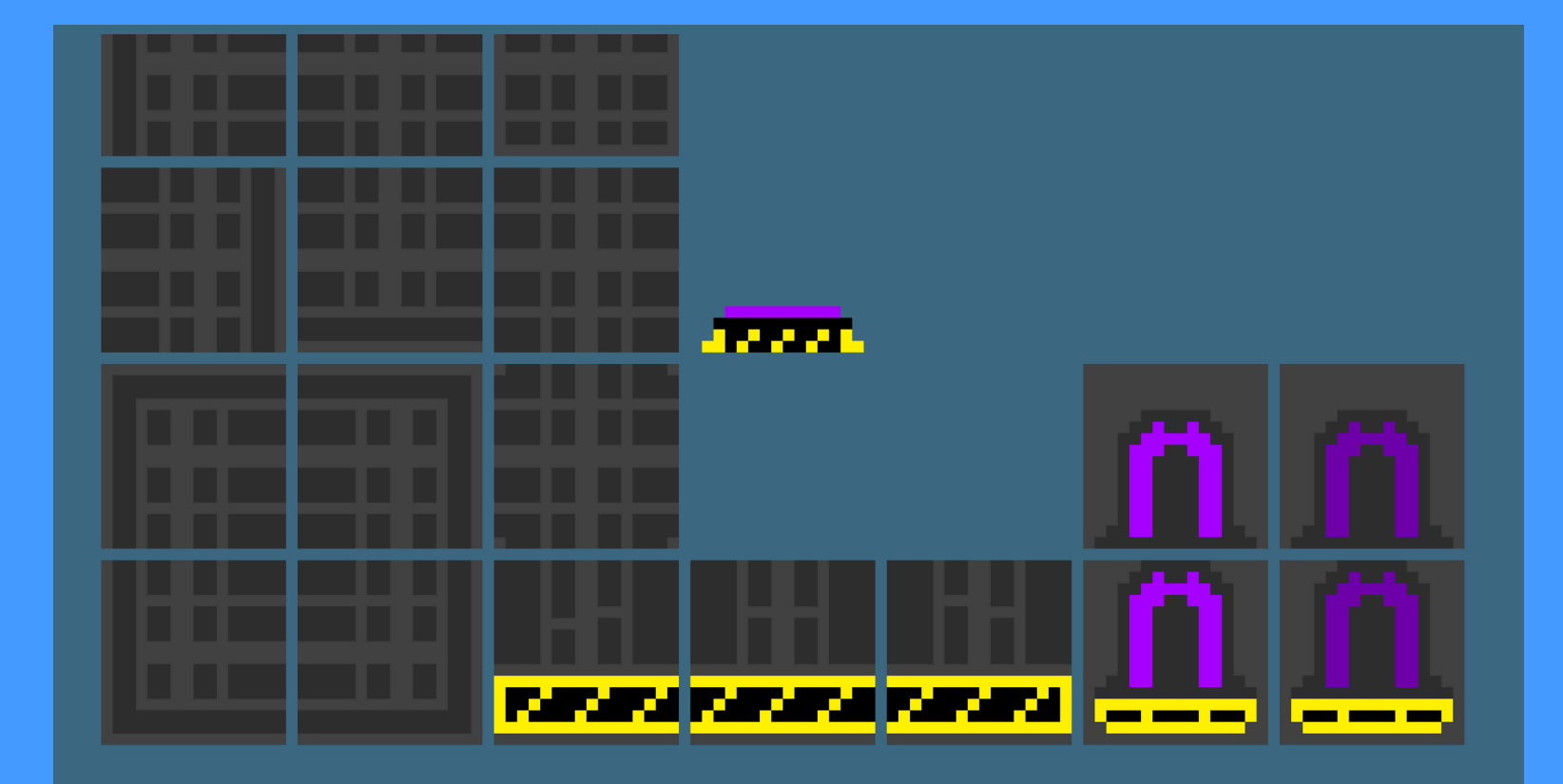
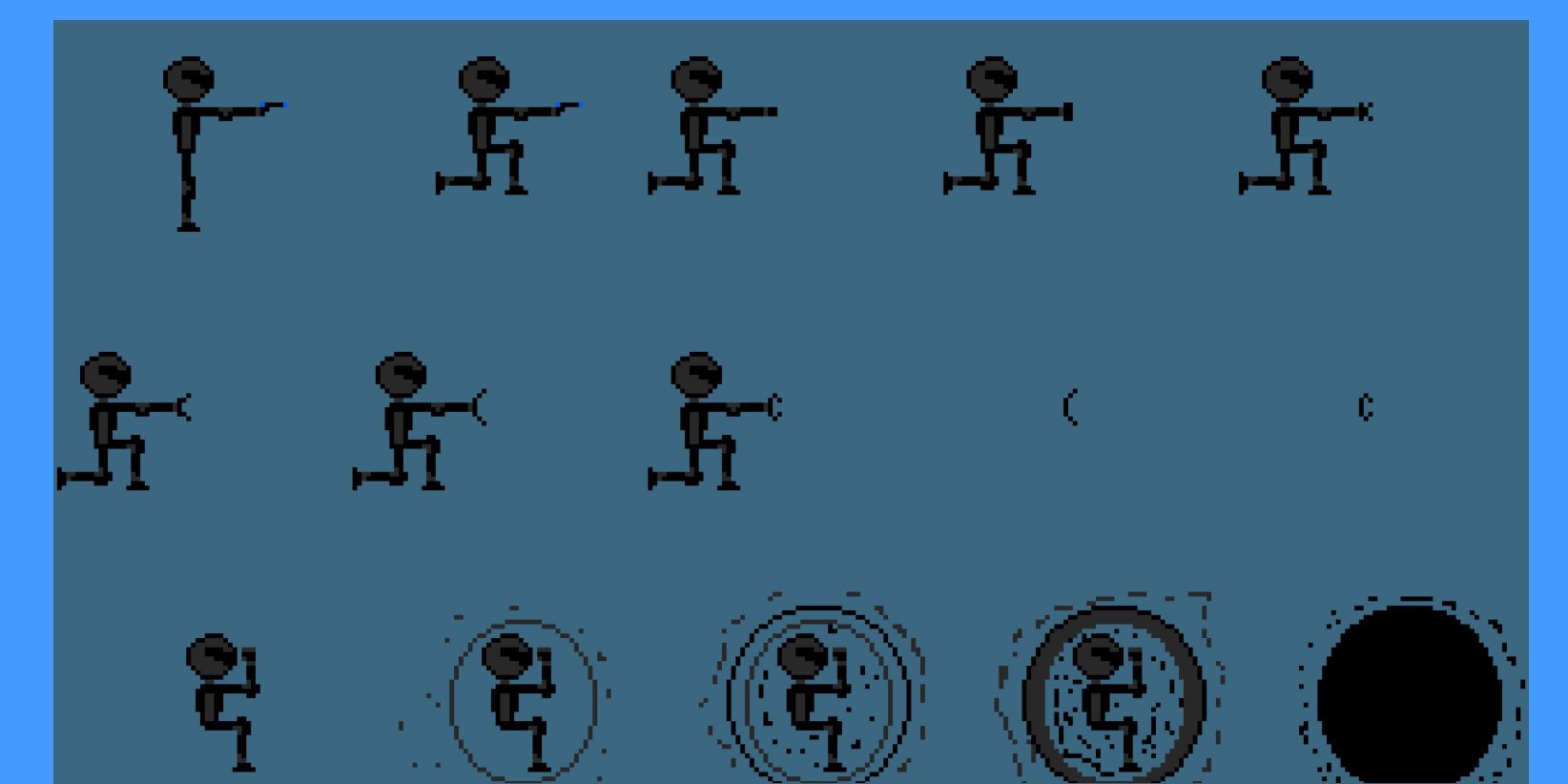
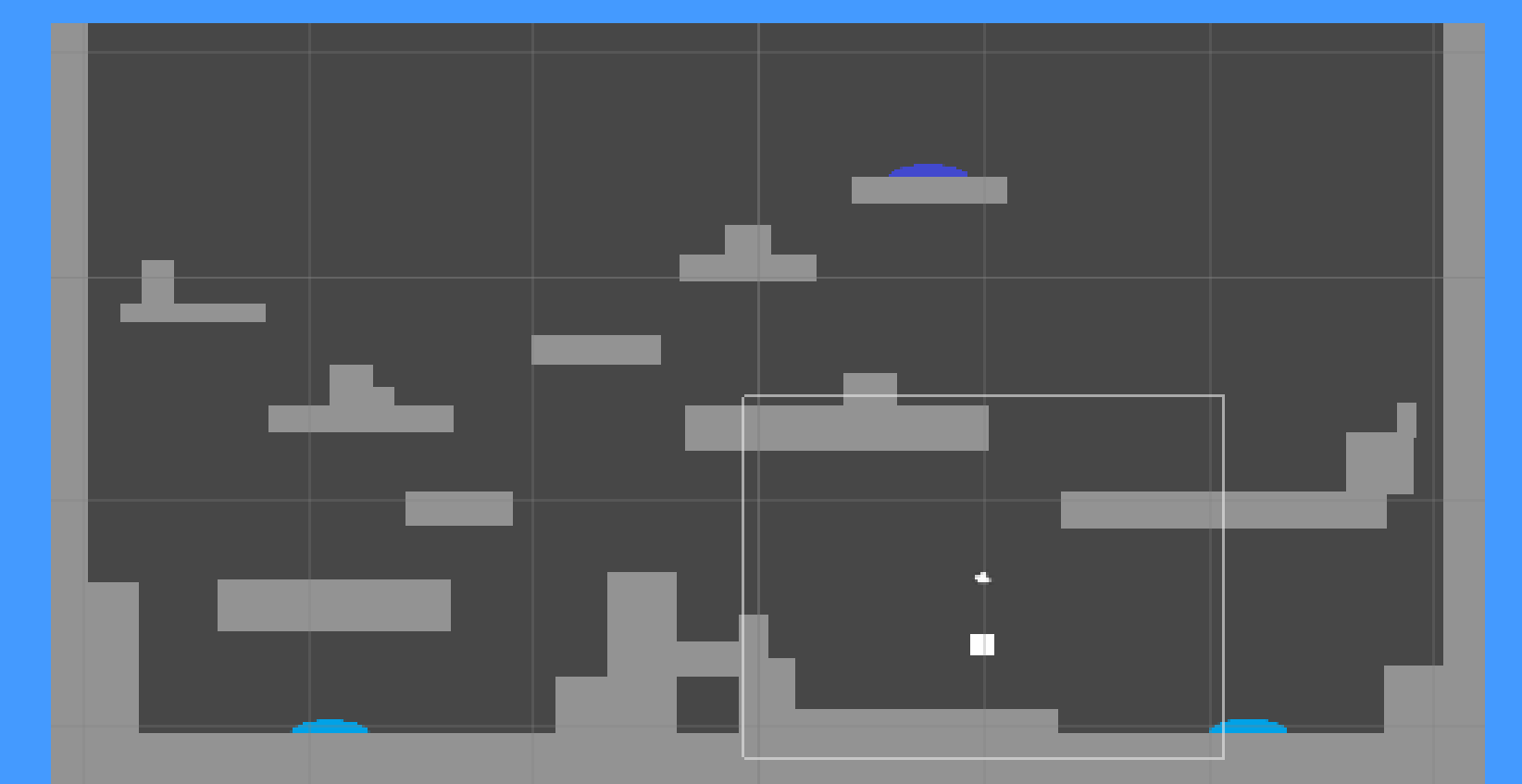
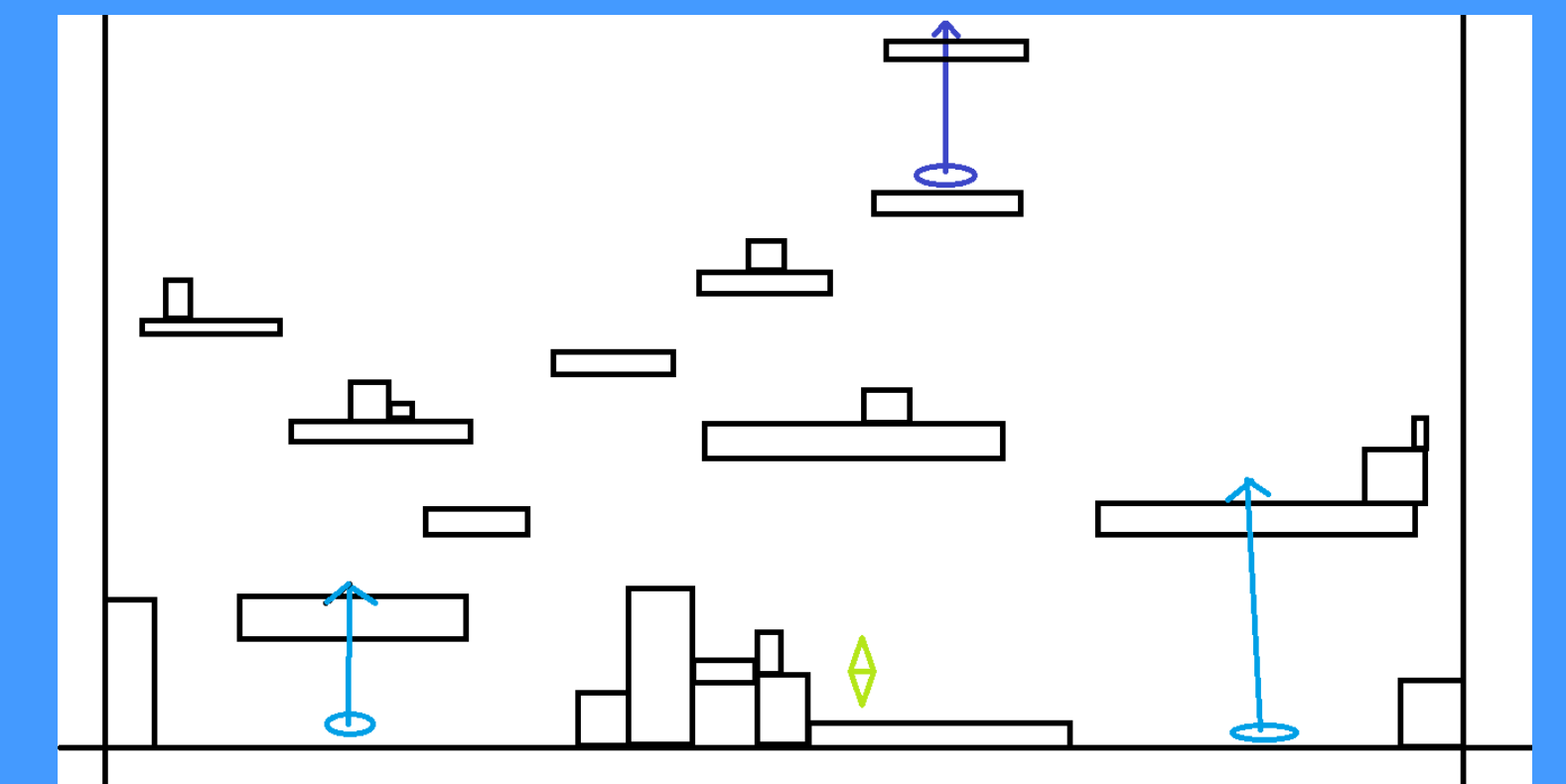
## Problem Statement:

Game developers do not utilize these factors to the fullest when creating their games, making their games not as enjoyable.

## Exhibition of Factors:

After determining these factors, I have found some games that use these factors effectively. Celeste utilizes the factor of Freedom and Control very well, having smooth, precise controls while dodging and maneuvering through challenging platforming. As the player progresses, it teaches you more about their controls and utilizes them to its absolute fullest. Lobotomy Corporation is a monster management