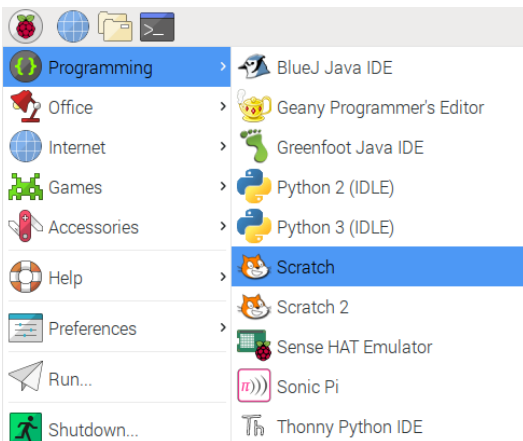


Raspberry Pi Scratch Maze Game - Simplified

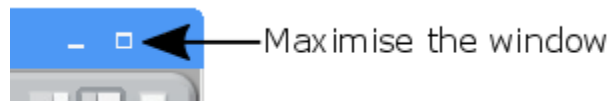


Tutorial by Andrew Oakley - Public Domain
Updated Nov 2017 www.cotswoldjam.org

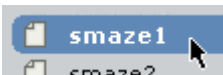
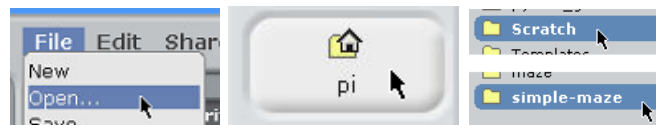
Getting started



1. Click on the Raspberry menu, Programming, Scratch



2. Click the Maximise Window button.
3. Select File menu, Open.
4. Click the Pi button.
5. Select Scratch and click OK.
6. Select simple-maze and click OK.



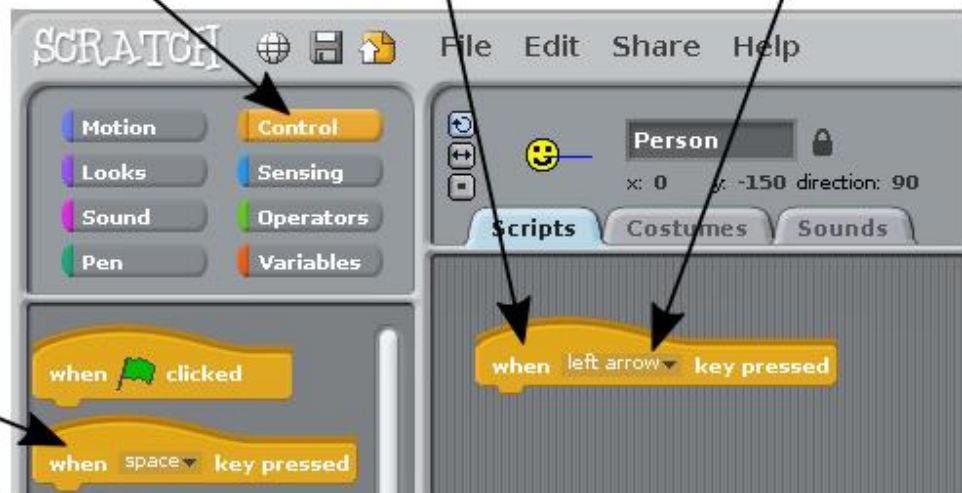
7. Select smaze1 and click OK. A green and blue maze should appear.

