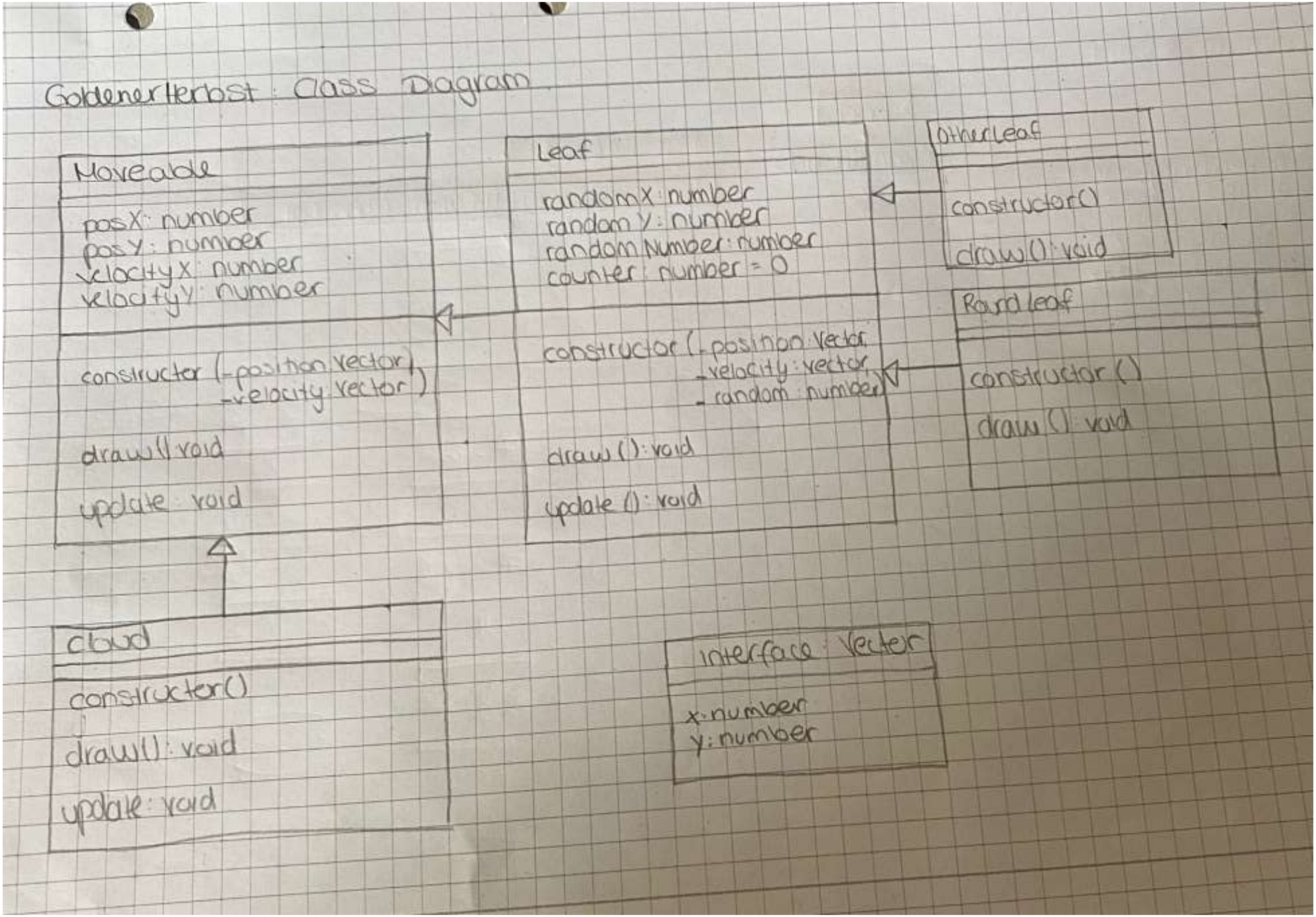
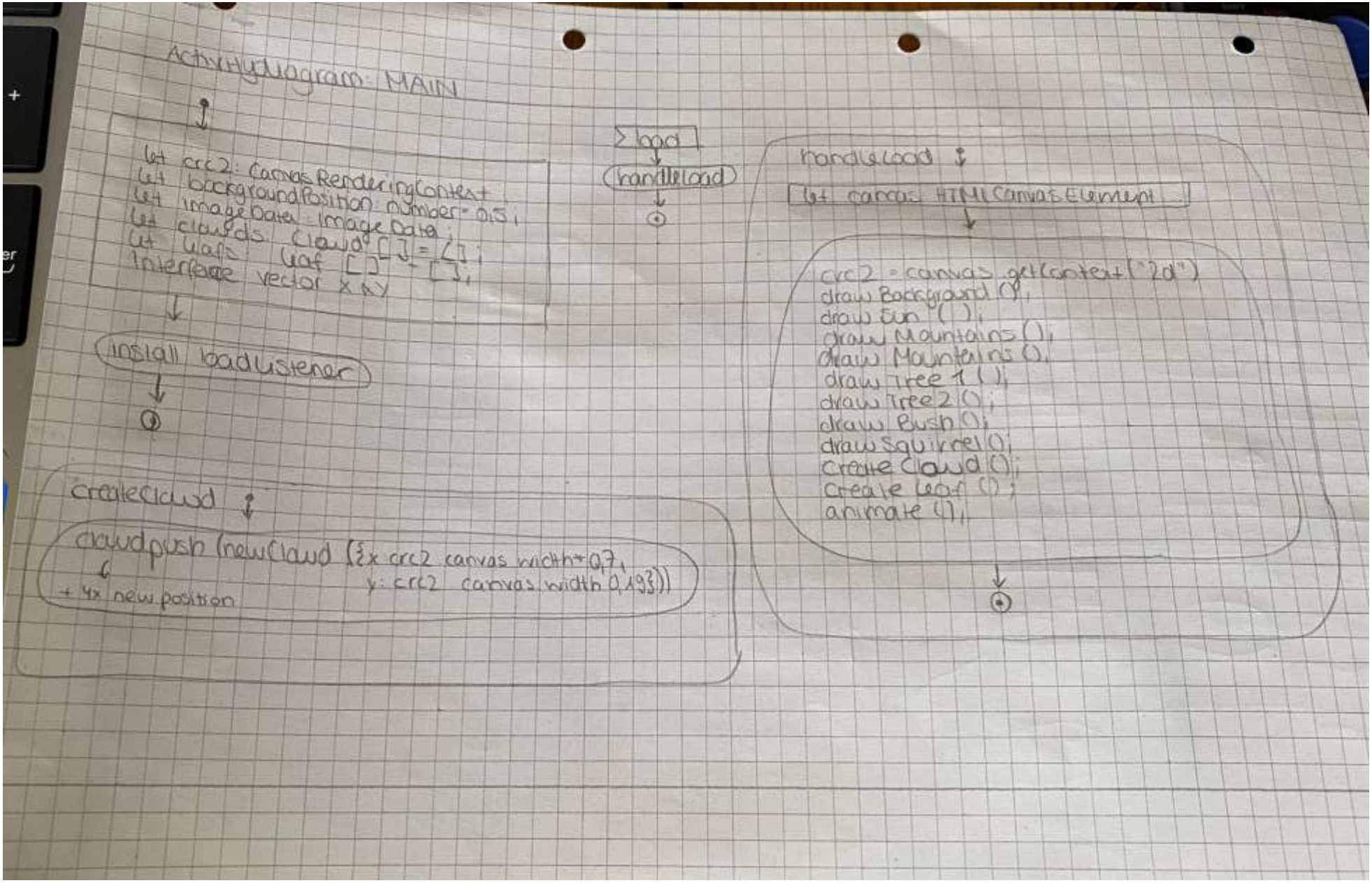
Goldener Herbst: Class Diagram





Activity diagram: MAIN

```
let crc2: CanvasRenderingContext
let backgroundPosition: number = 0,5;
let imageData: ImageData;
let clouds: Cloud[] = [];
let leafs: Leaf[] = [];
interface vector x & y
```

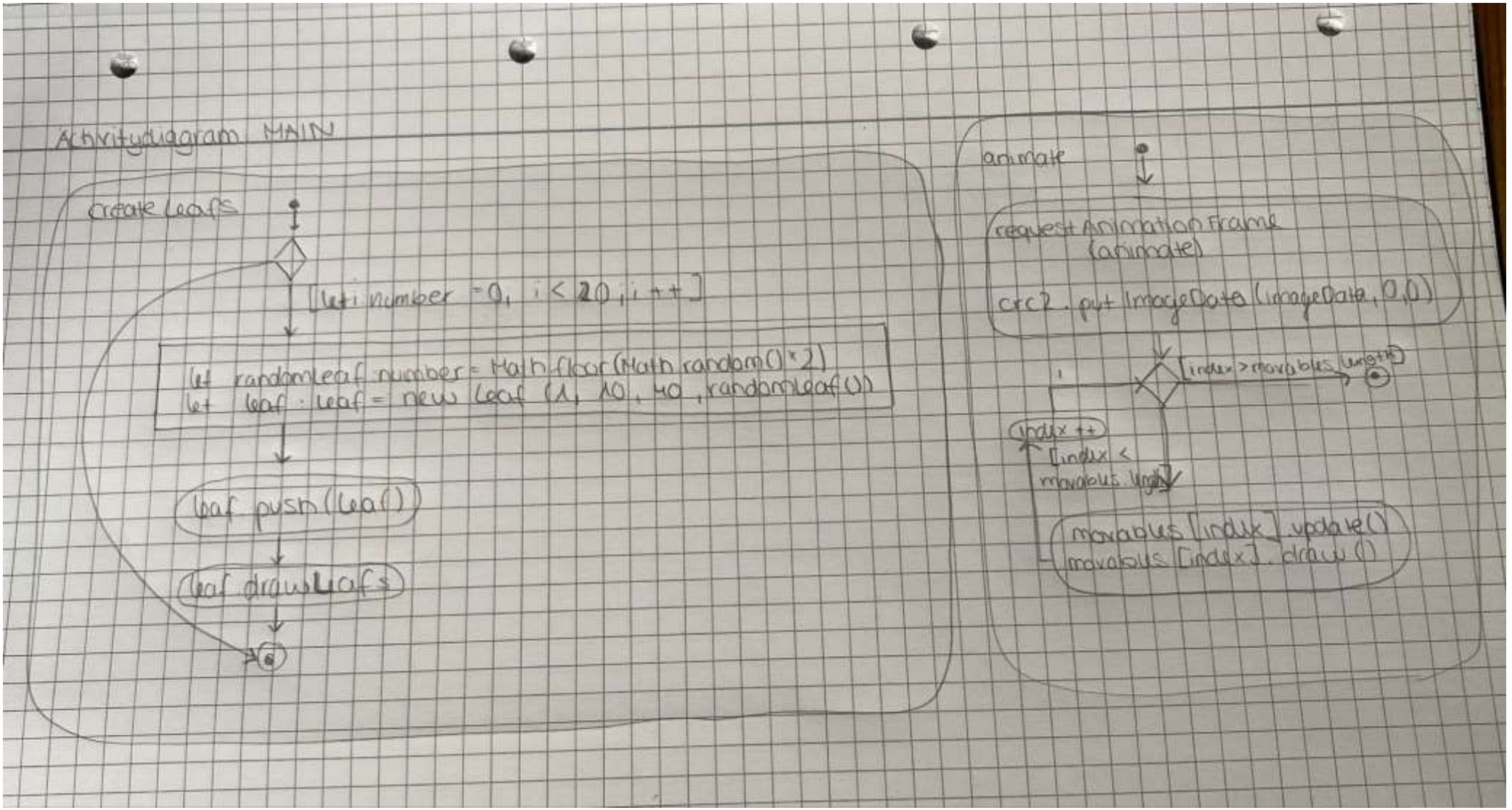
install loadListener

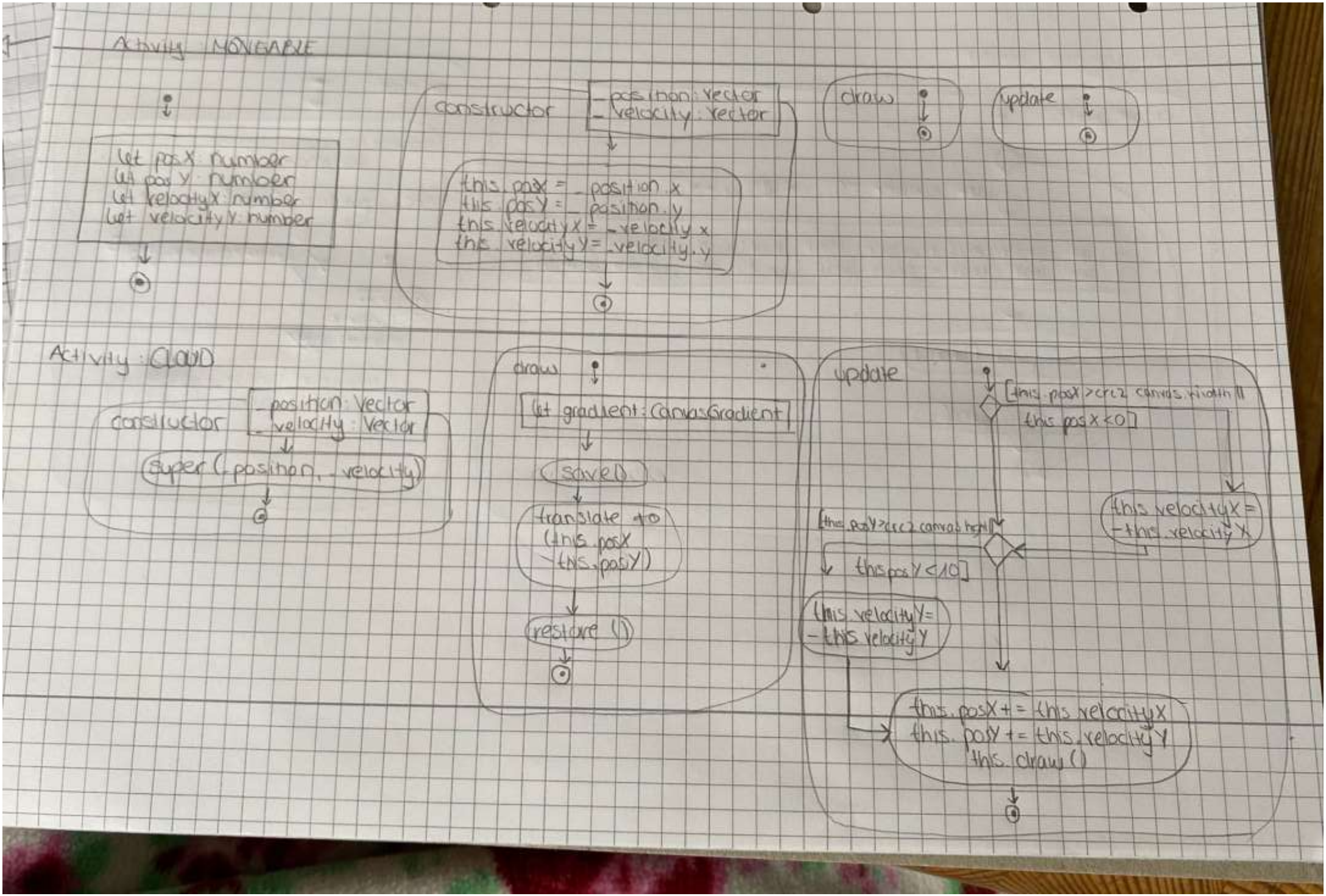
```
createCloud
