

## Principles Art Project

- Describe each of your three rules (30pts)
  1. In the render function I changed all of the balls to lines and added stroke weight and lowered the velocity.
  2. I added two classes of bars to the canvas with limits on a random  $\frac{1}{4}$  of the canvas.
  3. I changed the stroke weight of the bars and took away one class of bars adding another group of lines with random velocity.

- Show code for each rule (30pts)

```
1. this.render = function(){
  fill(100,700,225);
  if(this.loc.x<400 && this.loc.y>400 ){
    stroke(0,0,random(100,200)+this.loc.dist(this.vel))
    strokeWeight(random(1,5));
    line(this.loc.x, this.loc.y, 10, 40);
  }
  if(this.loc.x>400 && this.loc.y>400 ){
    stroke(random(100,200)+this.loc.dist(this.vel),0,0)
    strokeWeight(random(1,5));
    line(this.loc.x, this.loc.y, 10, 40);
  }
  if(this.loc.x<400 && this.loc.y<400){
    stroke(random(100,200)+this.loc.dist(this.vel),random(100,200)+this.loc.dist(this.vel),random(100,200)+this.loc.dist(this.vel))
    strokeWeight(random(1,5));
    line(this.loc.x, this.loc.y, 10, 40);
  }
  if(this.loc.x>400 && this.loc.y<400){
    stroke(0,random(100,200)+this.loc.dist(this.vel),0)
    strokeWeight(random(1,5));
    line(this.loc.x, this.loc.y, 10, 40);
  }
}

2. this.render = function(){
  fill(100,700,225);
  if(this.loc.x<400 && this.loc.y>400 ){
    stroke(0,0,random(100,200)+this.loc.dist(this.vel))
    strokeWeight(random(1,5));
```

```

    line(this.loc.x, this.loc.y, 10, 40);
  }
  if(this.loc.x>400 && this.loc.y>400 ){
    stroke(random(100,200)+this.loc.dist(this.vel),0,0)
    strokeWeight(random(1,5));
    rect(this.loc.x, this.loc.y, 10, 40);
  }
  if(this.loc.x<800 && this.loc.y<800){

stroke(random(100,200)+this.loc.dist(this.vel),random(100,200)+this.loc.dist(this.vel),ran
dom(100,200)+this.loc.dist(this.vel))
    strokeWeight(random(1,5));
    rect(this.loc.x, this.loc.y, 10, 40);
  }
  if(this.loc.x>800 && this.loc.y<4800){
    stroke(0,random(100,200)+this.loc.dist(this.vel),0)
    strokeWeight(random(1,5));
    line(this.loc.x, this.loc.y, 10, 40);
  }
}

