```
> pointerdown
```

create Babyduck ↑

○

CreateBabyduck
↓
wurde Bd geklickt = false
↓
set click Koordinaten
↓
Duck aus moveables holen
↓
Bd clicked = true
↓
create Babyduck
↓
Bd clicked = false
↓
create Food
↓
choose closest
Duck

Constructor

super (-x, -y, _color)

activity : string

set state
(idle, moving to food, eating, returning = idle)

draw

save

begin Path

translate (this.x, this.y)

fill duck with color

draw ellipse

close Path

restore

move

checking state of Duck

calculating distance

sets speed

change state

eating

returning

back to idle state

super. move as default

Constructor

super (-x, -y, _color)

move

set direction

reset position:
this.x > canvas.width

draw

save

begin Path

translate (this.x, this.y)

fill with color

draw ellipse

close Path

restore

Activity Diagram : Babyducks

constructor

constructor

↓

super(_x,_y,_color)

draw

draw

↓

save

↓

begin Path

↓

translate (this.x, this.y)

↓

scale (0.5 , 0.5)

↓

fill with color

↓

draw ellipse

↓

close Path

↓

restore

Activity Diagram : Food

size : number

constructor

↓

set size

↓

color : string

constructor

↓

set color

↓

draw

draw

↓

save

↓

beginPath

↓

translate

↓

fill

↓

draw arc

↓

close Path

↓

restore

Klassendiagramm:

Food
size: number color: string
constructor () draw ()

assignclosestDuck

↓

search closest Duck
in moveables

↓

checks state of
Duck

↓

set closest Duck
as target