

Klassen diagramm

Crc2

Moveable

- position: Vector
- velocity: Vector
#expendable: boolean

constructor(position?: Vector)
+ move(-timeslice: number): void
+ draw(): void
+ isHitBy(-partner: Moveable): boolean
- hit(): void

Virus

- type: number
+ size: number

constructor(size: number, position: Vec)
+ draw

Antibody

- speed: number

constructor()
+ move(timeslice: number)
+ draw(): void

Vector

+ x: number
+ y: number
+ length: number

constructor(-x: number, -y: number)
+ set(-x: number, -y: number): void
+ scale(-factor: number): void
+ add(-addend: Vector) - ...
+ copy(): Vector
+ getRandom(min: number, max: number): Vector
+ getDifference(V0: Vec, V1: Vec)
+ getSum(V0: Vec, V1: Vec)
+ * + Scaled(V: Vec, scale: number)

Moveable : AD

constructor -position?; vector



set position to
-position or (0,0)



set velocity to (0,0)

draw



move

-timeslice in number



add velocity - timeslice
to position



[position component
< 0]

[position component
> canvas dimension]



add canvas -
dimension to
component

subtract canvas -
dimension from
component



Virus: AD

Constructor

size: number
- position: ? vector

Super(-position)

Set velocity to random
direction and random length
 $> \text{min}$ $< \text{max}$

randomly choose type

Set size to _size



move

add velocity to position to
get new position

[position.x > width
< 0]

[position.y > height
< 0]

if random < 0.5
bounce off left
component

if random < 0.5
bounce off right
component



draw

save transform

transform to position

scale to size

draw path representing
type

restore transform