```

### 3. Velocity was changed to make the bars and line shake around more violently.

```

for(var i = 0; i < numBalls; i++){
  var loc = createVector(random(width), random(height));
  var vel = createVector(random(-5,5), random(-5,5));
  var col = color(0, 0, random(0,255));

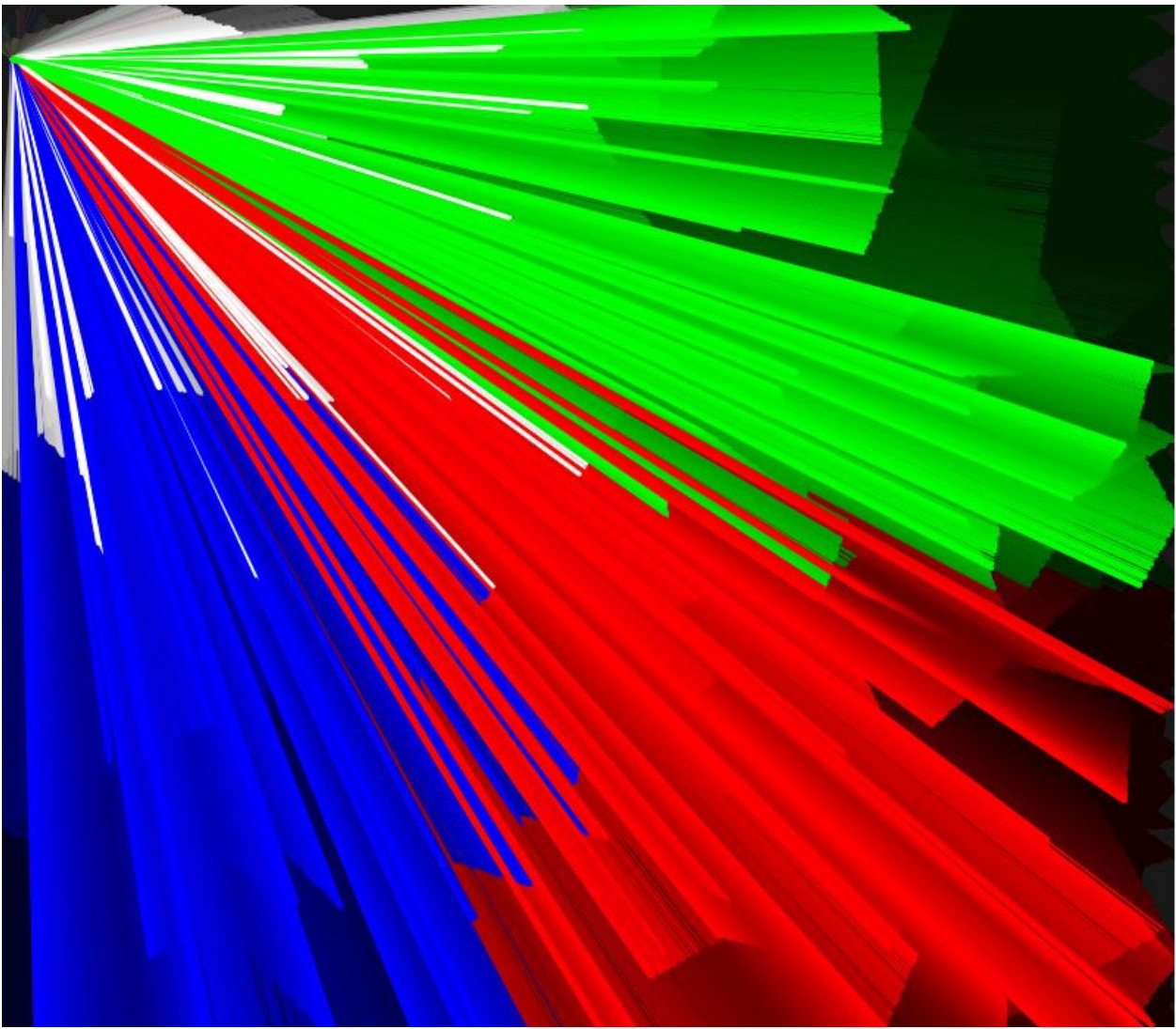
this.render = function(){
  fill(100,700,225);
  if(this.loc.x<400 && this.loc.y>400 ){
    stroke(0,0,random(100,200)+this.loc.dist(this.vel))
