

SCRATCH



+

LEAP  
MOTION



=

A lot of fun!

# About SCRATCH

Scratch is a **programming language**

You can create:

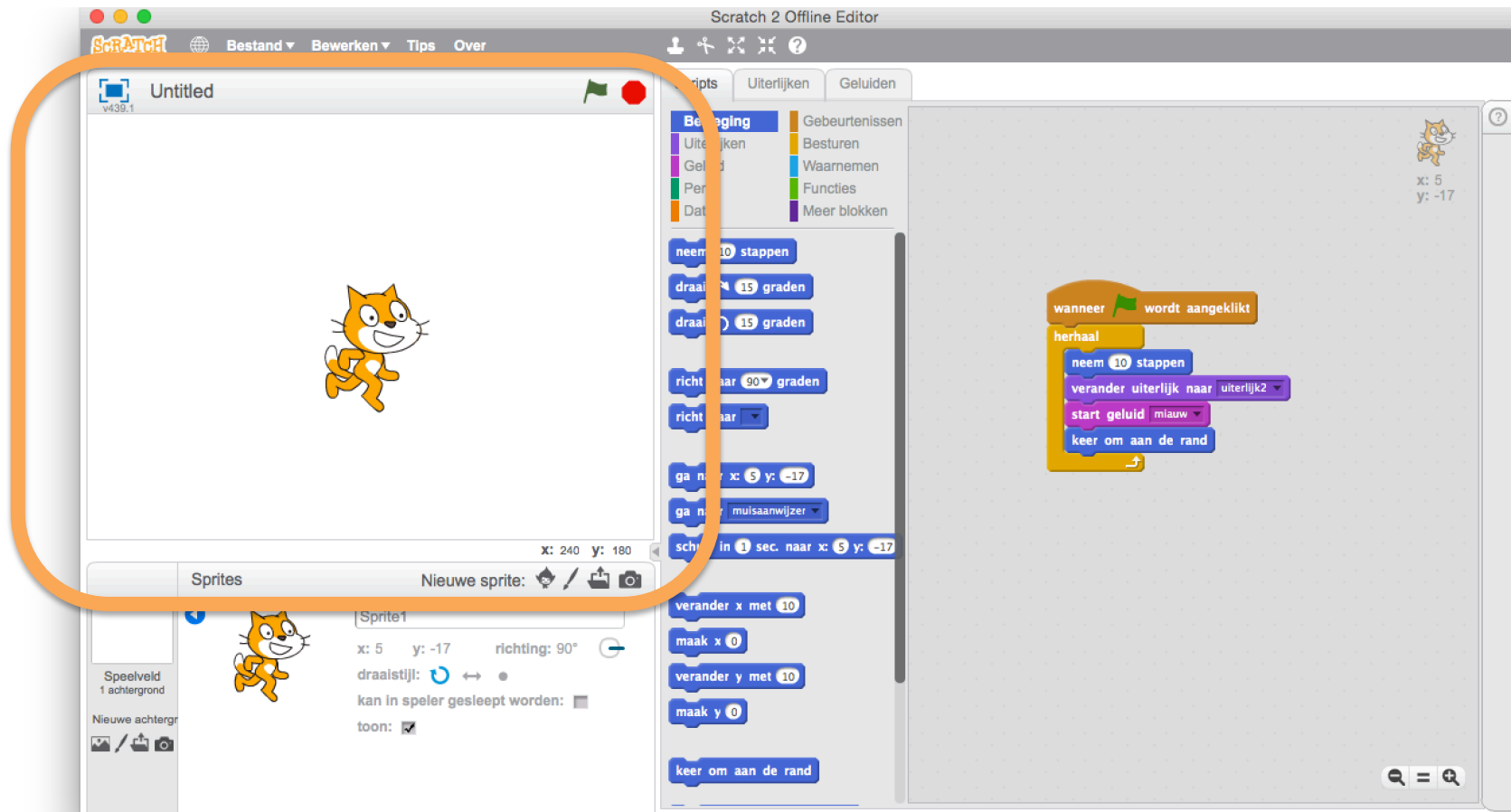
- Interactive stories
- Animations
- Games
- Music
- ...

