Programming

Yuhuiii, we hit the can. This gives us 1 point.

The can hops when it gets hit.

```
When I receive hit
change points by 1
point in direction pick random 1 to 360
set y to y position + 100
change x by pick random -50 to 50
if direction < 90 then
    change x by -1 * direction / 90
else
    change x by direction / 90
```

```
when I receive GameOver
hide
stop other scripts in sprite
```
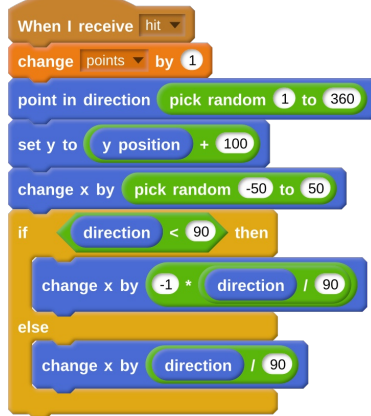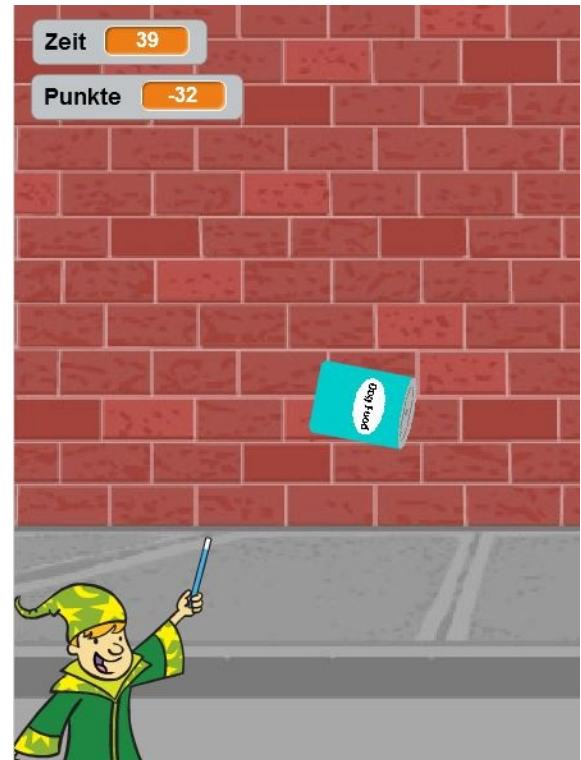
On GameOver, the game is finished.

Next steps

- Change points or speed.
- Let the wizard move around.
- Sometimes the can is small and sometimes big.
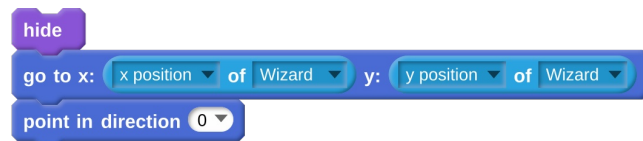
CoderDojo Zürich
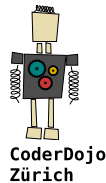
Shooting cans

Try to shoot down the cans with a lightning as many times as possible.

Programming

When the lightning misses the target, it goes back to the wizard.

```
hide
go to x: x position of Wizard y: y position of Wizard
point in direction 0
```

After receiving GameOver message, the game is finished.

```
when I receive GameOver
hide
stop other scripts in sprite
```
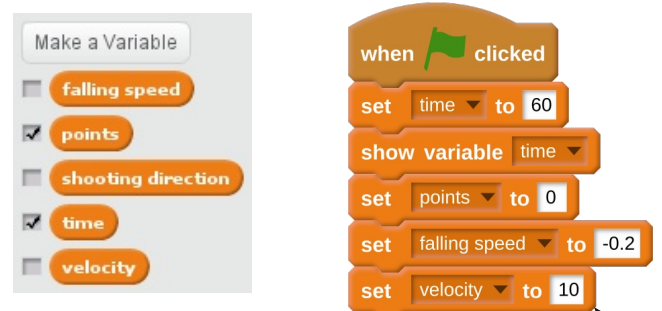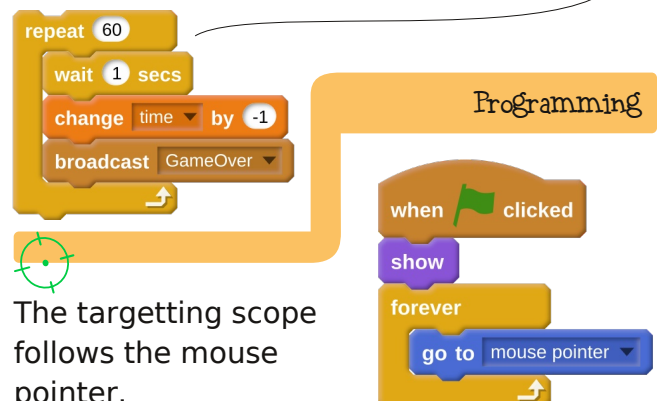
Next steps

– The wizard jumps up when the can is hit.
– The wizard says "hit"
– The lightning changes to fire when it hits the can.
– A music plays or an explosion is heard.