cloudpush(newCloud({x: crc2.canvas.width * 0,7,
                    y: crc2.canvas.width 0,19}))
+ 4x new position
```

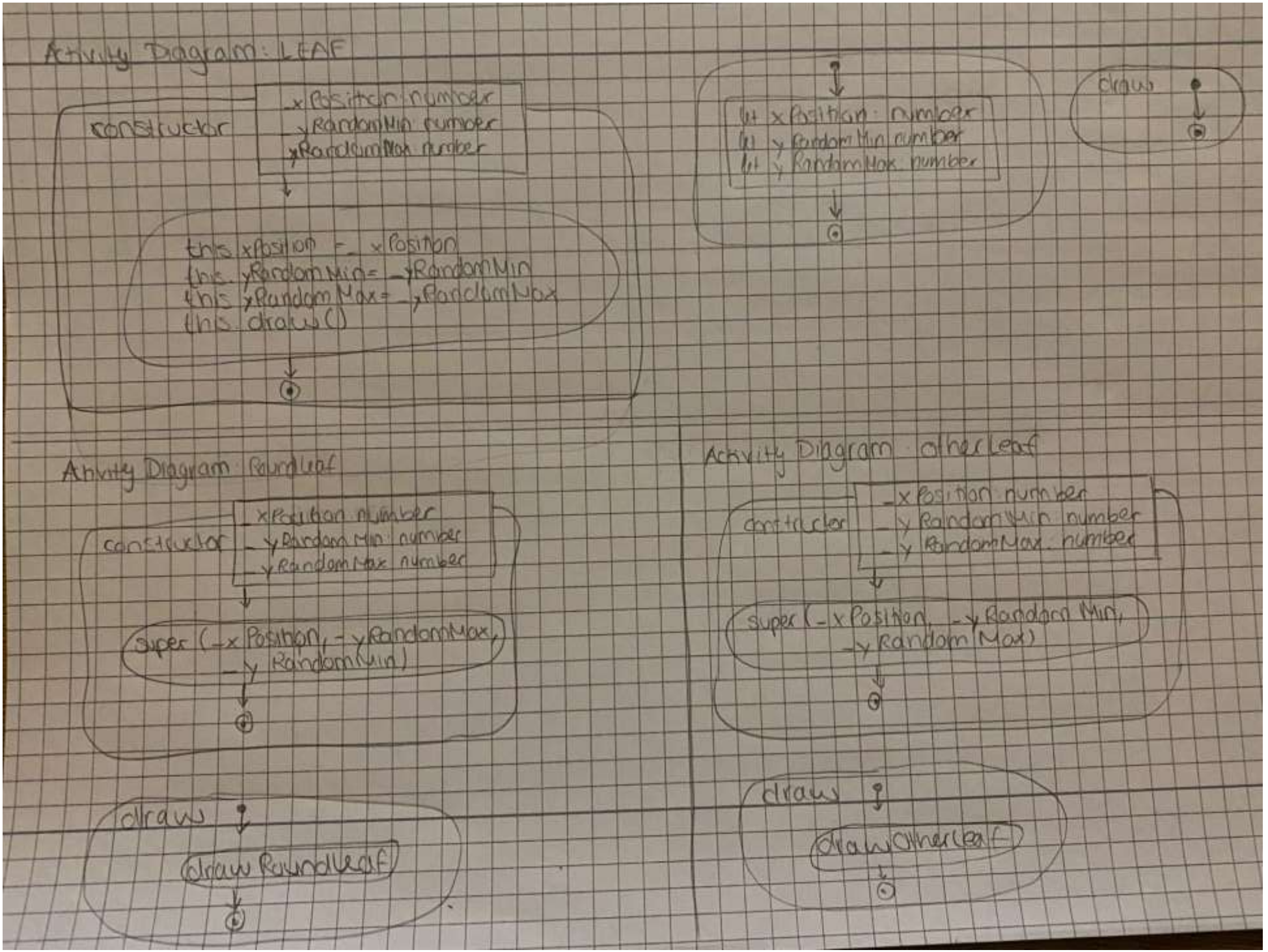
load

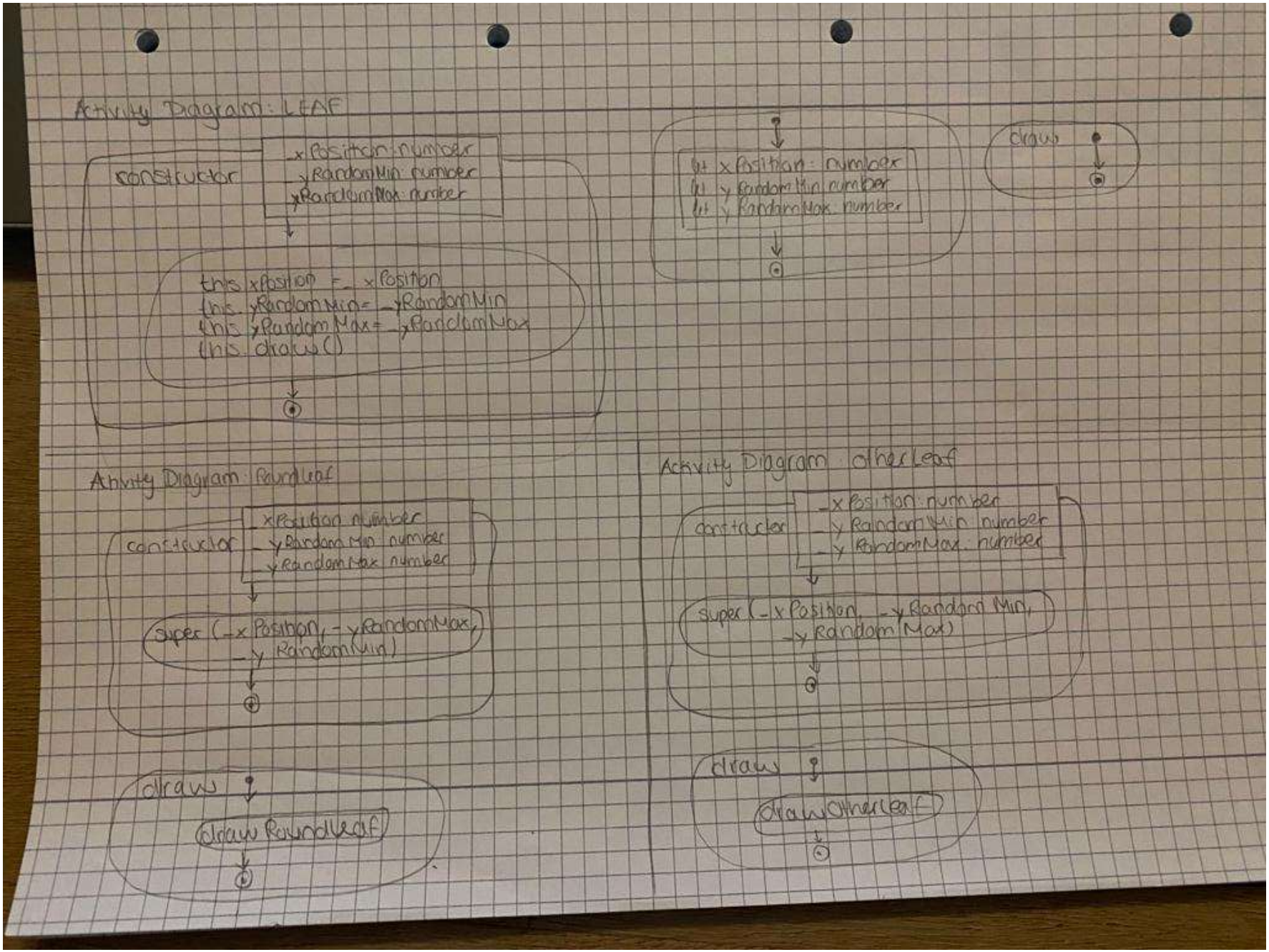
handleLoad

```
handleLoad
let canvas: HTMLCanvasElement
crc2 = canvas.getContext("2d")
drawBackground();
drawSun();
drawMountains();
drawMountains();
drawTree1();
drawTree2();
drawBush();
drawSquirrel();
createCloud();
createLeaf();
animate();
