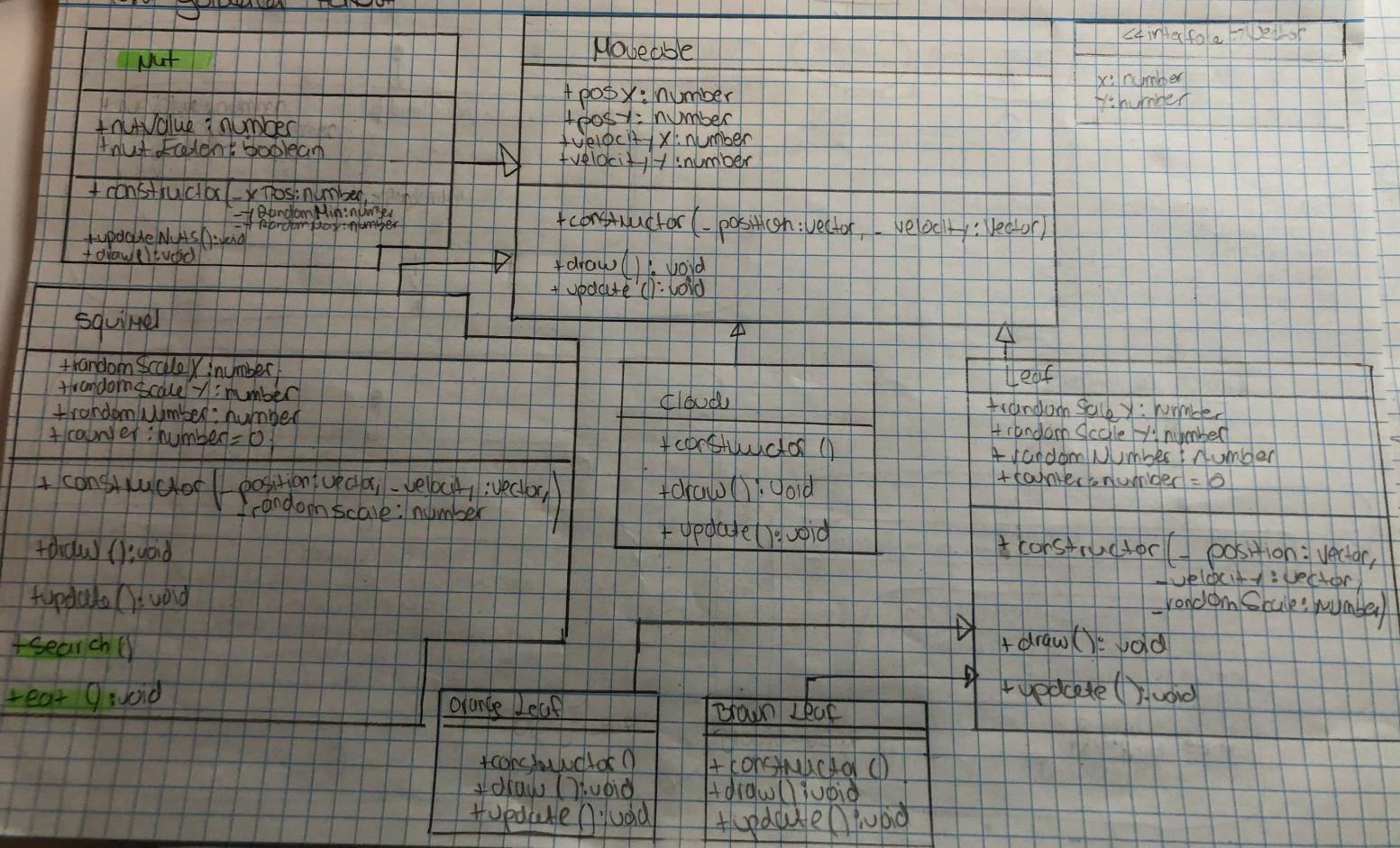


## AD) Squirrel

### 10.2 Goldener Herbst



AD Main

load

handle a load

click

clickNUT

```
let crc2: CanvasRenderingContext2D;  
let goldenCut: number = 0.62  
let leafs: Leaf[] = [];  
let squirrel: Squirrel[] = [];  
let image: ImageData = imageData;
```

install all listeners

handle  
load

```
let canvas: HTMLCanvasElement = document.querySelector(`#
```

```
    <HTMLCanvasElement>`);  
  
    crc2 = canvas.getContext("2d");  
    canvas.width = window.innerWidth;  
    canvas.height = window.innerHeight;  
    createBackground();  
    createLeafs();  
    createSquirrel();  
    createClouds();  
    imageData = crc2.getImageData(0, 0, 1, 1);
```

Create  
Cloud

```
moveable.push(newCloud({  
    x: crc2.canvas.width * x1,  
    y: crc2.canvas.height * y1 / 3,  
    x1, y1  
}));
```