# The art of programming

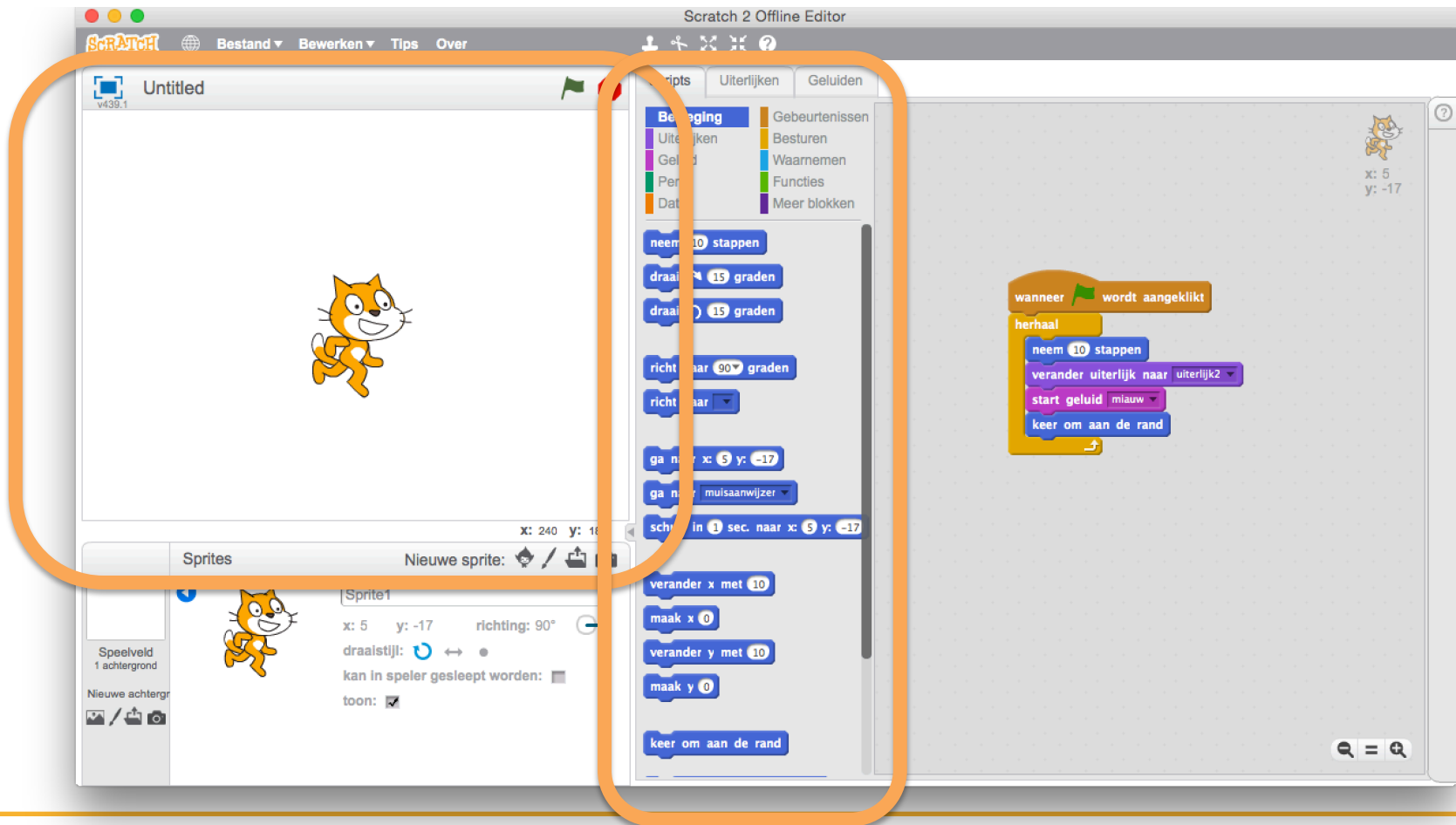
- a program instructs the computer to do stuff
- Add simple instructions together and..

magic happens (we hope...)