```


Activitydiagram MAIN
createLeafs
[let i number = 0, i < 20, i ++]
let randomLeaf number = Math.floor(Math.random()*2)
let leaf : Leaf = new Leaf (1, 10, 40, randomLeaf())
leaf.push(leaf())
leaf.drawLeafs
animate
requestAnimationFrame(animate)
crc2.putImageData(imageData, 0,0)
[index > movables.length]
index ++
[index < movables.length]
movables[index].update()
movables[index].draw()


Activity: MOVEABLE
let posX: number
let posY: number
let velocityX: number
let velocityY: number
constructor
_position: Vector
_velocity: Vector
this.posX = _position.x
this.posY = _position.y
this.velocityX = _velocity.x
this.velocityY = _velocity.y
draw
update
Activity: CLOUD
constructor
_position: Vector
_velocity: Vector
super(_position, _velocity)
draw
let gradient: CanvasGradient
save()
translate to (this.posX, this.posY)
restore()
update
[this.posX > crc2.canvas.width || this.posX < 0]
this.velocityX = -this.velocityX
[this.posY > crc2.canvas.height || this.posY < 10]
this.velocityY = -this.velocityY
this.posX += this.velocityX
this.posY += this.velocityY
this.draw()


Activity Diagram: LEAF
constructor
_xPosition: number
_yRandomMin number
_yRandomMax number
this.xPosition = _xPosition
this._yRandomMin = _yRandomMin
this.yRandomMax = _yRandomMax
this.draw()
let xPosition: number
let yRandomMin number
let yRandomMax number
draw
Activity Diagram: RoundLeaf
constructor
_xPosition number
_yRandomMin: number
_yRandomMax number
super(_xPosition, _yRandomMax, _yRandomMin)
draw
drawRoundLeaf
Activity Diagram: otherLeaf
constructor
_xPosition number
_yRandomMin number
_yRandomMax number
super(_xPosition, _yRandomMin, _yRandomMax)
draw
drawOtherLeaf


Activity Diagram: LEAF
constructor
-xPosition: number
-yRandomMin: number
-yRandomMax: number
this.xPosition = -xPosition
this.yRandomMin = -yRandomMin
this.yRandomMax = -yRandomMax
this.draw()
+xPosition: number
+yRandomMin: number
+yRandomMax: number
draw
Activity Diagram: RoundLeaf
constructor
-xPosition: number
-yRandomMin: number
-yRandomMax: number
super(-xPosition, -yRandomMax, -yRandomMin)
draw
drawRoundLeaf
Activity Diagram: otherLeaf
constructor
-xPosition: number
-yRandomMin: number
-yRandomMax: number
super(-xPosition, -yRandomMin, -yRandomMax)
draw
drawOtherLeaf