1. Click "Control"

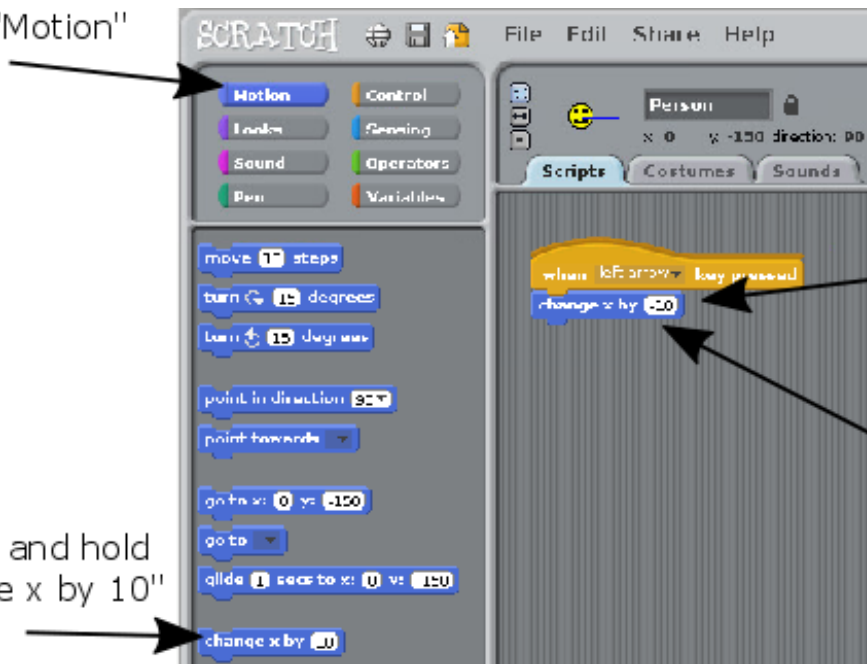
3. Drag to here

4. Change "space" to "left arrow"

2. Click and hold



1. Click "Motion"



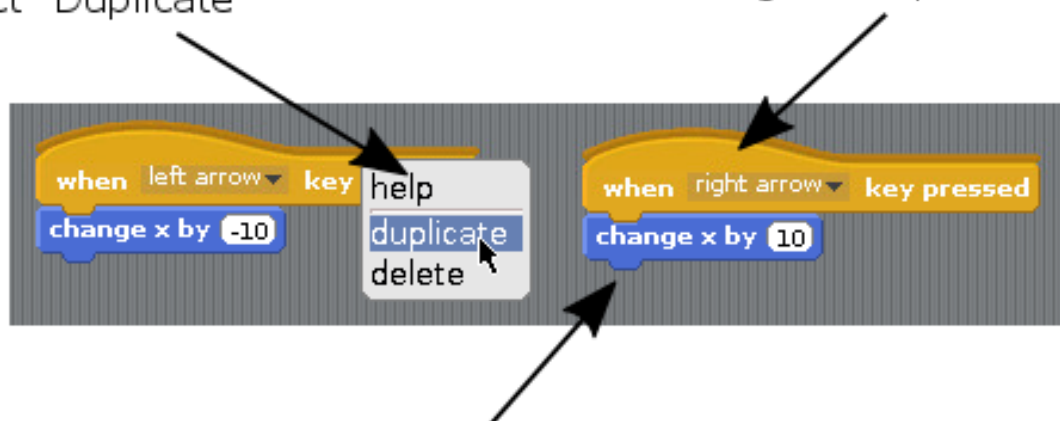
2. Click and hold "Change x by 10"

