
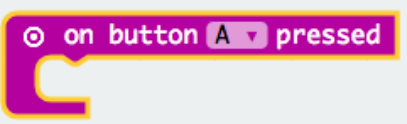

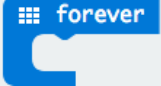

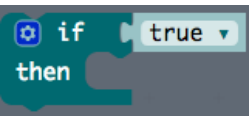
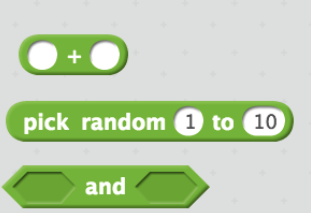
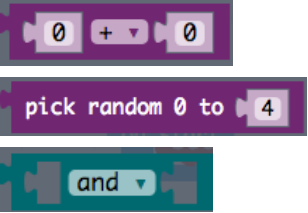




Moving between Scratch and Makecode

Modified on: Thu, 6 Dec, 2018 at 3:50 PM

Both **Scratch** (<https://scratch.mit.edu/>), and the **Makecode** (<https://makecode.microbit.org/>), editor build on the **Blockly** library, (<https://developers.google.com/blockly/>), a tool for visual programming. There are subtle differences in the code blocks for each editor that change the behaviour of the program.

Scratch	Makecode
<p>Events wait for a user action, like clicking the green flag in scratch or pressing a button on the keyboard</p> 	<p>Input waits for a user input like pressing the A button or shaking the micro:bit</p> 
<p>Control is about the flow of your program tasks. In scratch you can add a forever, repeat or if block to an event to trigger it.</p> 	<p>Makecode breaks controls into programming concepts. Forever is it's own loop (it's triggered as soon as the micro:bit is powered on).</p>  <p>Repeats are found in the Loops menu of Javascript Blocks</p>  <p>And if blocks are found in the Logic menu</p> 
<p>Operators let you do arithmetic and make comparisons</p> 	<p>Arithmetic and random number pickers can be found in Math, whereas a comparison between something and something else is found in Logic</p> 
<p>Data lets you define variables that might change within your program. Here we have made a variable called item</p> 	<p>We can define these in the Variables menu of makecode</p> 

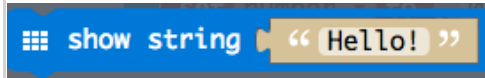
Looks let you display actions on the screen, which can be done by adding a **say** block. The word in the box is called a **string**



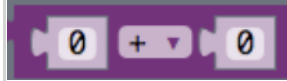
Blocks that let you edit them have **white backgrounds that you can type in** for example operators have circular input areas



To show a word on the micro:bit display we can use **show string**, found in the **Basic** menu



Blocks that you can edit usually look like jigaw pieces and may already have an example in them, for example **Math sums** have a '0' in the block



There are many more differences and similarities between Scratch and Makecode, if you would like to add some, please **contact us** (<https://support.microbit.org/support/tickets/new>).