Snap! Tips and Tricks

Anthony Lu, Pranav Chhabra, Kyaw Swar Ye Myint, Martin Garcia-Angel, Yolanda Shen Format template from Maxson Yang

Table of Contents (Clickable!):

Debugging and Speed	1
Visible Stepping	1
Pause Button and Pause Block	2
Warp Block	2
Turbo Mode	2
Coding Shortcuts	2
Block Searching	2
Adding Multiple Spaces to Lists and Similar Blocks	2
Relabel	3
Change Custom Block Types	3
Deleting Blocks and Temporary Variables	3
Modifying Stacks of Blocks	3
Delete Only 1 Block	3
Extract Only 1 Block	3
Duplicate Only 1 Block	3
Duplicate A Stack of Blocks	3
Misc	3
Snap! Light Mode	3
Most Useful Libraries	3
Snap Coding via Keyboard Typing	3

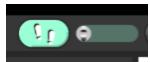
Debugging and Speed

Visible Stepping

- Visible stepping allows you to watch Snap "step" through code and see what blocks run when.
- To enable, press the footsteps icon, located at the top right corner of your screen.
- There is a sliding bar, the further right it is, the faster it steps through code.
 - Fast setting:



• Slow setting:



- Here is an example: Stepping Example (should replace with a professionally shot video)
- Useful for finding what line in Snap raises an error or where the program stops

Pause Button and Pause Block

Many forget it exists!



- This is the pause button and can be found in the top right corner of your Snap! Window.
- It can be helpful when used with visible stepping, as you can stop your script midway, and resume from that point at a different time. i.e you don't have to rerun the code to get to the same point.



• There is also a "pause all" block as shown below, which can be put in your code, and it will automatically pause the code when it reaches that block.

Warp Block

• The warp block allows you to speed up a segment of code. While running the code within warp, it gives it priority to other pieces of code, stopping other pieces of code from running until the code within warp is finished.



 Warp is useful while coding complex projects, when you need the extra processing speed.

Turbo Mode

- Turbo mode allows you to run your code at a much faster speed than normal.
- To enable, click on settings in the top left corner of Snap, and toggle "Turbo mode" on. Alternatively, hold shift and click on the green flag in the top left corner of Snap's stage.

☑ Turbo mode

• Like warp, Turbo mode is also useful while coding complex projects, and when extra processing speed is needed.

Coding Shortcuts

Block Searching

- The search icon in the top right corner in the left column can help you find specific blocks you may need
- e.g. Needing to find a delete an item from a list for specific code



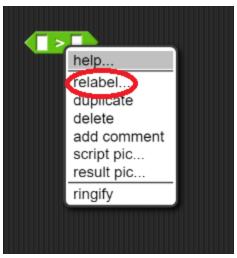
Adding Multiple Spaces to Lists and Similar Blocks

• Shift click plus an arrow key on lists, join block, or any block with <|> arrow to +/- 3 spaces to add specific details to your code.



Relabel

Right click > relabel to change between similar blocks
 e.g. > to = to <





Change Custom Block Types

- Change custom blocks from command \longleftrightarrow reporter \longleftrightarrow boolean
- Delete all instances of the block (but not the block definition)
- Right click on the yellow header inside the block definition and click on edit



Deleting Blocks and Temporary Variables

• Drag out blocks that may no longer serve use to the left column and watch them disappear!!

