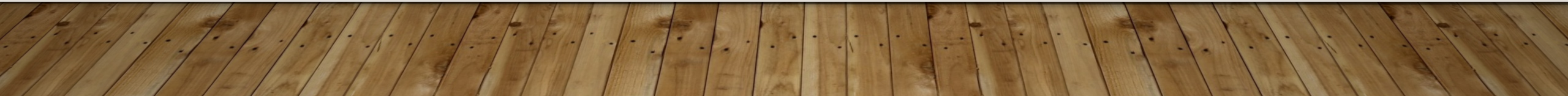


LIVING PAINTING

JASON RYAN – NEW MEDIA PRODUCTION

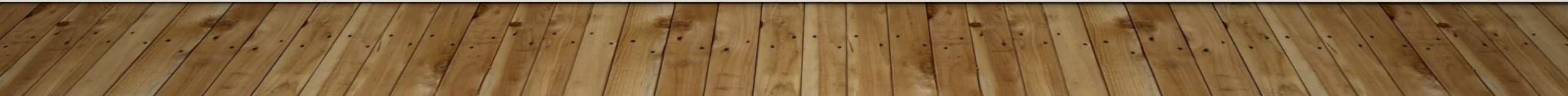


ARTIST STATEMENT

I've always been intrigued by the unpredictability of life and the stories each person/animal/thing may have. While this project may not go as deep as telling a story — or it may, depending on how you look at it — it focuses on life just happening. In my project, I have three creatures which are represented by particles: plants, herbivores, and carnivores.

Each has its own characteristics such as color, speed, and size. Each characteristic is randomized which gives the particles a unique identity. The plants serve the basic purpose to sustain life, and the herbivores and carnivores objectives to eat and live as long as their lifespan will let them. There are also random behind the scene factors that affect the reproduction of each species. Which can be symbolic of disease, prosperity, or simply being stagnant.

Through this living painting, you will see an ever-changing piece of work that is always unique. These particles will shape the canvas and show you the history of this little world. As time goes on, the past will be forgotten, and the new particles will always be working to create something new.



THE ORIGINAL IDEA

- To create a “self-sustainable” digital ecosystem of plants, herbivores, carnivores

GOALS

FOOD CHAIN

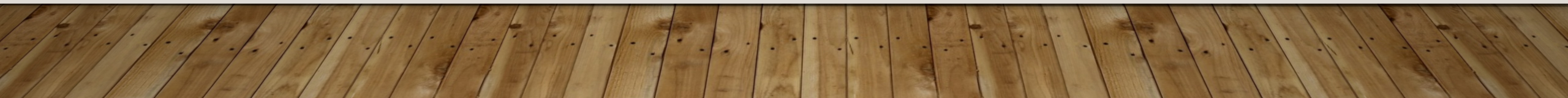
- Plants

- Idle
- Small Size
- Eats Nothing
- Reproduces 10 of itself
- Reproduces every 5 seconds
- Lifespan of 30 seconds

- Herbivores

- Slow – Medium Speed
- Medium Size
- Eats Plants
- Reproduces 5 of itself every 10 seconds
- Starves every 10 seconds
- Lifespan of 1 minute

- Carnivores

- Medium – Fast Speed
 - Large Size
 - Eats Herbivores
 - Reproduces 2 of itself every 20 seconds
 - Starves every 7.5 seconds
 - Lifespan of 1 minute
- 

GOALS

CREATURE CHARACTERISTICS

- Creatures of the same species bounce off of each other
- Creatures grow when they eat and shrink when they starve
- Creatures of the same species vary in size, speed, and color to make them more unique

PROCESS POST

PLANTS



Probably the simplest piece to get done for the project. All I had to do was create the plants using a for-loop and then I just fine tuned the reproduction rate and lifespan.

PROCESS POST

HERBIVORES



To create the herbivores, I took the code from the plants and gave them the ability to move across the canvas. I gave the herbivores fewer numbers so that they would not over run the plants and just consume everything. I also added a function so that when the herbivores got close to the plants they would "consume" them and grow.

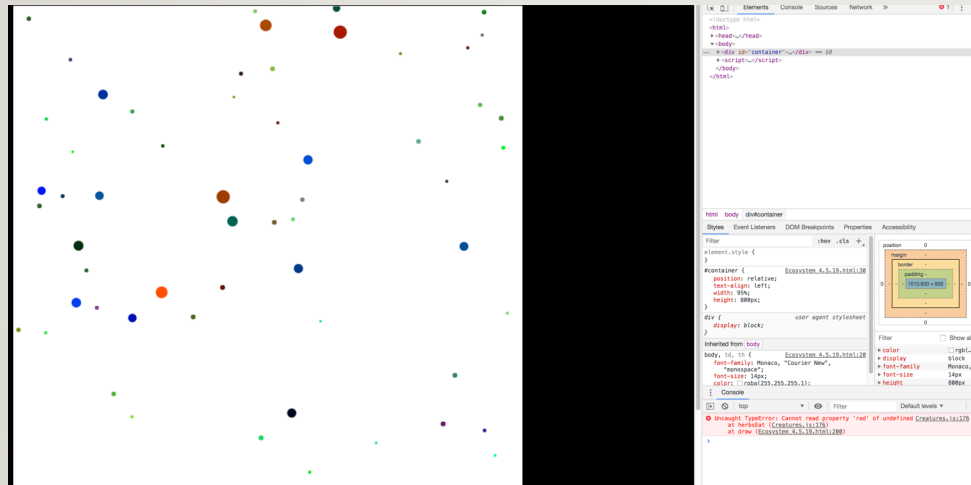
PROCESS POST

CARNIVORES



Same as before, I used the herbivore code to create the carnivores. All I had to do was switch the the eating function to eat the herbivores on contact. I also gave the carnivores fewer number since they are faster than the herbivores.

PROCESS POST CRASHING



So for some reason my code was randomly crashing at random times. It took me awhile to figure it out but after going through Google Chrome's console I figured out that it was because of the carnivores' eating function. At first, I wasn't sure why that was happening but the answer was right in front of my face the entire time. I originally had the function tracking the herbivores' array when it should have been tracking the carnivores'. After that my code started to run smoothly again.

PROCESS POST

REPRODUCTION DICE



I'll admit once everything was running smoothly, I started to get a bit bored with my little ecosystem. So I decided to create a metaphorical dice for each creature that would be thrown every 10 seconds. This dice would be symbolize disease, prosperity, or being stagnant. Depending on how the dice rolled the creatures could flourish or they could suffer for many "years" until they are able to make a comeback.

FINAL PRODUCT