Programming

When clicking on the green flag, we set the time, velocity, points and much more.

```
Make a Variable
☐ falling speed
☑ points
☐ shooting direction
☑ time
☐ velocity
```

```
when [flag] clicked
set time to 60
show variable time
set points to 0
set falling speed to -0.2
set velocity to 10
```

Then we start the countdown clock that goes from 60, 59, 58 down to 0.

```
repeat 60
    wait 1 secs
    change time by -1
broadcast GameOver
```

Programming

```
when [flag] clicked
show
forever
    go to mouse pointer
```

The targetting scope follows the mouse pointer.

Shooting cans

Aim at the can. Click the mouse button to shoot a lightning at the can

When you hit the can, then you receive one point.

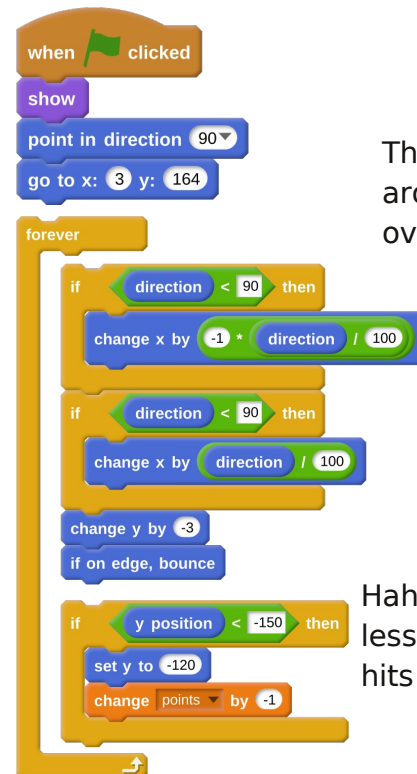Within 60 seconds hit as many cans as possible.

You will need for the game:
- a can,
- something to aim with,
- a wizard and a lightning,
- and a cool background.

Pick the sprites from the library or draw them yourself.

Click on the green flag and the targetting scope will follow the mouse pointer.

Programming

```
When this sprite clicked
broadcast  shooting
```

```
When I receive  Game Over
hide
stop  other scripts in sprite
```

When the game is over, everything stops.
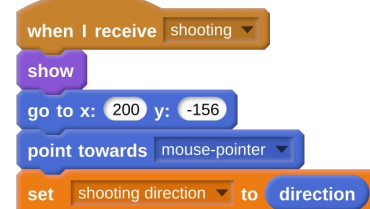
Programming

```
when [flag] clicked
hide
go to x: -200 y: -144
go to front
show
```
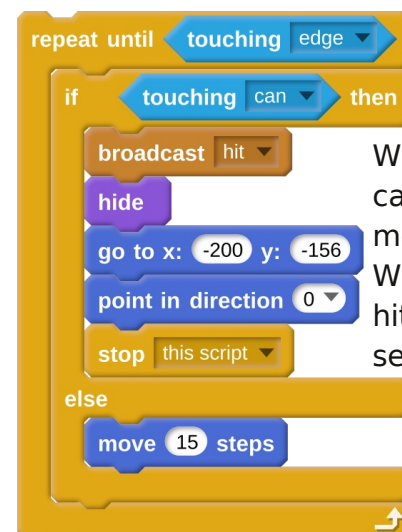
We are putting the wizard in the corner of the screen

Programming

First show the can on the screen

```
when [flag] clicked
show
point in direction 90
go to x: 3 y: 164
forever
  if  direction < 90  then
    change x by  -1 * direction / 100
  if  direction < 90  then
    change x by  direction / 100
  change y by -3
  if on edge, bounce
  if  y position < -150  then
    set y to -120
    change points by -1
```

The can bounces around. Over and over again.

Hahaha, 1 point less when the can hits the floor

Programming

```
when I receive  shooting
show
go to x: 200 y: -156
point towards  mouse-pointer
set  shooting direction  to  direction
```

The lightning starts at wizard's position and moves towards pointer

```
repeat until  touching edge
  if  touching can  then
    broadcast  hit
    hide
    go to x: -200 y: -156
    point in direction 0
    stop  this script
  else
    move 15 steps
```

When we miss the can, the lightning moves to the edge. When the lightning hits the can, we send a message.