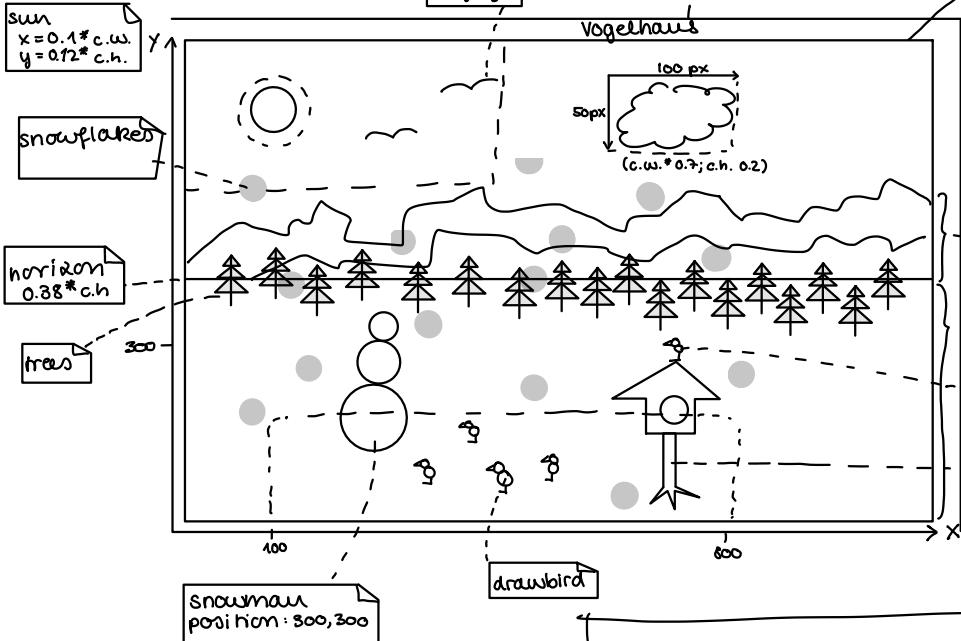


window : eventlisteners:
load, resize, orientation change

drawbird
flying

h1



canvases
width = window.innerWidth * 0.95
height = window.innerHeight * 0.85

canvas.width = c.w.
canvas.height = c.h.

→ no coordinate system as most values are relative

sky: gradient blue → white

-horizon

mountains
0, horizon
position = min, max
-coors
random step to next point

meadows: gradient white → lightgreen

drawbird

vogelhaus

x=800
y=540

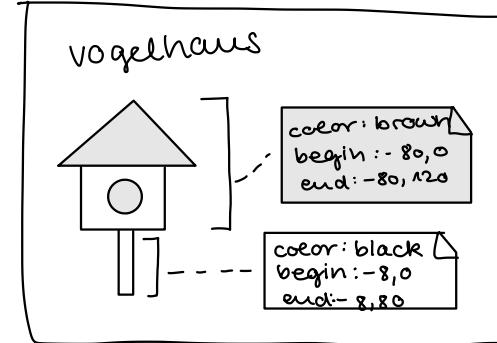
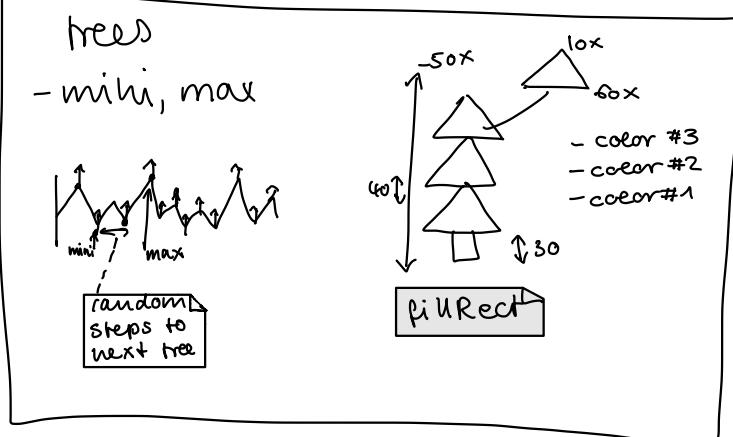
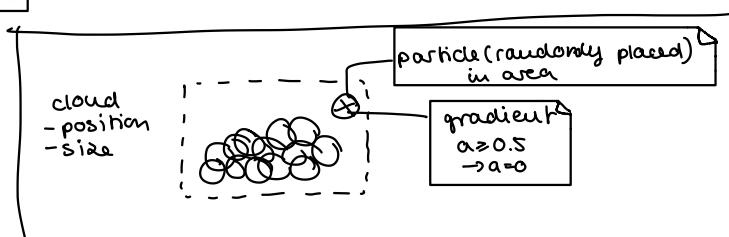
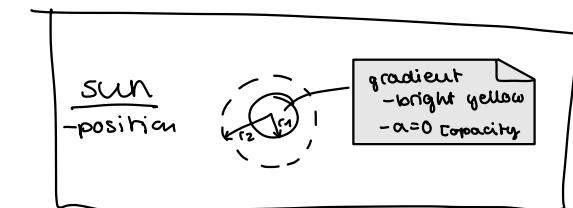
snowflakes