\* 4

Create  
Background

```
let horizon: number = crc2.canvas.height * goldenCut;  
let posMountains: Vector = {x: 0, y: horizon};
```

drawBackground()

```
drawSun({  
    x: crc2.canvas.width * 0, 25,  
    y: crc2.canvas.height * 0, 93});  
drawMountains(posMountains, 7520, "brown", "grey");  
drawMountains(posMountains, 50, 150, "grey", "white");  
drawFoggyEnv(-30, -50, 0.6, 0.5);
```

## AD Main

createLeaves

nLeaf: number

index++

[index > nLeaf]

[index <= nLeaf]

```
let randomScaleY: number = 0.12 + Math.random() * (0.7 - 0, 0.1);  
let randomScaleX: number = randomScaleY;
```

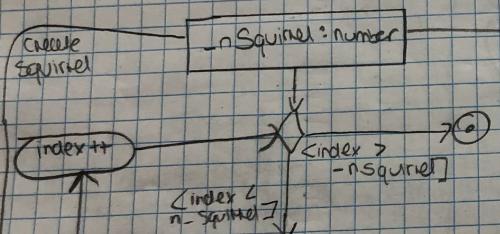
randomScaleX += Math.round(Math.random()) ? 1 : -1;

```
let randomVelocityX: Number = (Math.random() - 3) * 10,  
let randomVelocityY: number = (Math.random() - 3) * 10,
```

```
moveable.push(newLeaf({x: crcz.canvas.width, y:  
crcz.canvas.height * 0.2}, {x: randomVelocityX,  
y: randomVelocityY}, {x: randomScaleY, y: randomScaleY}))
```

AT) Squirrel

AT) Nut



```
let randomScaleY: number = 0.3 + Math.random() * (0.2 - 0.03);  
let randomScaleX: number = randomScaleY;
```

```
randomScaleX = Math.random() * Math.random() / 2 + 1;
```

```
let randomVelocityX: number = (Math.random() * 0.5) * 5;  
let randomVelocityY: number = (Math.random() - 0.5) * 5;
```

```
moveable.push(new Squirrel({x: crc2.canvas.width / 2,  
y: crc2.canvas.height * 0.8, x: randomVelocityX,  
y: randomVelocityY, randomScaleX,  
y: randomScaleY}))
```

