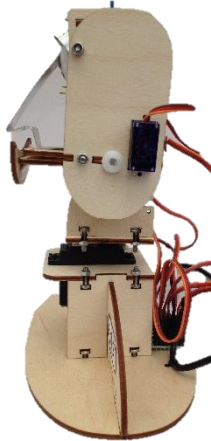


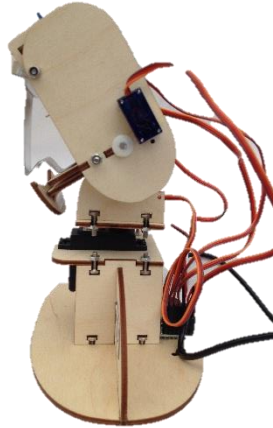
How to program your  
humanoid robot head

# Nod

set HeadNod to 5



set HeadNod to 0



You will need

Events

when space key pressed

Motion

set HeadNod to 5

set HeadNod to 5

Control

wait 1 secs

Try this code

when space key pressed

set HeadNod to 0

wait 1 secs

set HeadNod to 5

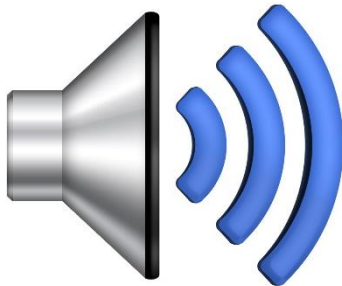
Click here  
and enter 0

Do it

Space

press the key to start

# Speak



You will need

```
Events when space key pressed
Speech say Hello! until done
```

Try this code

```
when space key pressed
say Hello my name is Olly! until done
```

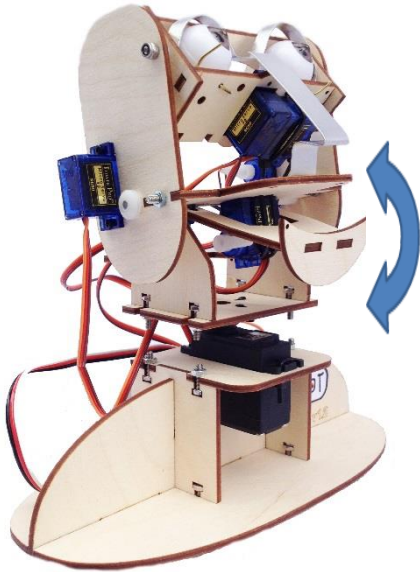
Click here and enter the words you would like Ohbot to speak

Do it



press the key to start

# Mouth Synch



You will need

```
when space key pressed
  say Hello my name is Olly! until done

Events
  when green flag clicked
    set MouthOpen to 0
    speech
    forever
```

Try this code

```
when green flag clicked
  forever
    set MouthOpen to speech
```

Do it



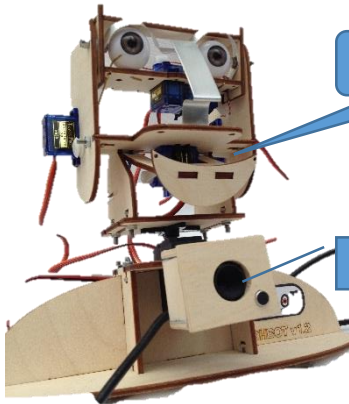
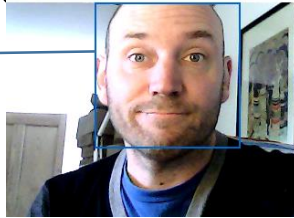
Click the green flag to start the loop



press the key to start

# Recognising a Human

Square indicates a human face detected



Hello human!