random dots: white

Snowman

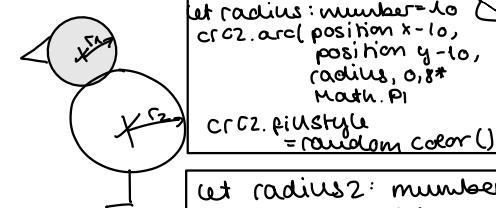


with loop
↳ three circles
let radius = number - 160
radius = radius + 10
crc2.fillStyle = "white"



drawbird

max.width:number = 800;
min.width:number = 100;
min.height:number = 515;
max.height:number = 530;

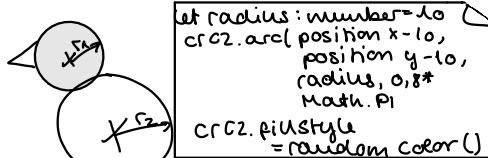


let radius2: number = 12;
crc2.arc(position x: position y, radius 2: 0, 2 * Math.PI);
crc2.fillStyle = randomColor();

scribble

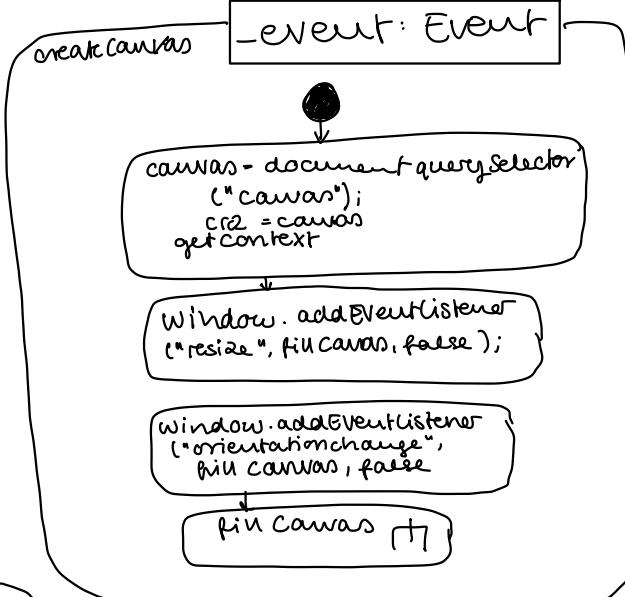
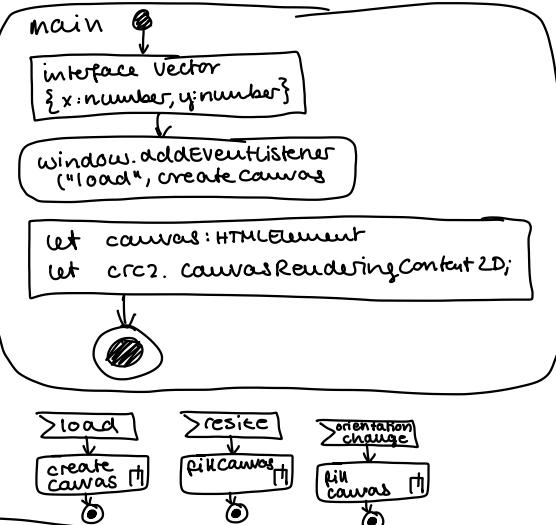
drawbird.sitting

```
let positionX: number = 800
let positionY: number = 300
```



```
let radius2: number = 2;
crc2.arc(positionX, positionY, radius2, 0, 2 * Math.PI);
crc2.fillStyle = randomColor();
```