simulator where the player must manage progressively more difficult monsters, and it uses Difficulty and Problem-Solving to its advantage. It requires them to strategize which monsters they wish to manage, producing enough energy to fulfill the quota. Enter the Gungeon uses Rewards and Consequences very well, rewarding skillful gameplay with difficult bullet-hell challenges the player must overcome. However, it is also rather punishing, sending the player back to the beginning of the game if they perish. Void Stranger is a puzzle game about uncovering many secrets, exhibiting Discovery and Knowledge greatly. It has many hidden riddles the player can solve, each one teaching them more about the gameplay and story. Some genres of games use the factors very well too. Roguelikes are a genre that make very good use of the Rewards and Consequences factor, rewarding good gameplay by providing the player with upgrades and punishing bad gameplay by sending them to the start of the game again. It often rewards them with permanent upgrades or unlocks, such as new upgrades that players can find throughout their attempts or simply new buffs to start out with. The genre lets players experiment with each of their upgrades, allowing them to perfect the character's abilities. Multiplayer shooters are also an interesting genre, utilizing many of these factors. In multiplayer shooters, the goal is stated at the beginning of the game, and the player must compete against many other people to achieve this goal. As the player wins more games, they have a rank that increases, further incentivizing playing well. They are very beloved due to having potentially endless replayability, so long as there are enough people to play alongside with.

## Game Creation:



## Next Steps:

Our game is a work in progress as of writing this. However, we are currently working as hard as possible to make it meet our quality standards. At the moment, we are implementing our sprites into the game, alongside refining our characters' abilities. Alongside this, we are refining the levels further, making them feel much more polished. Finally, we are implementing the enemies into every level, making sure they fit the level designs.