Snap the Dot

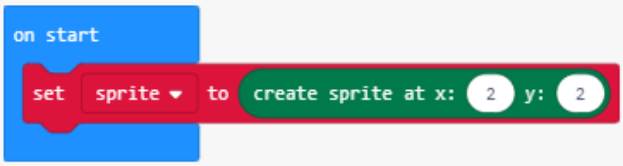
Introduction

Snap the dot is a game of skill where the player has to press **A** exactly when the dot reaches the center of the screen.

This tutorial shows how to use the game engine.

Create a sprite

Drag a `create sprite` block onto the workspace. A sprite is a single pixel that can move on the screen. It has an `x` and `y` position along with a direction of motion.



Edit JavaScript Run

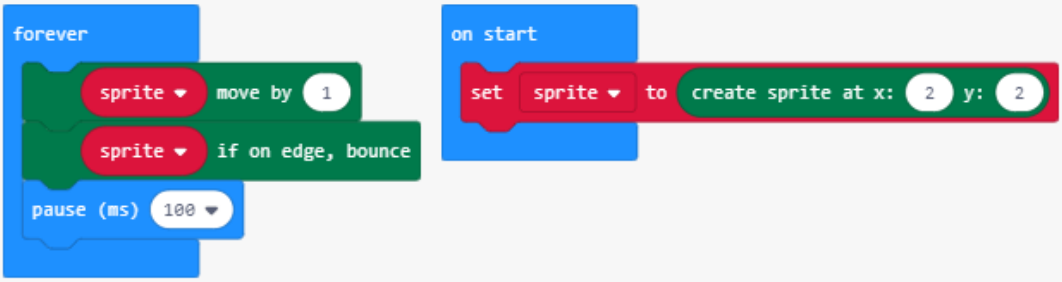
Move the dot

The sprite starts in the center facing right. Put a `move` block into the `forever` to make it move. Notice how it moves to the right but does not bounce back.

Edit JavaScript Run

Bounce

Grab a `if on edge, bounce` block to make the sprite bounce on the side of the screen. Also, add a `pause` block to slow down the sprite.



