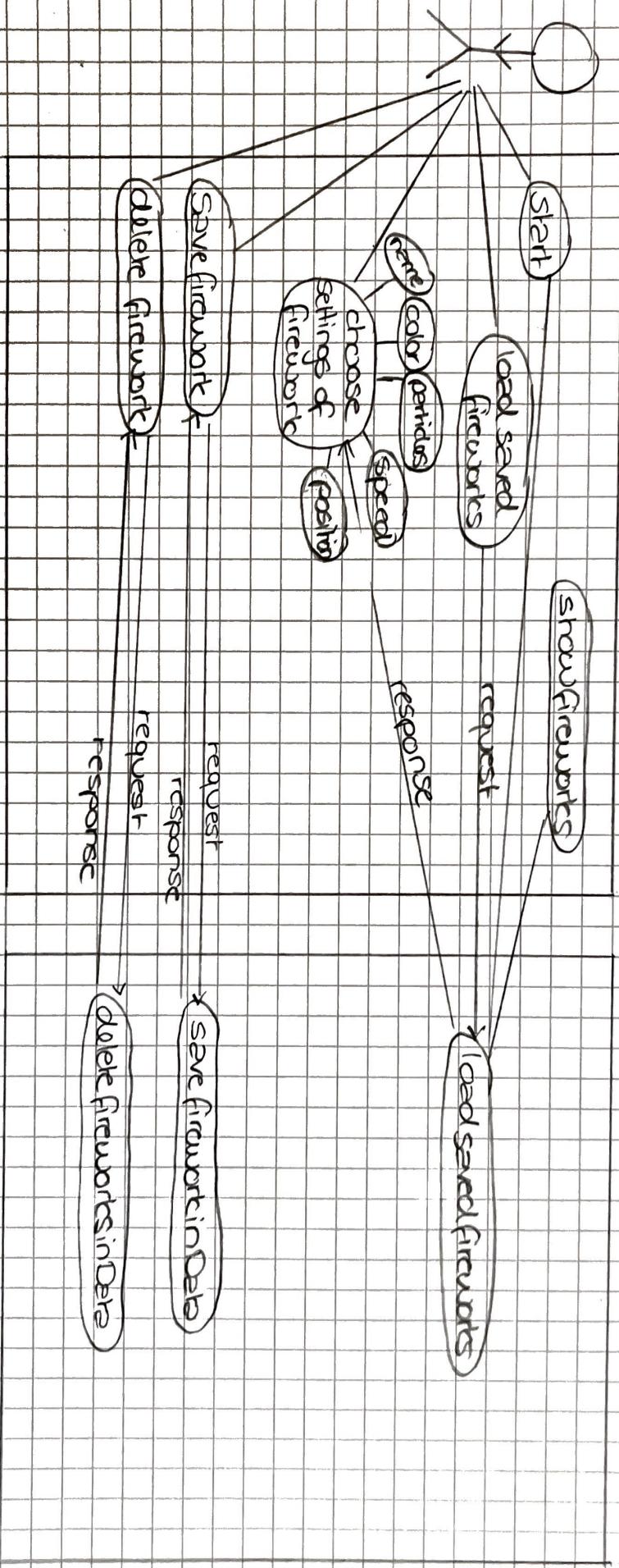


Use Case Diagram



class Diagramm

Firework

particles: Particle
createdParticles: boolean
particleConfig: particleConfig
counter: number
arc2: canvasRenderingContext2D
color: string
numberofParticles: number
position: Vector
speed: number

constructor (config: FireworkConfig,
particleConfig: ParticleConfig)

draw()
update()

Vector

x: number
y: number

constructor (-x, -y)
set (-x, -y)
scale (factor: number)
add (addend: vector)
random (-minLength: number,
maxLength: number)
copy (): vector

Particle

alive: boolean
lifetime: number
position: vector
velocity: vector
crc2: canvasRenderingContext2D
color: string
size: number

constructor (config: ParticleConfig,
position: vector,
startVelocity: vector)

update()
draw()

11

J

Activity Diagram

vector

ser

```
[x: number  
y: number]
```

constructor

```
[x: number  
y: number]
```

scale

```
[factor: number]
```

```
this.set(x, y)
```

```
this.x *= factor;  
this.y *= factor;
```

add

```
[addend: vector]
```

```
random [minLength: number  
maxLength: number]
```

```
this.ser(Math.cos(direction),  
Math.sin(direction));
```

```
this.scale(length)
```

copy

```
[return]
```