nut.click

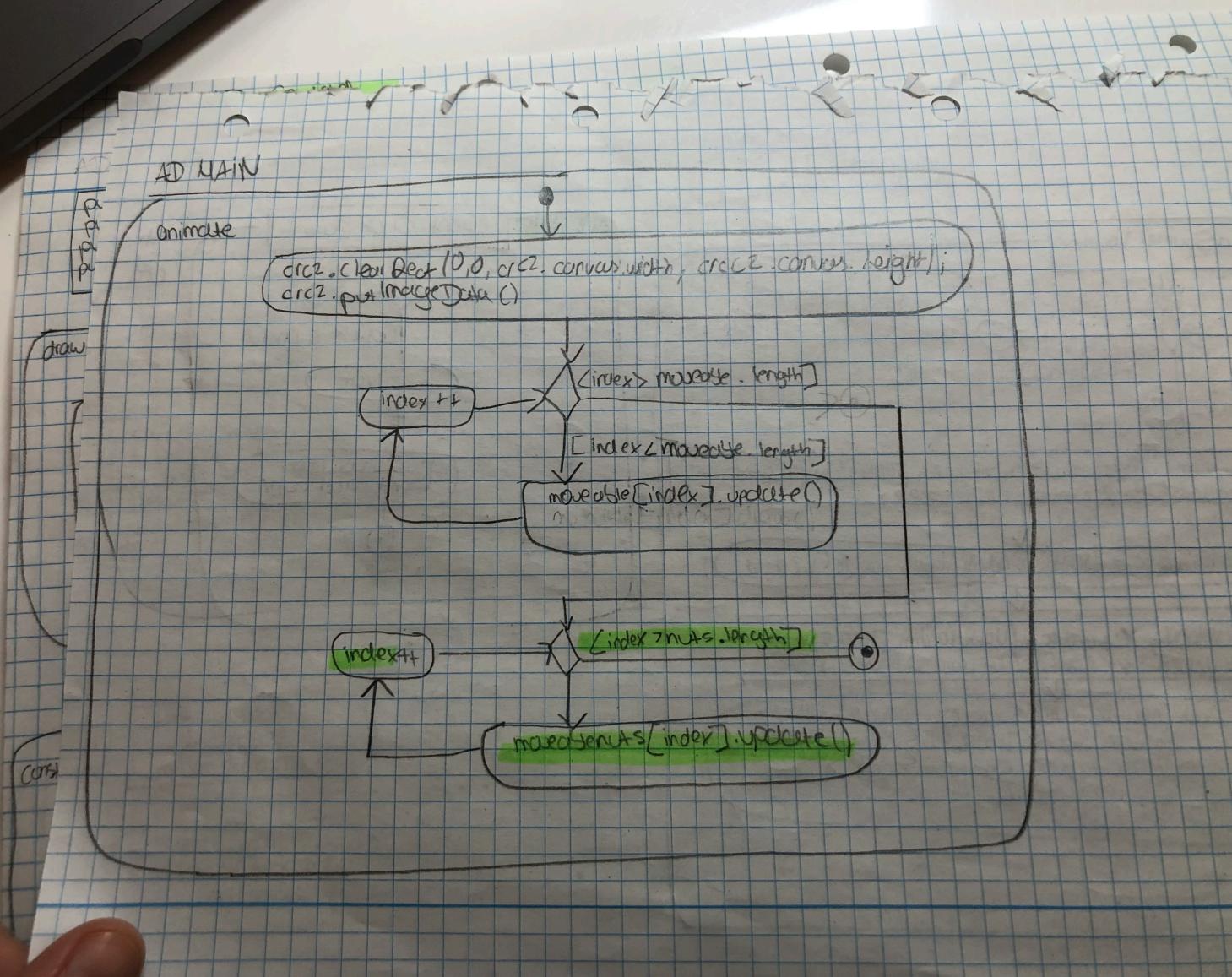
event: Click Event

End click

(click is done)

push Nut

Nut has been found and eaten



## AD Squirtle

```
public randomScaleX:number;
public randomScaleY:number;
public randomNumber:number;
public counter:number
```

draw

```
crc2.save();
crc2.translate(this.posX, this posY);
crc2.setScale(this.randomScaleX, this.randomScaleY);
drawing()
crc2.restore();
```

Constructor

```
-position:Vector
-velocity:Vector
-randomScale:Vector
```

```
Super(position, velocity)
this.randomScaleX = -randomScale.x
this.randomScaleY = -randomScale.y
```

update

```
[this.posX >
crc2.canvas.width]
this.posX += 10
```

```
this.velocityX =
this.velocityX +
```

```
[this.counter == this.randomNumber]
```

```
this.velocityX =
this.velocityX -
```

```
this.velocityY =
this.velocityY -
```

```
this.counter = 0
```

```
[randomNumber =
number = (Math.floor(
Math.random()) * 100) / 100]
```

```
this.posX += this.velocityX
```

```
this.posY += this.velocityY
```

```
counter++
this.draw();
```

### A) Leaf

```
public randomScaleX:number;  
public randomScaleY:number;  
public randomNumber:number;  
public counter:number
```

draw

```
crc2.save();  
crc2.translate(this.posX, this.posY);  
crc2.setScale(this.randomScaleX, this.randomScaleY);  
drawingOrangeLeaf(), drawingBrownLeaf();  
crc2.restore();
```

constructor

```
-position:vector  
-velocity:vector  
randomScale:vector
```

```
super(position, velocity)  
this.randomScaleX = -randomScaleX  
this.randomScaleY = -randomScaleY
```

update

```
[this.posX >  
crc2.canvas.width]||  
[this.posX < 0]
```

```
[this.velocityX =  
-this.velocityX]
```

```
[this.counter =  
this.randomNumber]
```

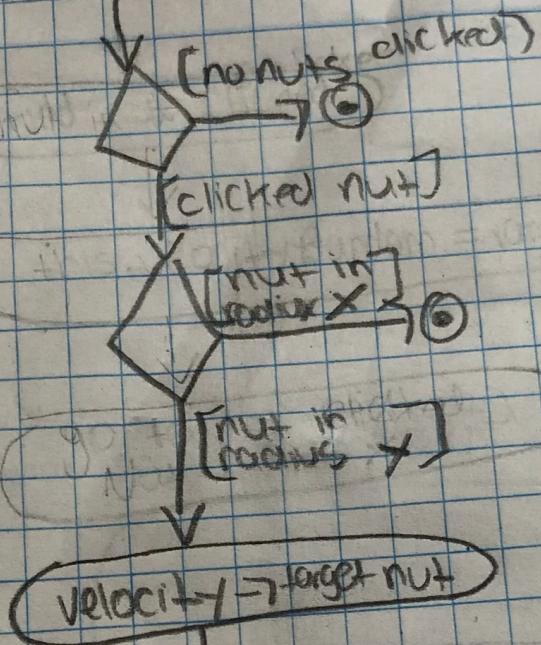
```
[this.velocityX =  
-this.velocityY,  
this.velocityY =  
-this.velocityX]
```

```
this.counter = 0
```

```
[randomNumber =  
number = (widthFor  
(width + random) * 800)  
500].
```

```
[this.posX += this.velocityX  
this.posY += this.velocityY  
counter++  
this.draw();]
```

FindNUTS



velocity = target nut

velocity 0.0  
eat nut

delete nut