echo.location
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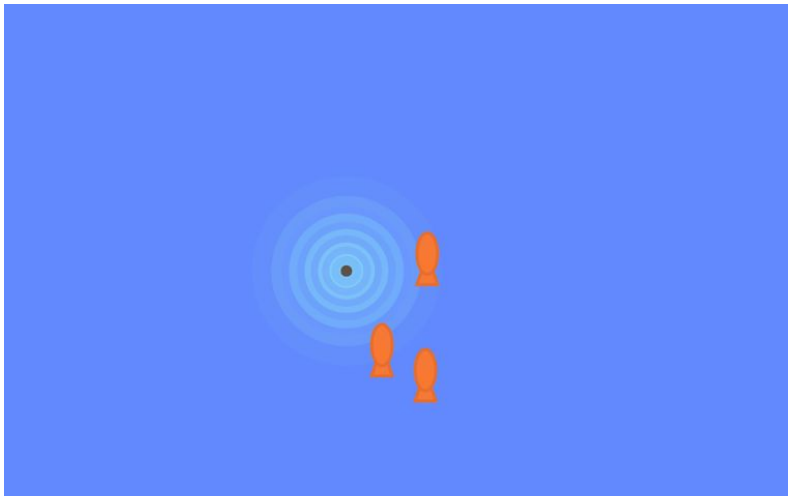
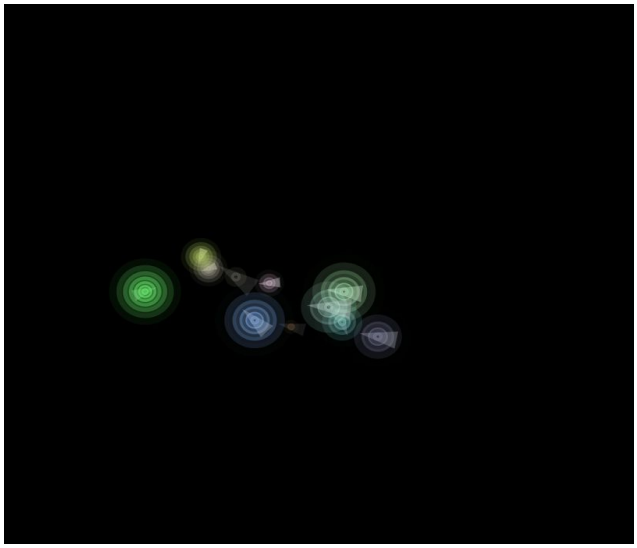
https://echo-location.herokuapp.com/

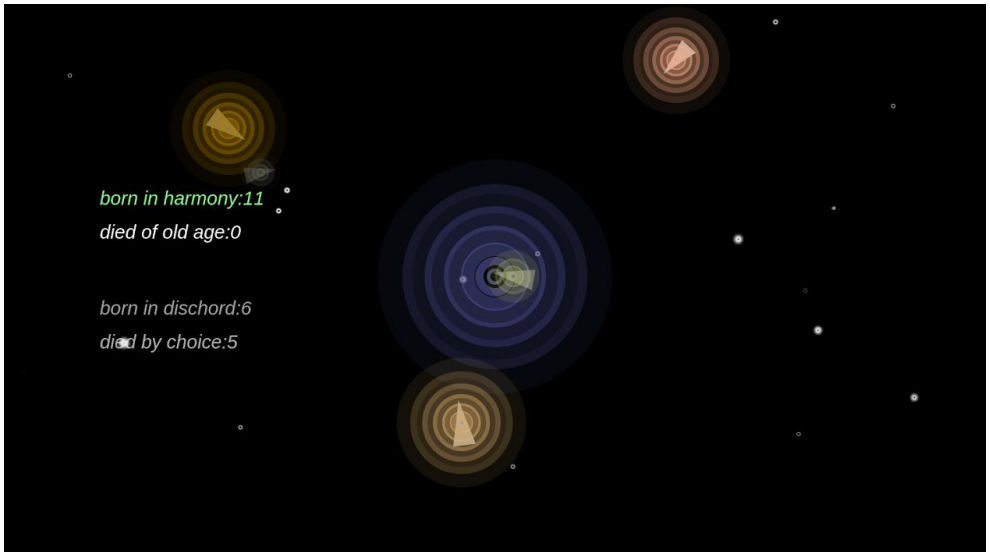
This project was inspired by echolocation, the process in which sound allows animals to find their way. My intention was to design a musical environment, with the creatures emitting pleasing noises to draw eachother closer. My original plan involved a system of genetics based on how pleasing the resulting tones were, but that turned out to be not only too difficult to code, but too taxing on my computer because of how much power the p5 Sound library was already drawing. I am slightly upset that I couldn't get this genetic structure working, but I might stick with this project and make changes for my final project. The other problem, which I decided to instead use as a constraint for the user, is that the program will stop if all the creatures die. However, I designed around this, and tried to make the process of continuing keeping creatures alive the object of the program.



Iteration 1. Some very basic fish with a bait acting as an attractor. No seeking behavior, just a gravitational pull. Though I scrapped most of this code, I did save the fade effect of the bait, and bring it to the foreground of my next attempt.



Iteration 2. Seeking forces added, but no sounds, no splicing, and only vehicles. The code was very sluggish because there could essentially be an unlimited number of creatures.



Final iteration. Lots of changes since the last iteration. There is now a second central attractor (Biggie) as well as stars. Users can now use their mouse to create and remove new vehicles, up to a point. Sound is added, and every object makes it. Counters are added for births/deaths of every vehicle, and splicing is added so that there can only be 5 vehicles at any given time.