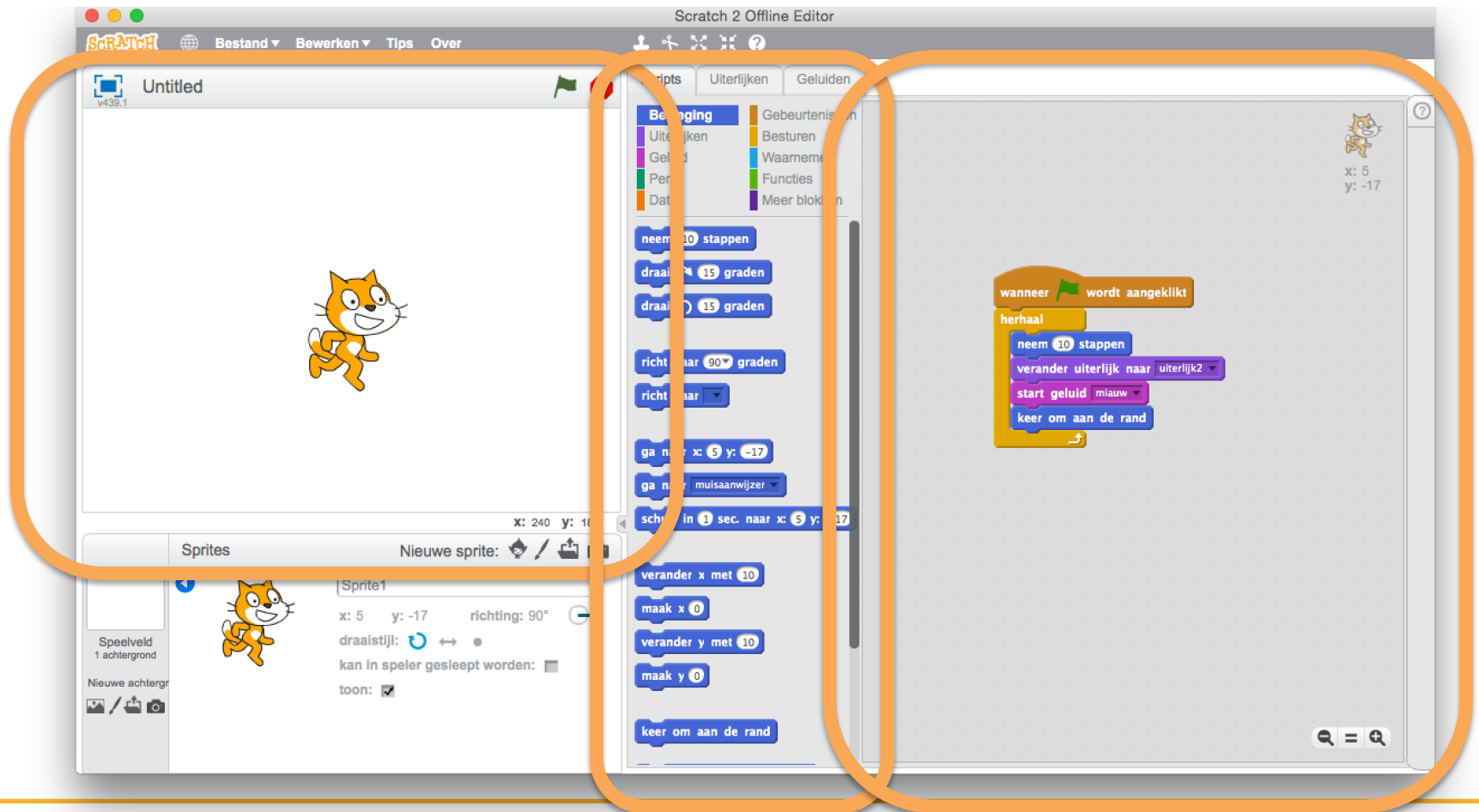
# How? with building blocks



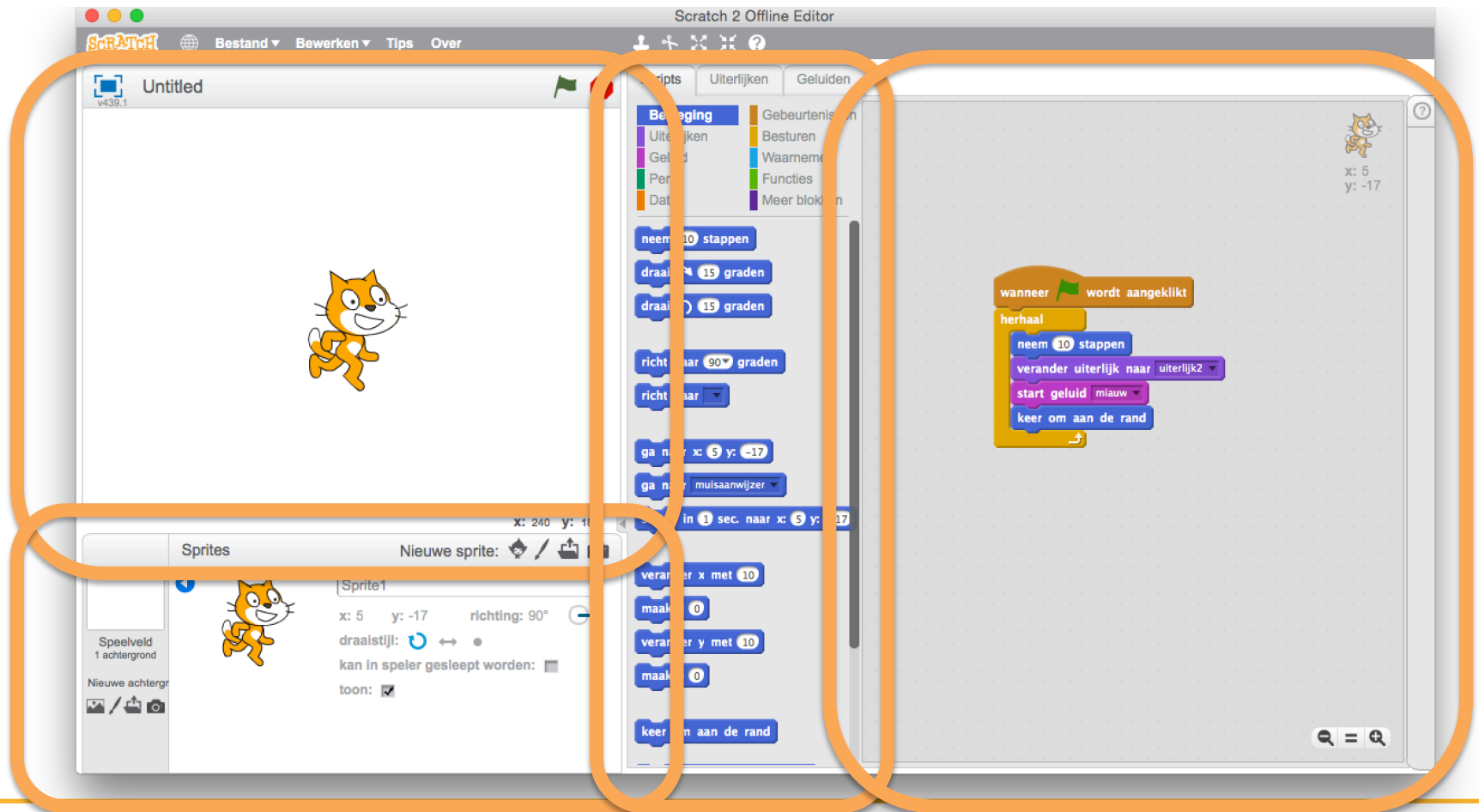
# How? with building blocks



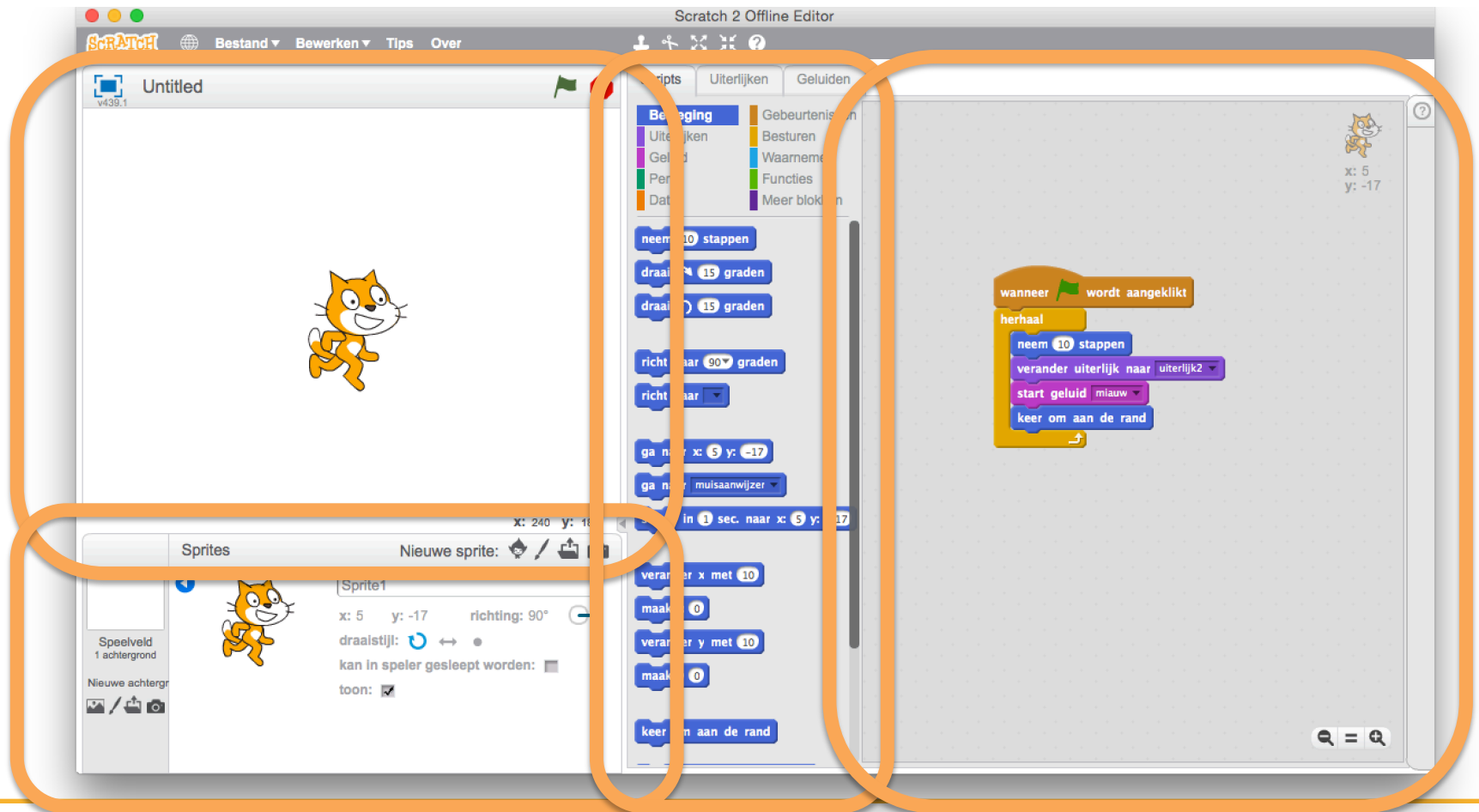
