Scratch Programming: 9. Functions

Programming concept: Functions

Task: Create a function that determines if a number is positive, negative or zero.

Lesson Objectives:

To learn how to use a function.

What do you need to do?

Follow the instructions below. Always remember to save your work (Save as) in a place you can remember and test your program. Regular saving of your programs will help you if you make mistakes or if there is problem and you lose your work.

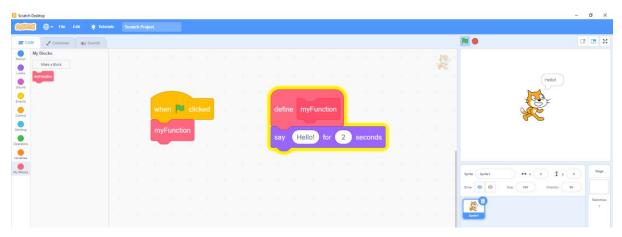
Instructions

Create a define function block using My Blocks (red) option in the blocks area. Name the new function 'myFunction'.



Let's start with a simple example.

- Add a say hello for 2 seconds block to the define function block.
- Add a when green flag clicked block with the block to call the function found in My Blocks.



Now let's try manipulating a number.

	Make a Block	×					
myFunction							
Add an input number or text	Add an input boolean	text Add a label					
Run without screen refresh		Cancel OK					

- name the function 'myfunction'
- click on the 'add an input' option
- add a number we can call 'myNum'.



- add a variable called myNum
- set it to the value 2 after a when green flag clicked block
- put a myNum variable block inside a say for 2 seconds block
- put a myNum variable block inside the function call
- duplicate the above two commands
- duplicate another say block so you have 3 say blocks & two function calls (see below)

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myFunction						say myNum for 2 seconds	Backdrops

Task: Create a function that determines if a number is positive, negative or zero.

Try to complete the task by yourself or with a partner.

Test your program with zero, positive and negative numbers.

The blocks should look like the following:

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define myFunction myNum	when 🔛 clicked	
	When be clicked	
if myNum > 0 then	set myNum • to 0	
say positive for 2 seconds	myFunction myNum en	
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Well done you have completed Task 9