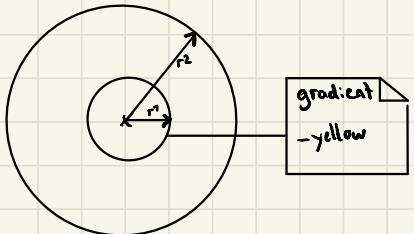
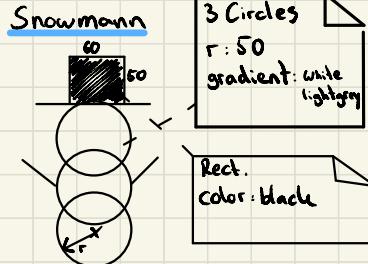


## SUN



gradient  
- yellow

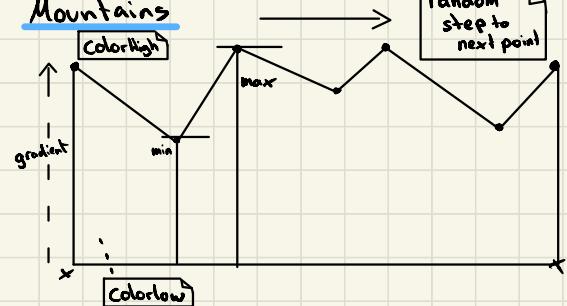


Snowmann

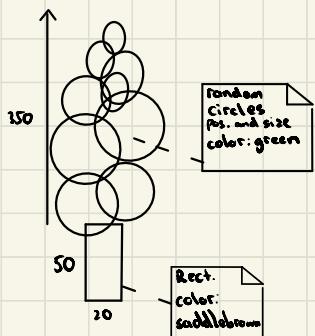
3 Circles  
 $r: 50$   
gradient: white  
lightgray

Rect.  
color: black

## Mountains



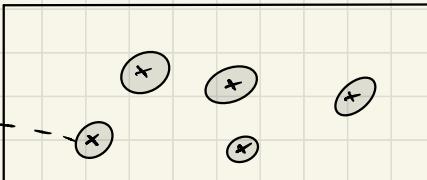
## Tree



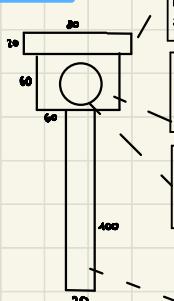
Random  
Circles  
Pos. and size  
color: green