Aktivitätsdiagramm



drawbird.flying

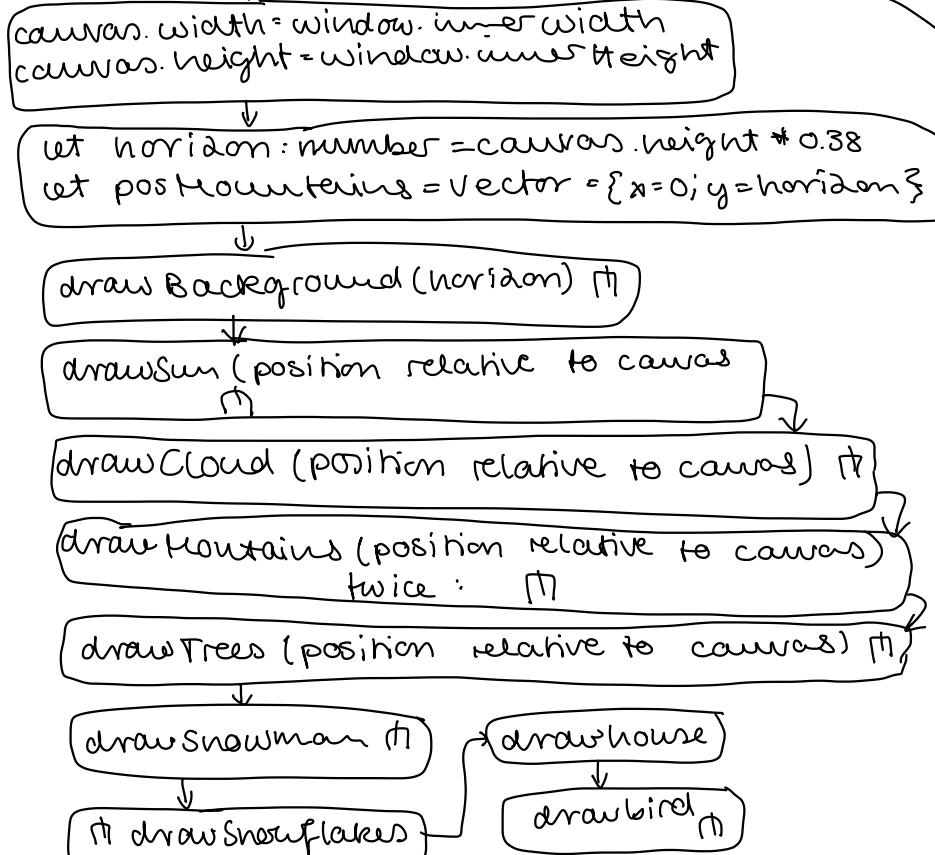
positionX: Math.random * (900-40)+40

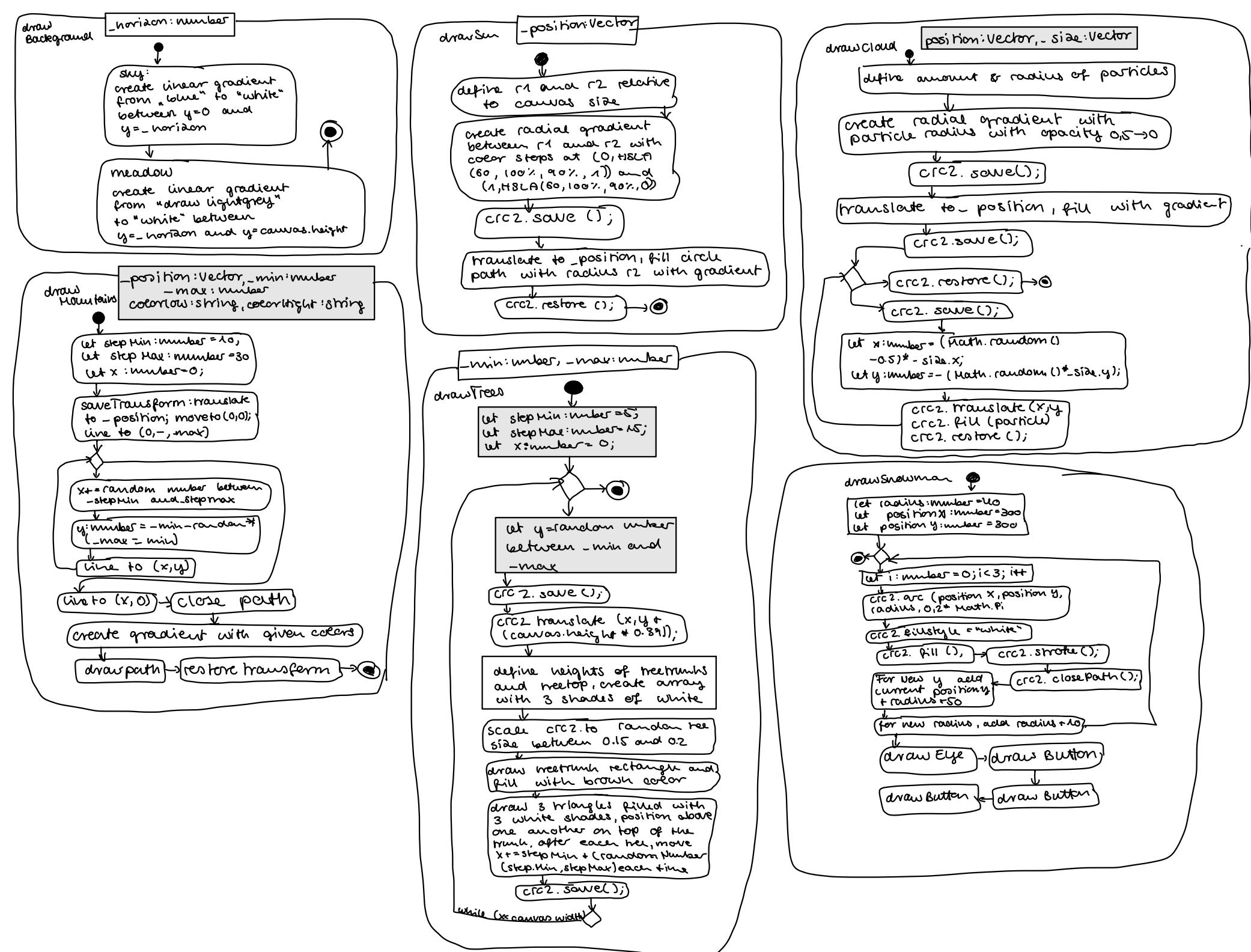
positionY: math.random * (200-20)+20

randomScale: math.random * (3-0,5+0,5)

```
crc2.moveTo(1, 0)
crc2.bezierCurveTo
  (8, -5, 15, -10, 20, -2)
crc2.moveTo(-1, 0)
crc2.bezierCurveTo
  (8, -5, -5, -10, 20, -2)
```

fill canvas





drawSnowflakes

```

let index: number = 0; index < 600; index++
let randomX: number = Math.floor(Math.random() * (1500 - 1) + 1)
let randomY: number = Math.floor(Math.random() * (700 - 1) + 1)
let randomScale: number = Math.floor(Math.random() * (4 - 1) + 1);
let r1: number = 1;
let r2: number = 2;
let gradient: canvasGradient

```

```

gradient.addColorStop(0, "HSLA(0,0%,100%,1)");
gradient.addColorStop(1, "HSLA(240,50%,90%,0)");

```

```
crc2.save();
```

```
crc2.scale(
    randomX, randomY);
```

```
crc2.arc(0, 0, r2, 0, 2 * Math.PI);
```

```
crc2.closePath();
```

```
crc2.restore();
```

-position: Vector

drawHouse

```

crc2.save();
crc2.translate();
crc2.fillStyle = "brown";
crc2.fill();
crc2.restore();
crc2.closePath();
crc2.save();
crc2.fillStyle = "black";
crc2.fill();
crc2.arc(0, -60, hole, 0, 2 * Math.PI);
crc2.closePath();
crc2.restore();

```

-position: Vector

drawbirdSitting

```

let positionX: number = 800;
let positionY: number = 310;

```

```
let radius2: number = 12;
```

```
draw bottom part of bird
```

```
crc2.fillStyle = randomColor();
```

```
let radius: number = 10;
```

```
draw head of bird
```

```
crc2.fillStyle = randomColor();
```

```
let radius3: number = 1;
```

```
draw eye on the head
```

```
draw beak of bird
```

```
draw leg
```

```
draw foot
```