# How? with building blocks



# How? with building blocks



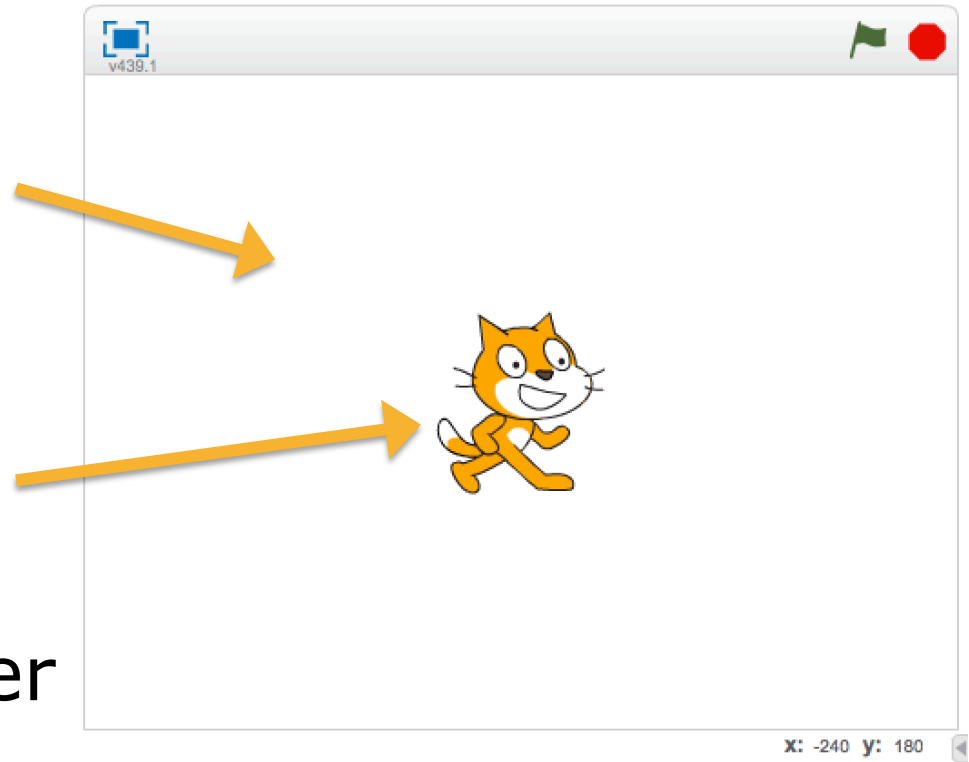
# How? with building blocks





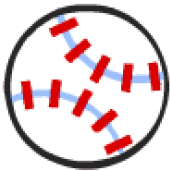
# The stage

- The **stage** is where your imagination comes to live