    strokeWeight(random(1,5));
    line(this.loc.x, this.loc.y, 10, 40);
  }
  if(this.loc.x>400 && this.loc.y>400 ){
    stroke(random(100,200)+this.loc.dist(this.vel),0,0)
    strokeWeight(random(1,5));
    line(this.loc.x, this.loc.y, 10, 40);
  }
  if(this.loc.x<800 && this.loc.y<800){

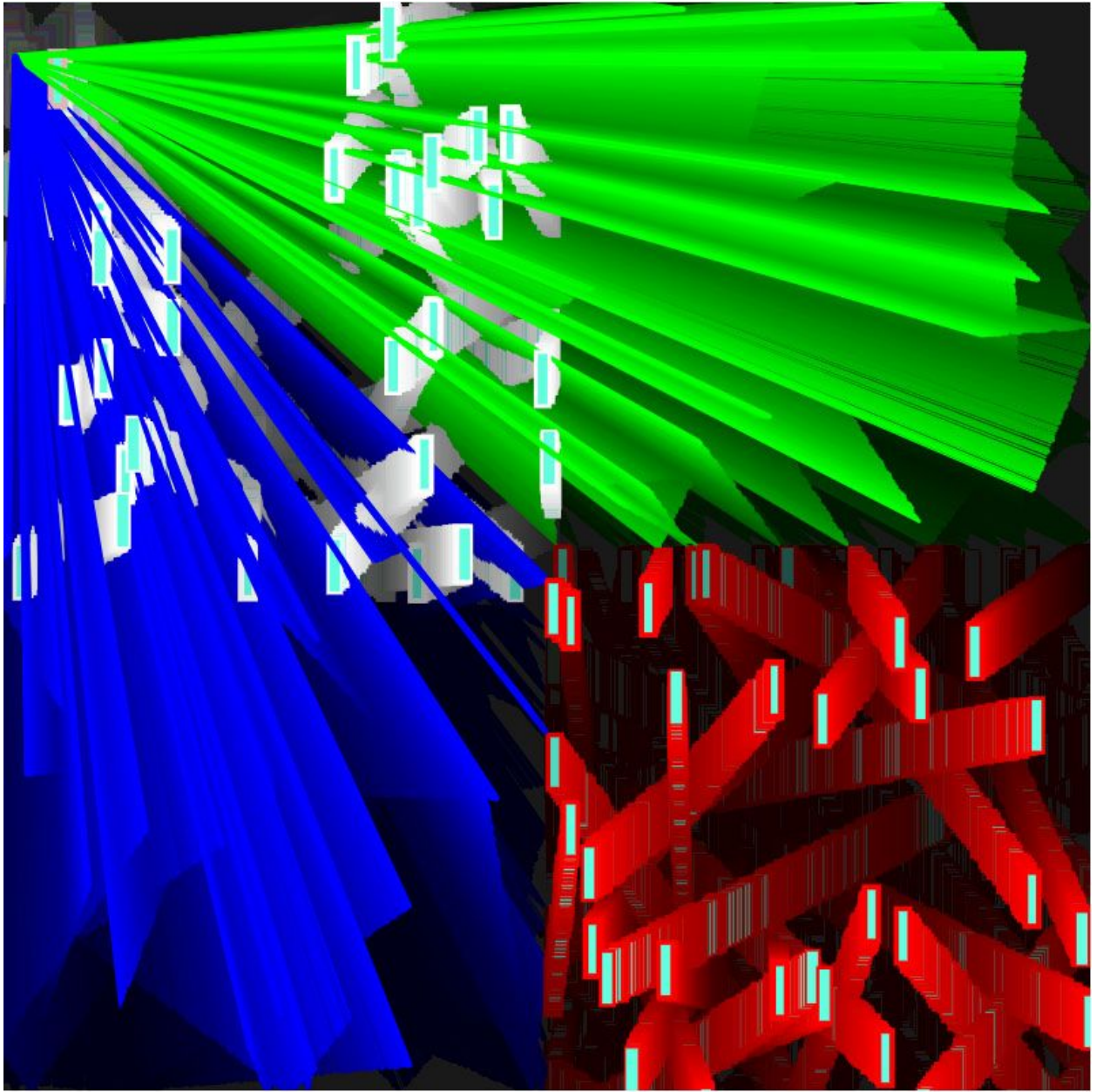
stroke(random(100,200)+this.loc.dist(this.vel),random(100,200)+this.loc.dist(this.vel),ran
dom(100,200)+this.loc.dist(this.vel))
    strokeWeight(random(1,5));