## Snow flakes

particles  
random  
position



## Birdhouse



Rect.  
color:  
saddlebrown

Rect.  
color:  
burlybrown

Circle  
 $r: 15$   
color:  
black

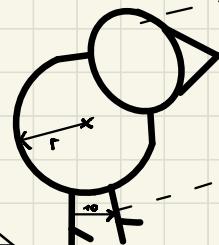
Rect.  
color:  
saddlebrown

## Flying Birds



stroke black  
2 Bezier  
scale: random

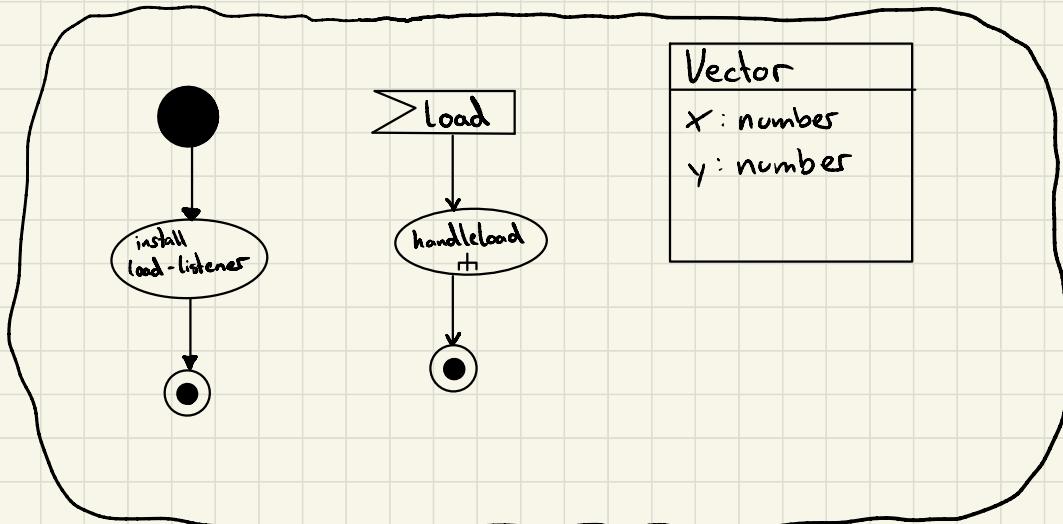
## Bird



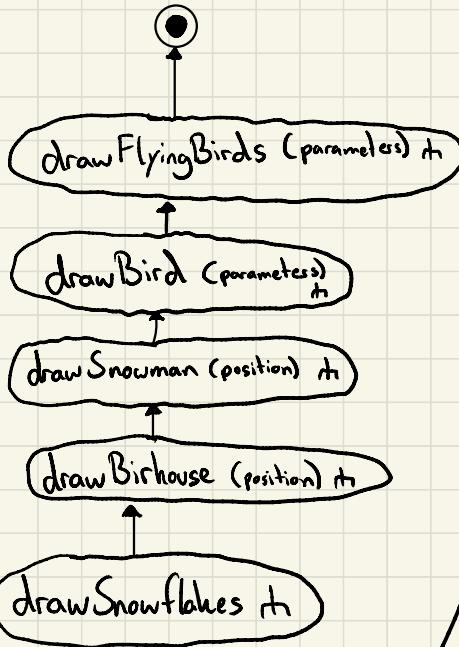
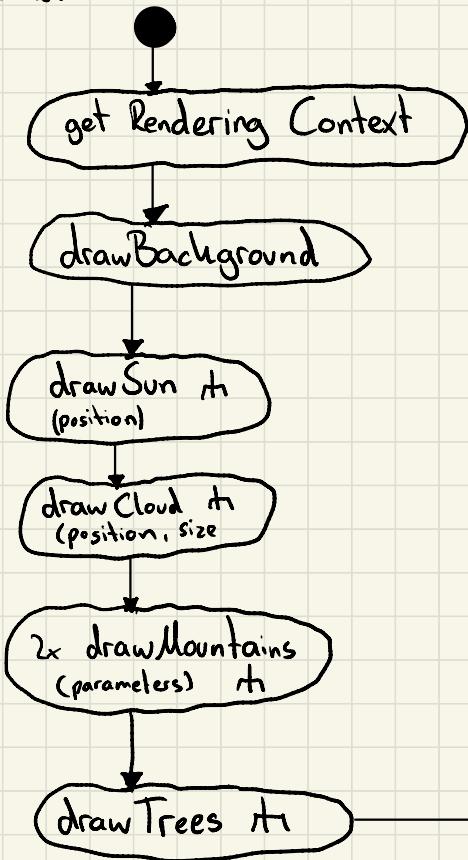
Leg  
height: 20  
color: black

2 Circles  
color: random  
 $r: 20$

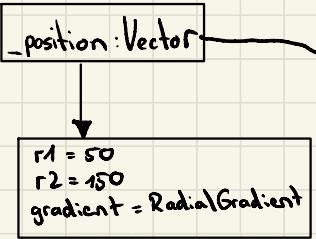
# Activity-Diagram: Vogelhaus



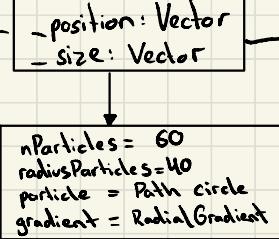
# handleLoad



drawSun



drawCloud



$x = (\text{random} - 0,5) \cdot \text{size.x}$   
 $y = \text{random} \cdot \text{size.y}$

translate x, y

drawParticle

restore transform

# draw Mountains

-position: Vector  
-min : number  
-max : number  
-colorLow: string  
-colorHigh: string

stepMin: number = 30  
stepMax: number = 50  
x : number = x

Save transform

translate position

MoveTo (0,0)

LineTo (0, -max)

x += random between  
StepMin and stepMax

y: number = -min - Math.random(\_max - \_min)

LineTo (x, y)

LineTo (x, 0)

closePath

create gradient  
with given colors

restore transform  
drawPath

[x < canvas.width]

drawTrees

Console "Trees"



drawSnowflakes

console "Snowflakes"



# draw Tree

-position: Vector

nBranches = 60  
maxRadius = 30  
branch = Circle with maxRadius

draw Trunk

translate position

[drawn < nBranches]

restore transform

$y : \text{random } 0 \text{ to } 350$   
 $\text{size: } 1 - y / 700$   
 $x : \text{random } -\text{maxRadius} \text{ to } +\text{maxRadius}$

Save transform

translate (600, 0)  
scale size  
translate (x, 350)

pick random Color  
between darkgreen  
and green

draw Branch

-position: Vector

draw Snowmann

```
radius = 50  
snowball1 = Circle  
snowball2 = Circle  
snowball3 = Circle  
gradient = RadialGradient  
pupils = Circle
```

Set colorstops  
white to lightgrey

Save transform

translate position

draw Snowball1

restore transform

Close Path

Save transform

draw Snowball2

restore transform

close Path

Save transform

draw Snowball3

restore transform

close Path

draw hat

translate position

Restore transform

draw Pupils

translate position

restore transform

close Path

draw Pupils

translate position

restore transform

close Path

draw Nose

translate position

restore transform

draw Arm (l)

translate position

restore transform

draw Arm (r)

translate position

restore transform

close Path



draw Birdhouse

-position: Vector

circle: Circle

beginPath

draw Stick

close Path

save transform

draw House

close Path

draw roof

close Path

draw Hole

close Path



restore transform

translate position

draw Bird

drawBird

Console "Bird"



draw Flying Birds

console "Flying Birds"



RandomNumber

- min: number  
- max: number

returnNumber: number = Math.floor(Math.random() · (-max - -min)) + \_min

Return returnNumber