- **Sprites** can:
  - move
  - talk to each other
  - interact



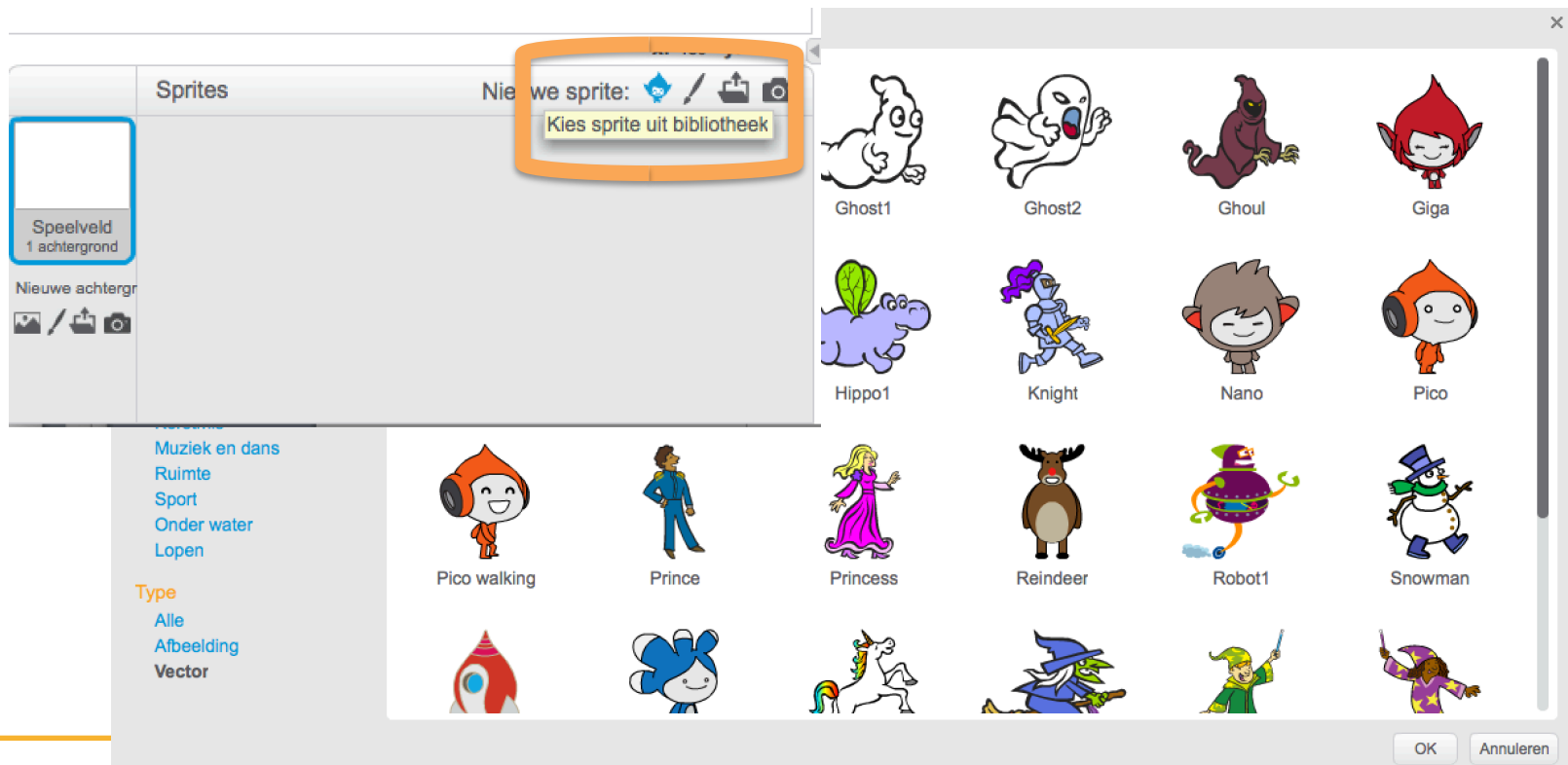
# Sprites: your imaginative characters

You can place sprites on the play field like these:



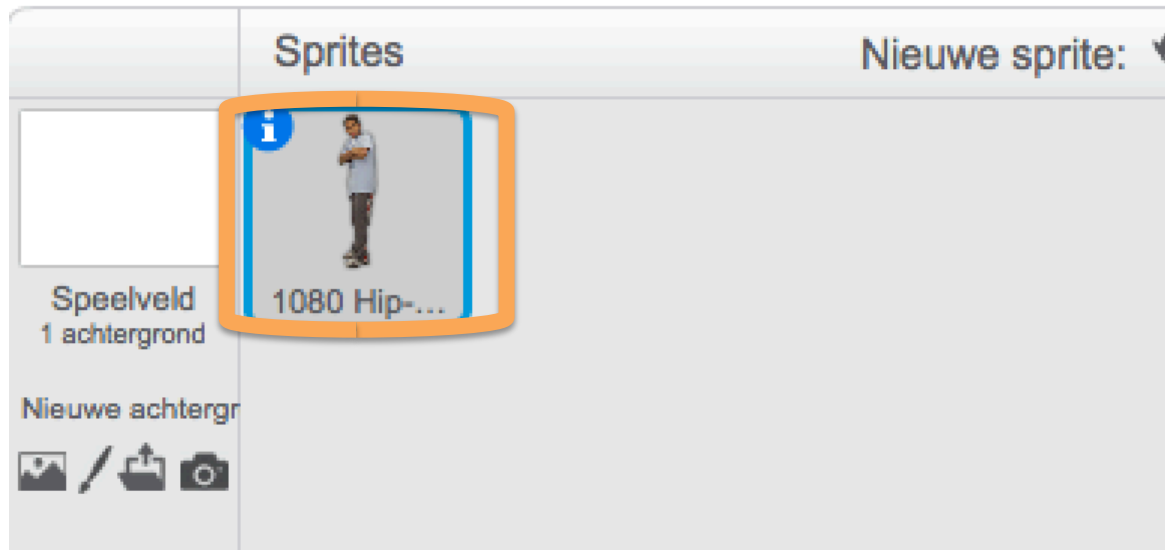
# Sprites: choose your own

You can make your own or choose one from the library



# Sprite information

extra sprite information is hidden behind the image



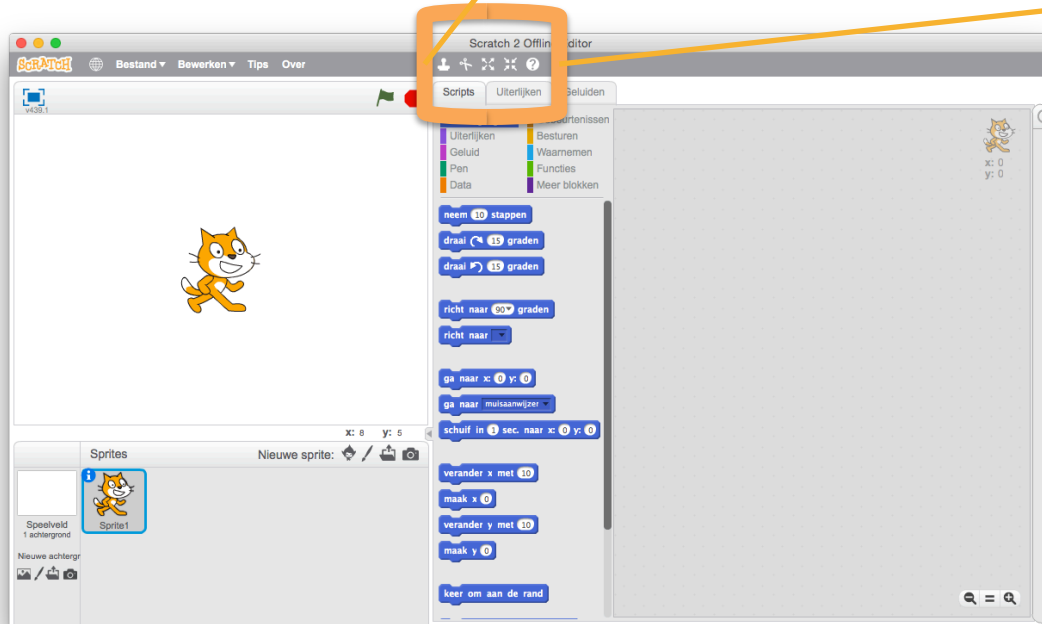
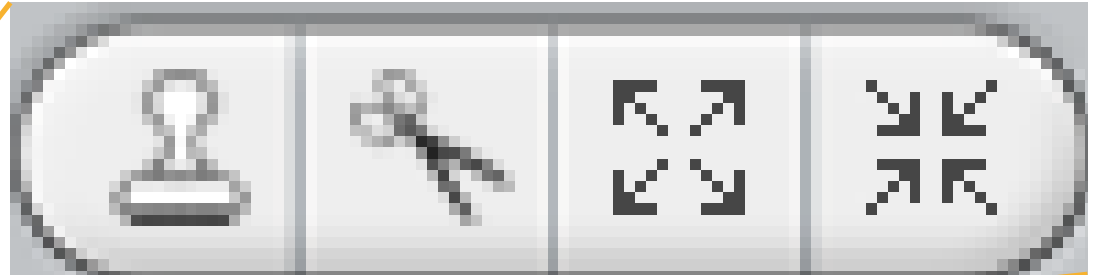
# Sprite information

