

# Year 3 - Lesson 5 (Hello Human)



## Learning Intention

- I can program a robot to speak.

## Introduction

Discuss with children whether they know of any robots that are able to speak. Discuss how, what and why they speak. Can they think of ways that speaking robot could be helpful to us. Explain that Ohbot can be programmed to speak. Play the children example script **Welcome2** to demonstrate that Ohbot's speech. This week we are going to program Ohbot to talk about us. Ensure that children have speakers or headphones connected to their computers so they can hear Ohbot speak.

## Teacher Input 1

First, we need **when green flag clicked** block to start our program. Next, we need to go to the **Speech** palette and find **say until done**, followed by a **wait** from the **Control** palette. We now need to **File, Save As** – 'speak'. We can use this very simple program as a skeleton to build up a longer piece of code with speech. In task 1 we will write a paragraph of speech about ourselves. If we type our own name or the name of our school or favourite football team Ohbot may not be able to say them correctly! Please don't worry about this, Ohbot's speech is generated using a program that translates the letters into sounds, it doesn't have your knowledge of how to pronounce words that don't follow the rules!

```
when green flag clicked
say Hello! How are you? until done
wait 1 secs
say I am a very clever robot because I know how to talk! until done
```

## Activities

- Can you write your own code to make Ohbot speak? Write a paragraph of code about yourself. E.g. my name is....., I am .....years old, my hobbies are ..... etc. Keep each sentence as one line of code and remember to have a wait after each sentence.
- Can you write some code to make Ohbot speak and move? Just like **Welcome2**. E.g. I can move my eyes up and down like this. How many motors does Ohbot have? (7). You need 7 parts to your code.

Top Tip - Try duplicating scripts. How? (Right click the mouse on an instruction to copy a sequence of code)

## Extension

Ask children to open the program called 'speak' that they wrote at the start of the lesson. Try to write an additional code sequence (to accompany the speech) to make Ohbot's top or bottom lip move up and down while it is speaking?

```
when green flag clicked
say I have seven motors. Let me show you how I can move. until done
wait 2 secs
say I can move my eyes up and down like this... until done
repeat 3
set EyeTilt to 10
wait 1 secs
set EyeTilt to 0
wait 1 secs
set EyeTilt to 5
say I can move my eyes left and right like this... until done
repeat 3
set EyeTurn to 10
wait 1 secs
set EyeTurn to 0
wait 1 secs
set EyeTurn to 5
```

## Plenary

Look at examples of the children's coding. Were they successful? Did they need to debug their code? How did you find today's lesson? (Thumbs up, down, middle).