-position: Vector

drawbirdflying

```

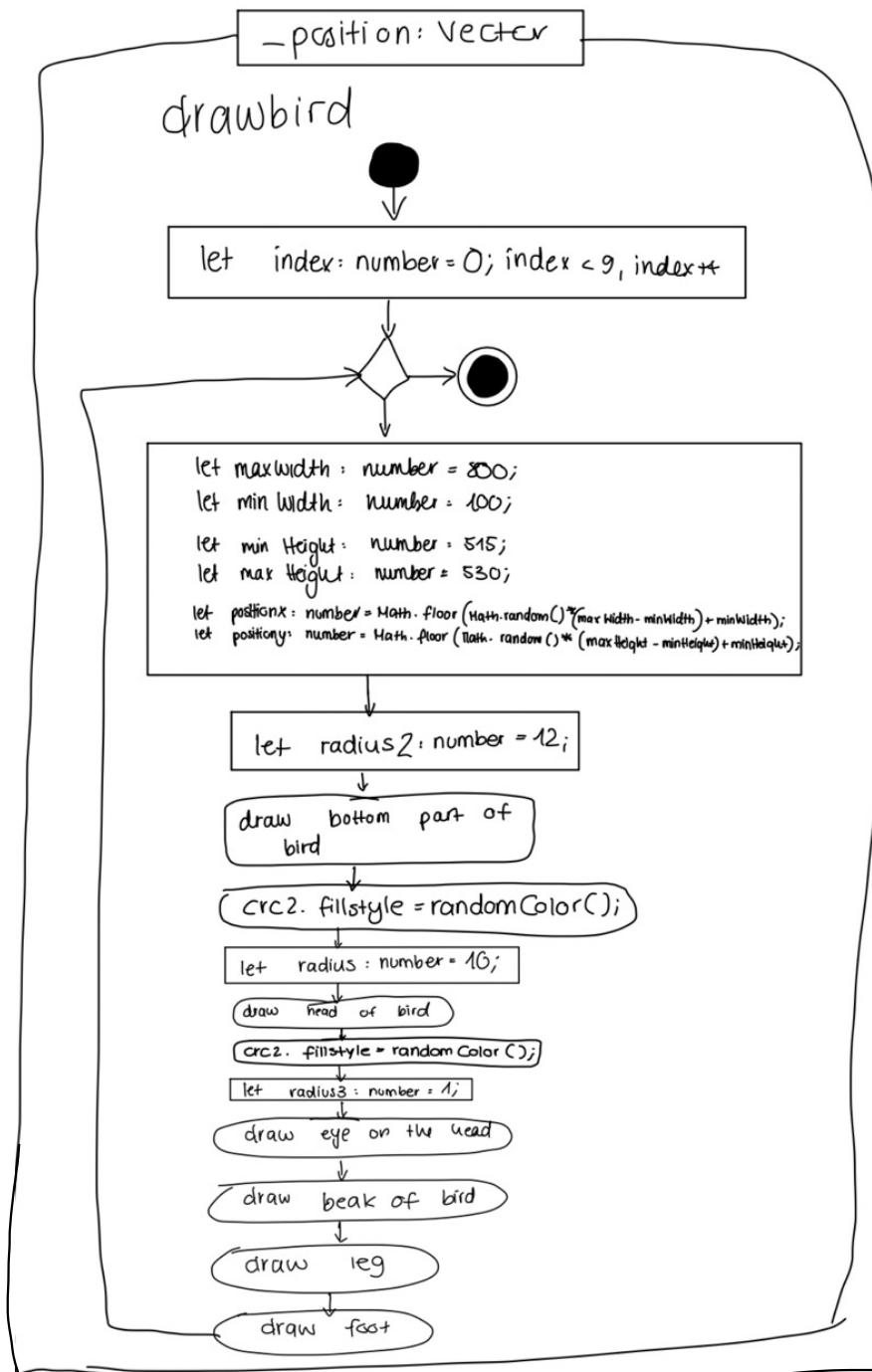
let index: number = 0; index < 15;
index++
let positionX: number = Math.floor(
    Math.random() * (900 - 40) + 40);
let positionY: number = Math.floor(
    Math.random() * (200 - 40) + 20);
let positionX2: number = Math.floor(
    Math.random() * (3 - 0.5) + 0.5);

```

```

if (positionX > positionX2) {
    Crc2.save();
    Crc2.translate();
    Crc2.scale();
    Crc2.bezierCurveTo();
    Crc2.stroke();
    Crc2.closePath();
    Crc2.restore();
}

```



random Color