```

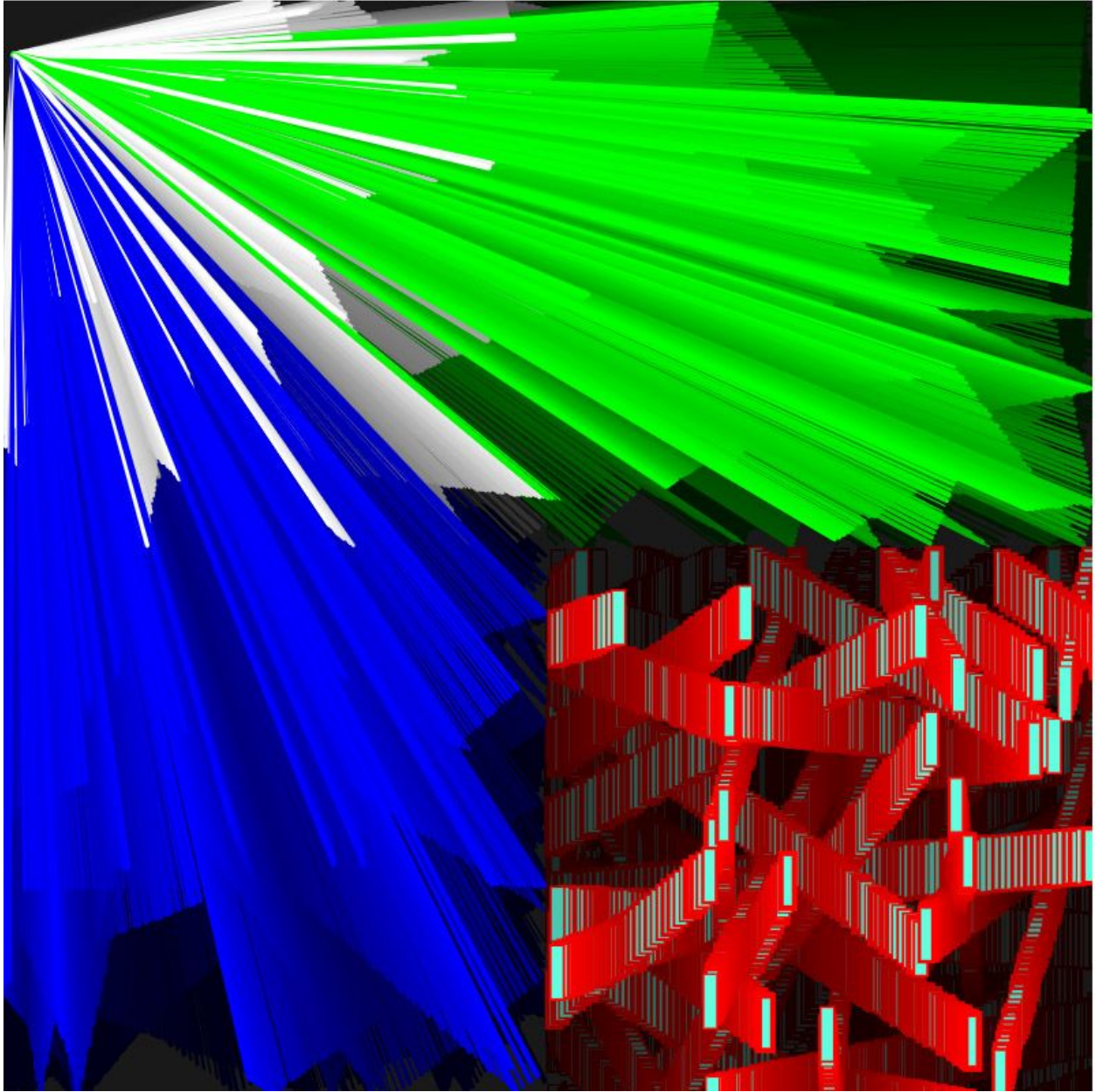
```
    rect(this.loc.x, this.loc.y, 10, 40);  
  }  
  if(this.loc.x>800 && this.loc.y<4800){  
    stroke(0,random(100,200)+this.loc.dist(this.vel),0)  
    strokeWeight(random(1,5));  
    line(this.loc.x, this.loc.y, 10, 40);  
  }
```

- Show screen shot for each rule (30pts)









- Save as PDF and upload to canvas (For credit)