Edit JavaScript Run

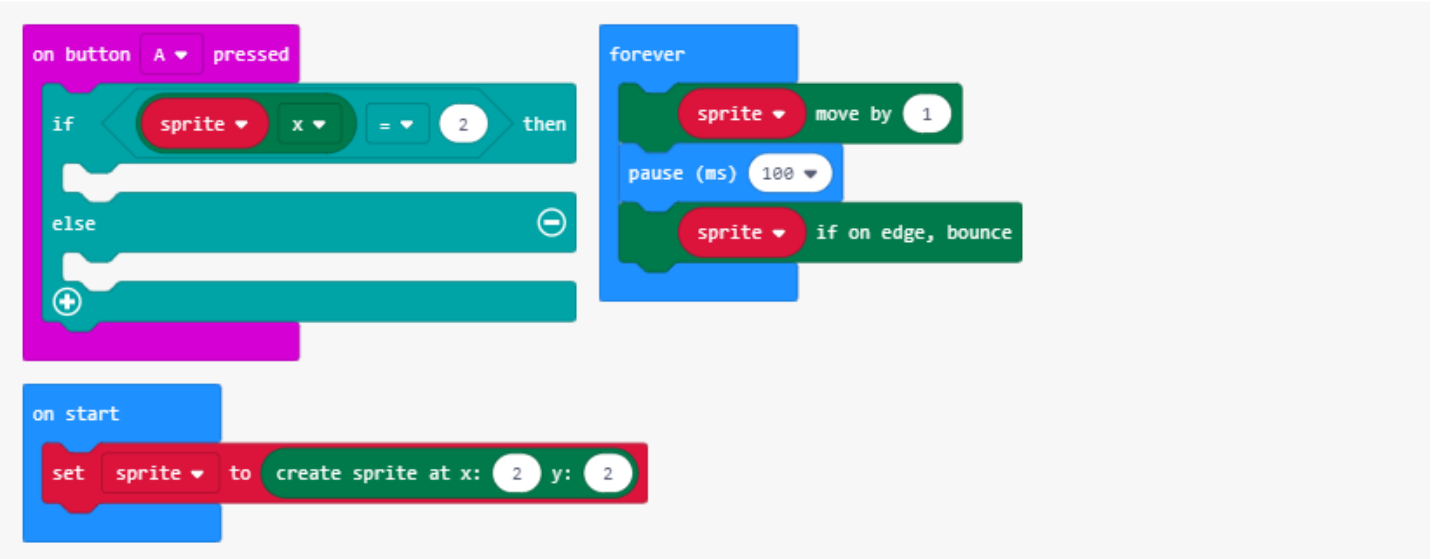
Test and download

Use the simulator to find the best speed. If you have a micro:bit, press **Download** to try it out on the device.

Button handling

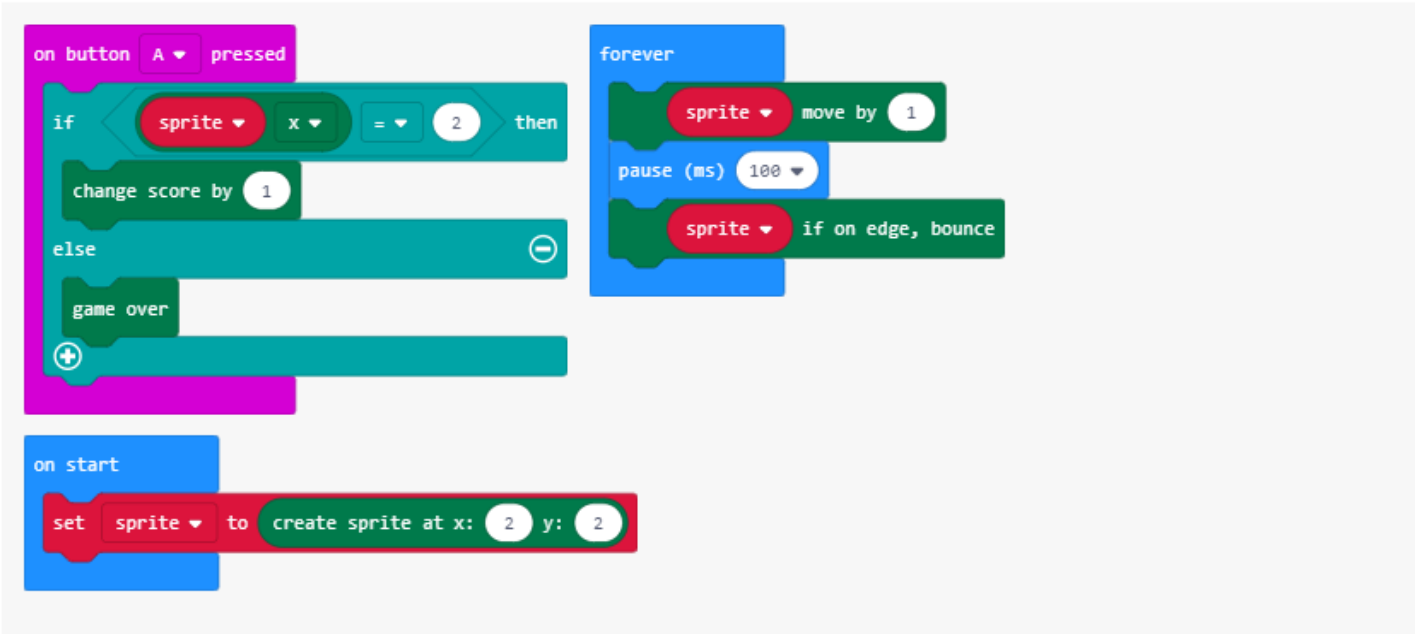
When **A** is pressed, we test if the sprite is in the center or not.

Use a `on button pressed` block to handle the **A** button. Put in a `if` block and test if `x` is equal to `2`.



Score and game over

Finally, pull out an `add score` and a `game over` block to handle both success (sprite in the center) and failure (sprite not in the center).



Edit JavaScript Run

Test and download

Your game is ready! If you have a micro:bit, press **Download** to try it out on the device.