camera

## You will need

Events

when space key pressed

Control

wait until

Operators



Sensing

faces detected

Speech

say Hello human until done

## Try this code

when space key pressed

wait until faces detected = 1

say Hello human until done

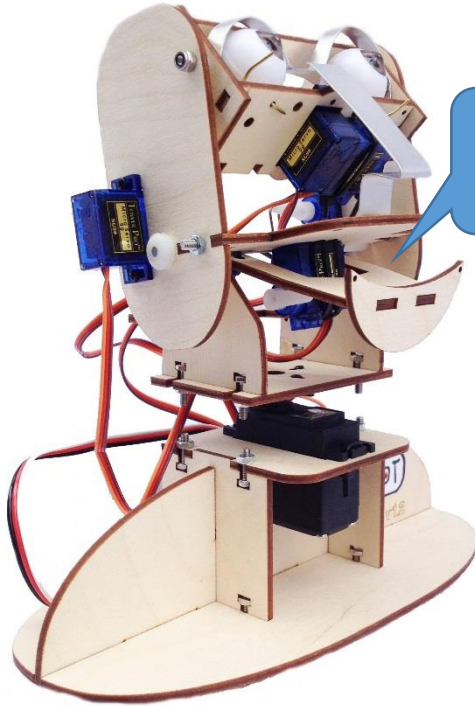
Enter 1 here

## Do it

Space

press the key to start

# Ask and Say



## You will need

Events

when  key pressed

Sensing

ask  and wait

answer

Speech

say  until done

say  until done

## Try this code

when  key pressed

ask  and wait

say  until done

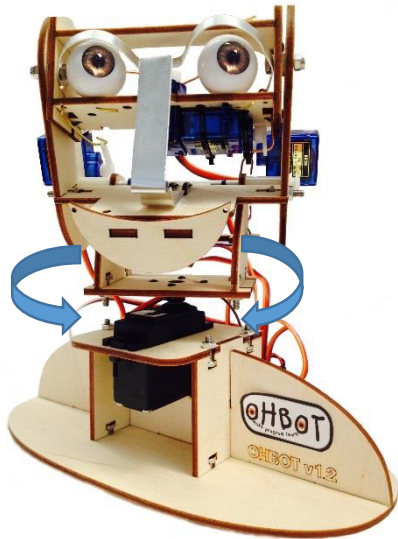
say  until done

## Do it

Press the key to start

Type in and press Enter

# Moving



You will need

Events

- when space key pressed
- when space key pressed

Motion

- change HeadTurn by 1
- change HeadTurn by 1

Try this code

when right arrow key pressed

change HeadTurn by 1

Select right arrow key

when left arrow key pressed

change HeadTurn by -1

Select left arrow key

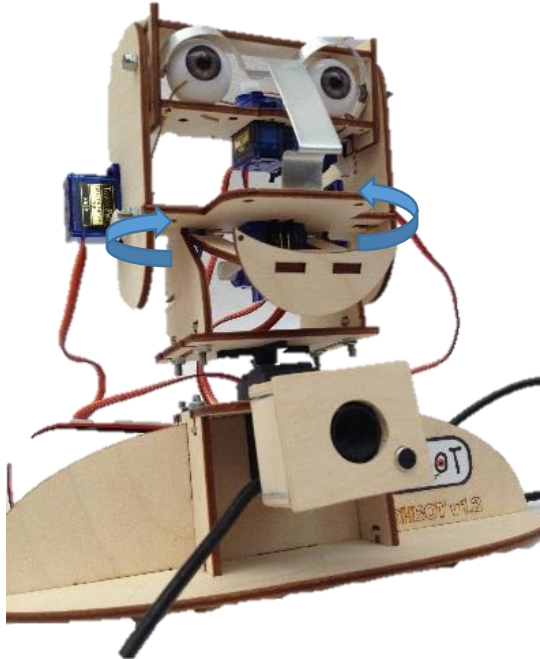
Enter minus 1

Do it

← press the key to turn one way

→ press the key to move the other way

# Watching You



You will need

```
Events
Motion
Sensing

when green flag clicked
forever
  set HeadTurn to 5
  camera x
```

Try this code

```
when green flag clicked
forever
  set HeadTurn to camera x
```

Do it Click the green flag

 Move in front of the camera



# Jokerbot

You will need

Events

Control

Speech

when space key pressed

wait 1 secs

say Hello until done

Try this code

when space key pressed

say What goes Ha Ha Ha Clunk? until done

wait 1 secs

say A robot laughing its head off! until done

wait 1 secs

say Ha Ha Ha! Oh no! until done

Type each line  
in a separate  
block

Adjust this  
wait to add a  
pause  
between lines

Do it press the space key



## Tinker

Try adding Mouth Synch so that Ohbot's mouth moves as he/she speaks

# That's Scary

Make Ohbot act terrified when she/he hears a scary sound.

## You will need

Events: when space key pressed

Control: repeat 5, wait 1 secs X2

Sound: play sound cackle4

Motion: set EyeTurn to 0 X3, set MouthOpen to 10 X2

## Try this code

when space key pressed

play sound cackle4

set MouthOpen to 0

repeat 5

set EyeTurn to 0

wait 0.2 secs

set EyeTurn to 10

wait 0.2 secs

set MouthOpen to 10

set EyeTurn to 5

Callouts: Choose a scary sound, Enter 0, Enter 0.2, Enter 10

Do it press the space key



## Tinker

Can you make Ohbot's eyes close when he/she hears the sound?