Modifying Stacks of Blocks

Delete Only 1 Block

- In a big stack of blocks, if you only want to delete a single block you can right-click on that block and choose the "delete" option.
- Example: Selecting the circled "delete" option on the "turn left by 30 degrees" block



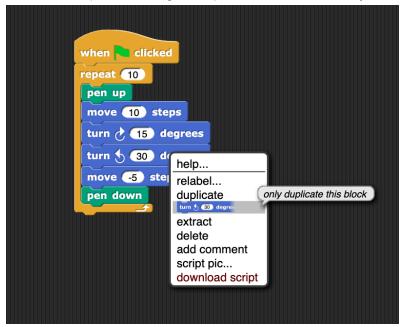
Extract Only 1 Block

- To separate just one block from a stack of blocks, you can right click on that block and choose the "extract" option.
- Example: Wanting to separate the "turn left by 30 degrees" block.

```
when clicked
repeat 10
pen up
 move 10 steps
 turn 👌 15 degrees
 turn 为 😘 degrees
                help...
 move -5 ste
                relabel...
 pen down
                duplicate
                             only grab this block
                turn 5 30 degree
                extract
                delete
                add comment
                script pic...
```

Duplicate Only 1 Block

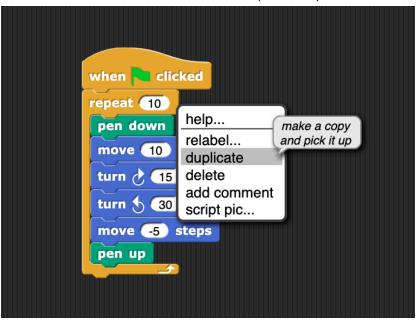
- To duplicate just one block from a stack of blocks, you can right click on that block and choose the option showing the picture of the block
- Example: Wanting to duplicate the "turn left by 30 degrees" block.



Duplicate A Stack of Blocks

• To duplicate an entire stack of blocks, you can right click on the top block of the stack you want to duplicate, and choose the "duplicate" option

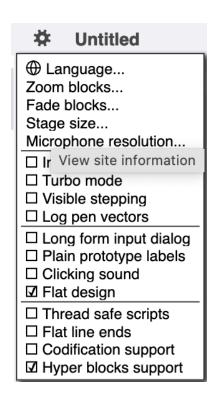
• Example: Wanting to duplicate the entire repeat loop show - right click on the repeat block, and select the shown duplicate option.

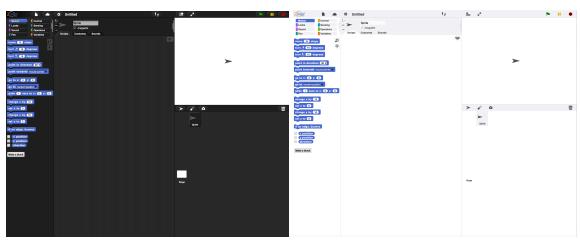


Misc

Snap! Light Mode

 When using Snap! during nighttime, your eyes may become tired from staring at the screen for too long. A way to lessen the load on your eyes is to use Snap! in light mode. This can be done by going to 'Settings' and clicking on 'Flat design' as shown below.





• By turning on 'Flat design' the background of Snap! changes from black to white.

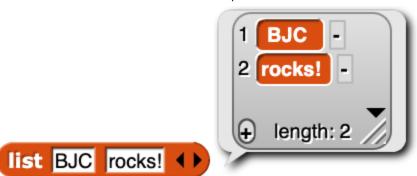
Most Useful Libraries

• Lists, utilities



• The list reporter allows you to make a list without giving it a name. The left and right arrowheads at the end of the list reporter allows you to increase or decrease the length of inputs of lists.

• For instance, if you want to create a list [BJC, rocks!], you would have to press the right arrowhead once to get a length of input of 2 and then type in the words 'BJC' and 'rocks!' into each input blank.



Words, sentences



- The split report allows you to split sentences into words.
- For instance, if you want to split 'BJC rocks!' into words, you can do this by putting in 'BJC rocks!' into the first blank and then by selecting the 'word' option in the drop down menu that will show up after you press the down arrowhead.



Variadic reporters



These 4 reporters and 2 predicates take in 2 inputs. The 4 reporters compute for the simplest math calculations and reports back a number while the 2 predicates return a Boolean value of True or False.

Snap Coding via Keyboard Typing

• Yolanda will create a video on this