

I decided to make this prototype because I wanted to experiment with the idea of having all or a player's resources, health, ammo, money, as a single resource because I felt like it would allow for some unique balance as decision making from the player as the game played out. I implemented this mechanic in a twin stick shooter style game because I felt that this allowed me the best opportunity to see how this style of resource management is handled by players without complicated platforming or camera controls getting in the way of the mechanic. The twin stick shooter also gave me plenty of variables that I could allow the player to change with the upgrade system.

This idea came from a few different areas. The primary source being an anime *Control* which was centered around a story of people fighting by using their personal fortunes in order to attack, losing money if they are hit, and gaining money from successful attacks. The idea sounded interesting and I hadn't seen this idea implemented in games before in a way that provided meaningful choice to players. Games like PixelJunk Shooter had implemented this as a system that generated heat when you fired and took damage which led to you losing control and falling if you had too much heat. However, this didn't really create much choice for the player as it could simply be handled by submerging in water or just hiding out of their line of fire for a minute. Additionally, many RPGs also contain a blood mage class that allows the player to exchange health for magic. However, this also didn't provide the kind of balance and thought that I wanted to make.

Some other approaches I thought of involved having a smaller bar that would empty as you fire and leave you vulnerable to attack and recharge after a certain amount of time. However, I didn't think this would give the meaningful choice and balance that I wanted. I also thought of just linking health and ammo but felt that adding more options for them to use this single resource would create some interesting dynamic play.

I learned from my first prototype that players were having trouble noticing what direction they were moving, sometimes even questioning why the enemies were not moving toward them and seemed to have variable speed. Players also told me that some of the speed values seemed off. Players told me that they wanted to be able to purchase more upgrades than just the size of their resource pool.

I addressed these comments in my next version. I added a tail that follows behind the player and set the background to be a gradient across the diagonal so that it would allow the player to see where they are now in relation to where they were and the player would be able to see in the change in the gradient as they move provided feedback about how fast and in which direction they were moving. I adjusted the speed values so that the enemies move faster in relation to the player and provide more of a threat. I added the ability for the player to upgrade their speed, reload speed, and the value of the enemies to allow the players more meaningful choice.