

Level 4

Scratch Card - Movement



These projects are for use outside the UK only. More information is available on our website at <http://www.codeclub.org.uk/>. This coursework is developed in the open on GitHub, <https://github.com/CodeClub/> come and join us!



Activity Checklist



As your monster will be made up of lots of **sprites** you will need to make sure that all sprites move together at once. Rather than adding move commands to all your sprites you can simply attach your controls to your body sprite and use `broadcast` to control any other sprite. When our **Tentacle sprite** (or any other sprite for that matter!) receives a `moved right` broadcast, we can move it to the right too.

on Ghost Body

```
when right arrow key pressed
change x by moveSpeed
broadcast moved right
stop this script
```

```
when left arrow key pressed
change x by moveSpeed * -1
broadcast moved left
stop this script
```

on Tentacle

```
when I receive moved right
change x by moveSpeed
stop this script
```

```
when I receive moved left
change x by moveSpeed * -1
stop this script
```



Using `broadcast` also means if we want to change the way our movement commands work, we only have to change one set of scripts. **Have a look at this example:**

on Ghost Body

```

when right arrow key pressed
  change x by moveSpeed
  point in direction 90
  if on edge, bounce
  if not touching edge ?
    broadcast moved right
    broadcast moved
  stop this script

```

```

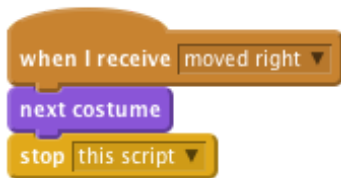
when left arrow key pressed
  change x by moveSpeed * -1
  point in direction -90
  if on edge, bounce
  if not touching edge ?
    broadcast moved left
    broadcast moved
  stop this script

```

- Here we're telling the body to face the direction it is moving (make sure your sprite orientation is set to **"only face left-right"**) and to stop and turn around if it collides with the edge of our screen. You will have also noticed that we have wrapped our broadcast in an **if** block, we only want the other body parts to move if the body isn't on the edge of the screen.

If you decide to add any animation to the movement, make sure that any associated movements take just as long. i.e. if moving a leg to the left takes 1 second due to an animation, all other left movements must take 1 second too (use a **wait block to make sure they're all in step).**

- You can also animate your body sprite using **costume** changes, by triggering the change every time a movement broadcast is received.



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