you can change the

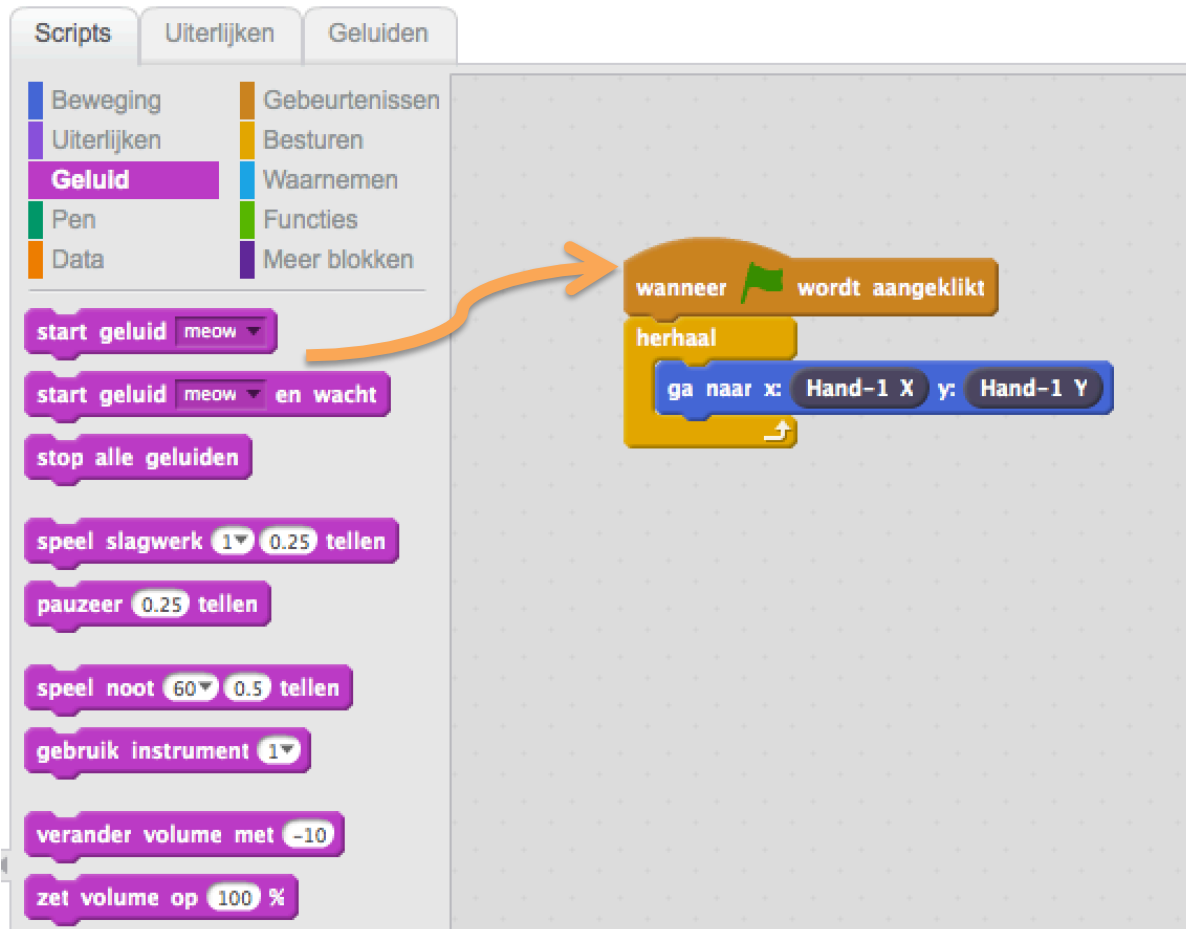
- name
- position
- movement
- ...