3. Drag to here

4. Click 10 and change to -10 using keyboard

1. Right-click here and select "Duplicate"

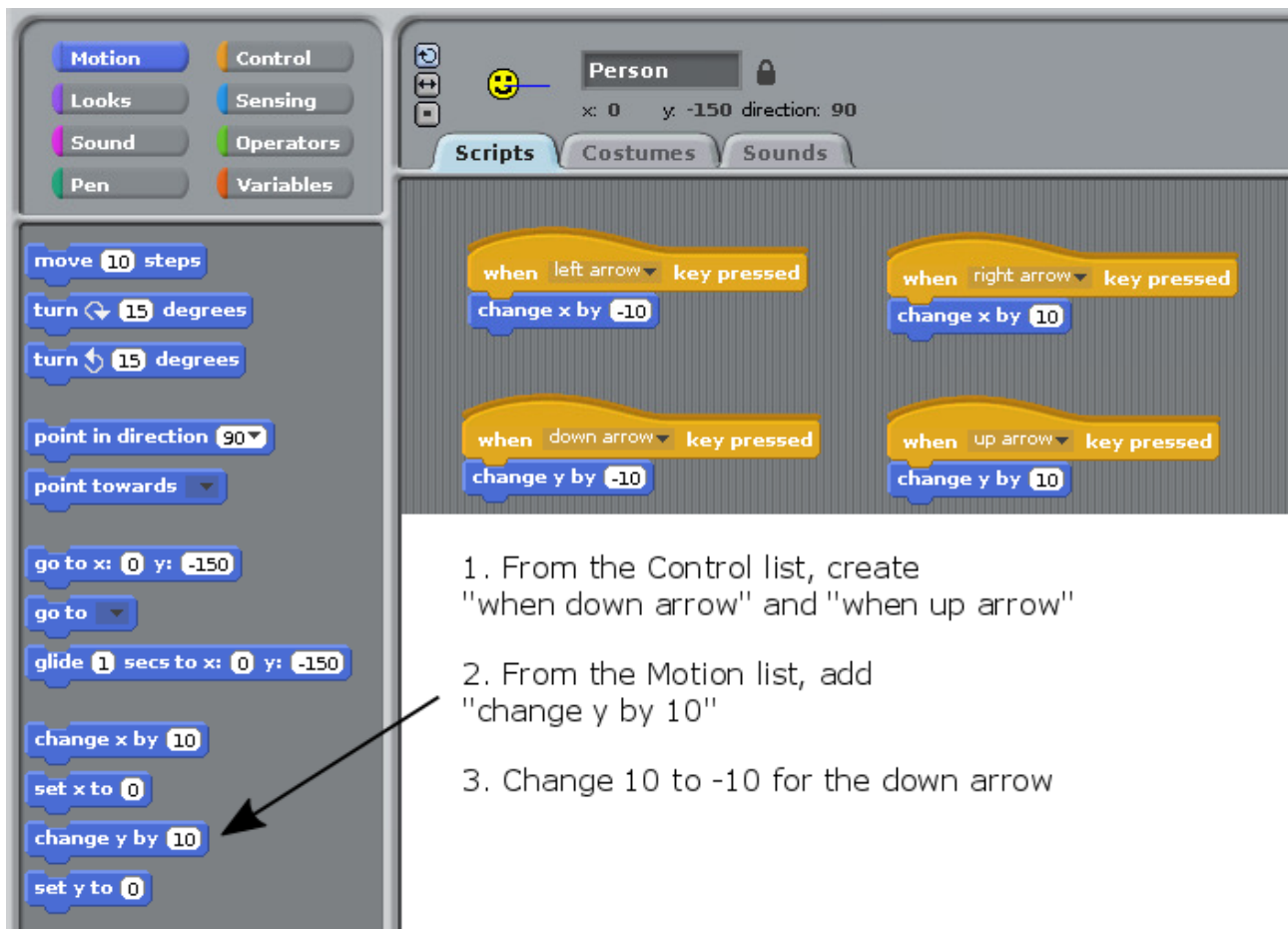
2. Drag the duplicate to here



3. Change "left arrow" to "right arrow" and -10 to 10

You should now be able to move the Smiley left and right, using the left and right arrow keys.

X is a "variable". A variable can hold a number or a word which can change. X measures left and right position.

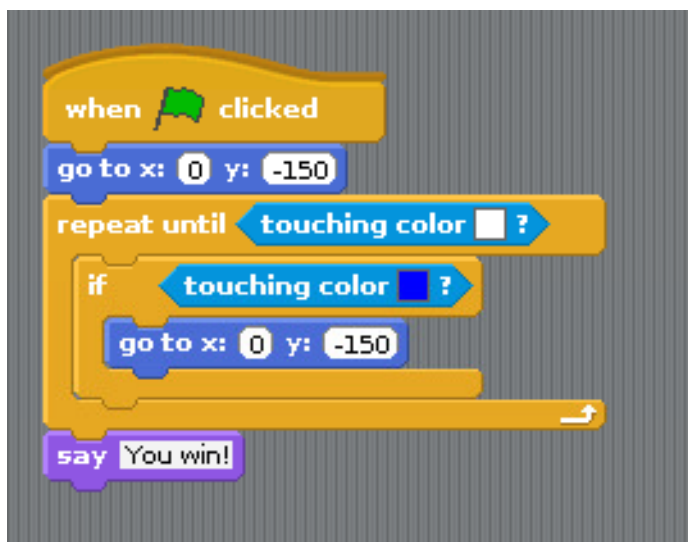


You should now be able to move the Smiley up and down, using the up and down arrow keys. The Y variable measures up and down position.

The Smiley can now move anywhere around the maze, including through the walls.

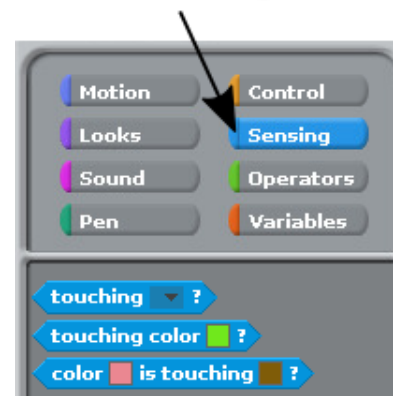
We need to add rules:

- To make the Smiley go back to the start if it hits a **blue** wall
- To say "You win!" if the Smiley reaches the **white** outline of the exit



Create this new block.

You will find "touching color" under the "Sensing" list.



To select a colour:



1. Click the colour box



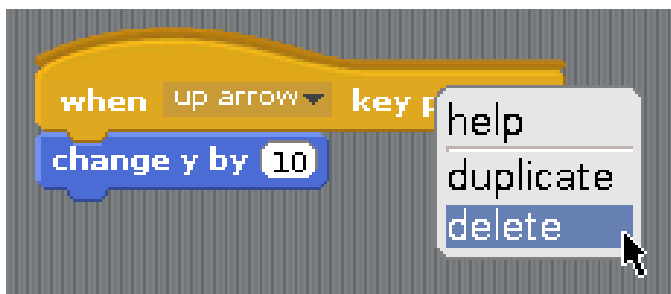
2. Click the colour you need

To start a new game:



Click the green flag

What if you make a mistake?



Right-click any block and click "delete"

For teachers / Scout / Guide leaders:

Downloads available from <http://www.cotswoldjam.org/downloads/beavers>

To add the files to Raspbian, go to the terminal:



```
cd
mkdir -p "Scratch/simple-maze"
curl "http://www.cotswoldjam.org/downloads/beavers/cjam-scratch-simple-maze-code.zip" -O
unzip cjam-scratch-simple-maze-code.zip
exit
```

Note that -O is the capital letter O, not zero.