# Task bar

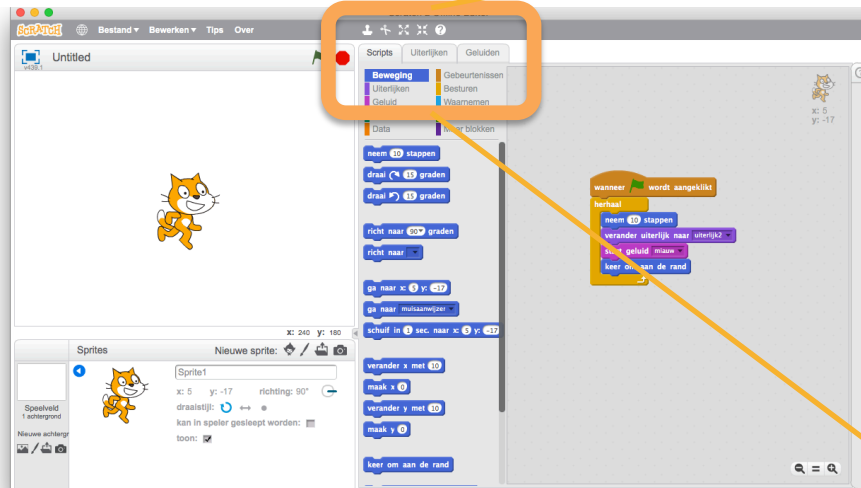


# Programming



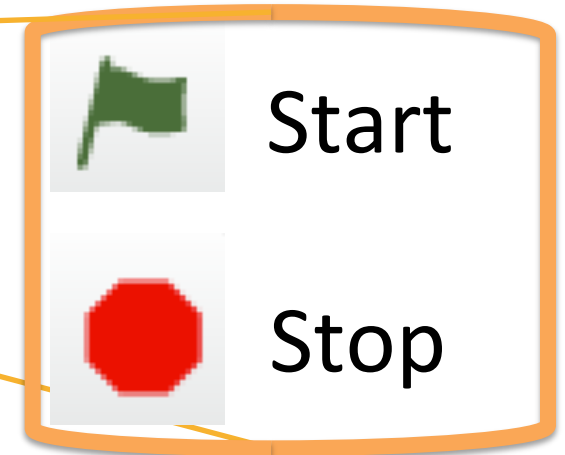
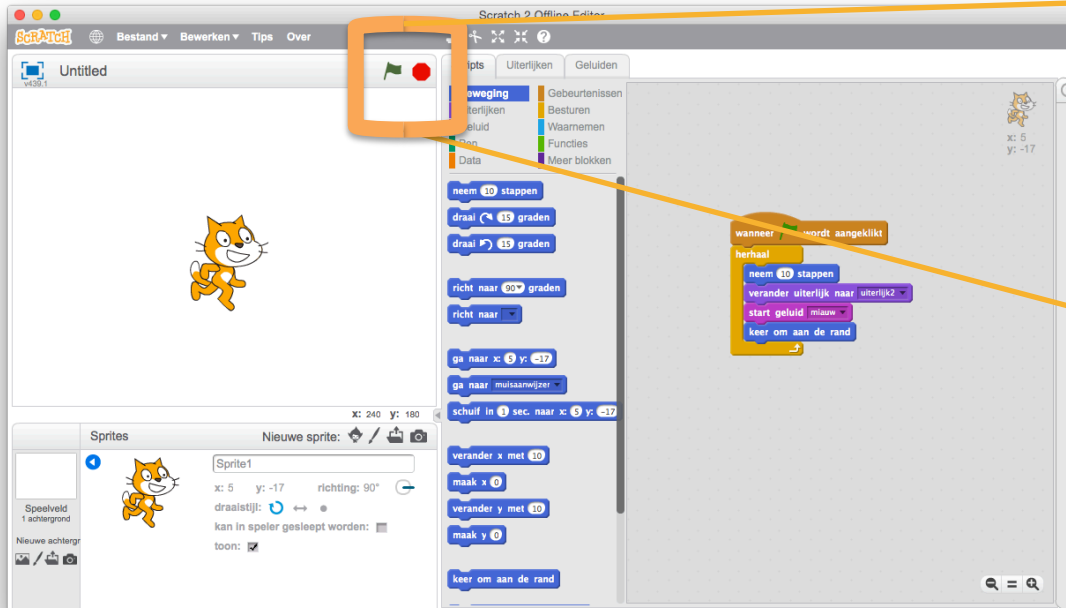
Drag and drop  
the building  
blocks into the  
execution area

# Costumes





# run your program



# Imagine Create Share

<https://scratch.mit.edu/>

# Leap motion



# What is it?

- Small device connected to your PC
- It looks at your hands if you move them around the device
- It determines the position of your hands and fingers

# Leap Motion

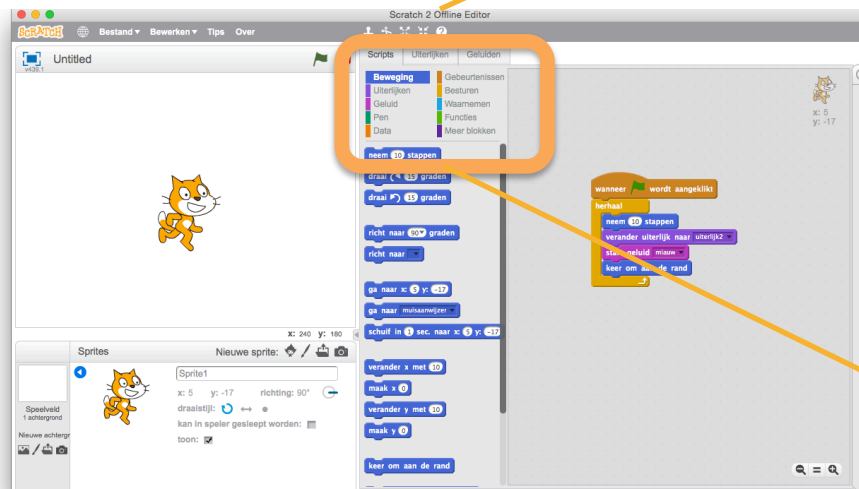
## Demo

# What can you do with it

- Browse the internet
- playing games
- scale maps and images
- draw
- examine virtual 3D objects
- ...
- ...
- use it with

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# Leap motion building blocks



Scripts | Costumes | Sounds

Motion | Looks | Sound | Pen | Data | Events | Control | Sensing | Operators | **More Blocks**

Make a Block

Add an Extension

**LeapMotion** ▼

- ☐ Hand-1 X
- ☐ Hand-1 Y
- ☐ Hand-1 Z
- ☐ Hand-2 X
- ☐ Hand-2 Y
- ☐ Hand-2 Z
- ☐ Hand-1-Finger-1 X
- ☐ Hand-1-Finger-1 Y
- ☐ Hand-1-Finger-1 Z



Let's start!

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Open '2 - Assignment 2.pdf'  
and read the instructions

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Order of assignments:

1. Assignment 2
2. Bongo Drum
3. Basketball
4. Diver
5. Balloon Pop

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