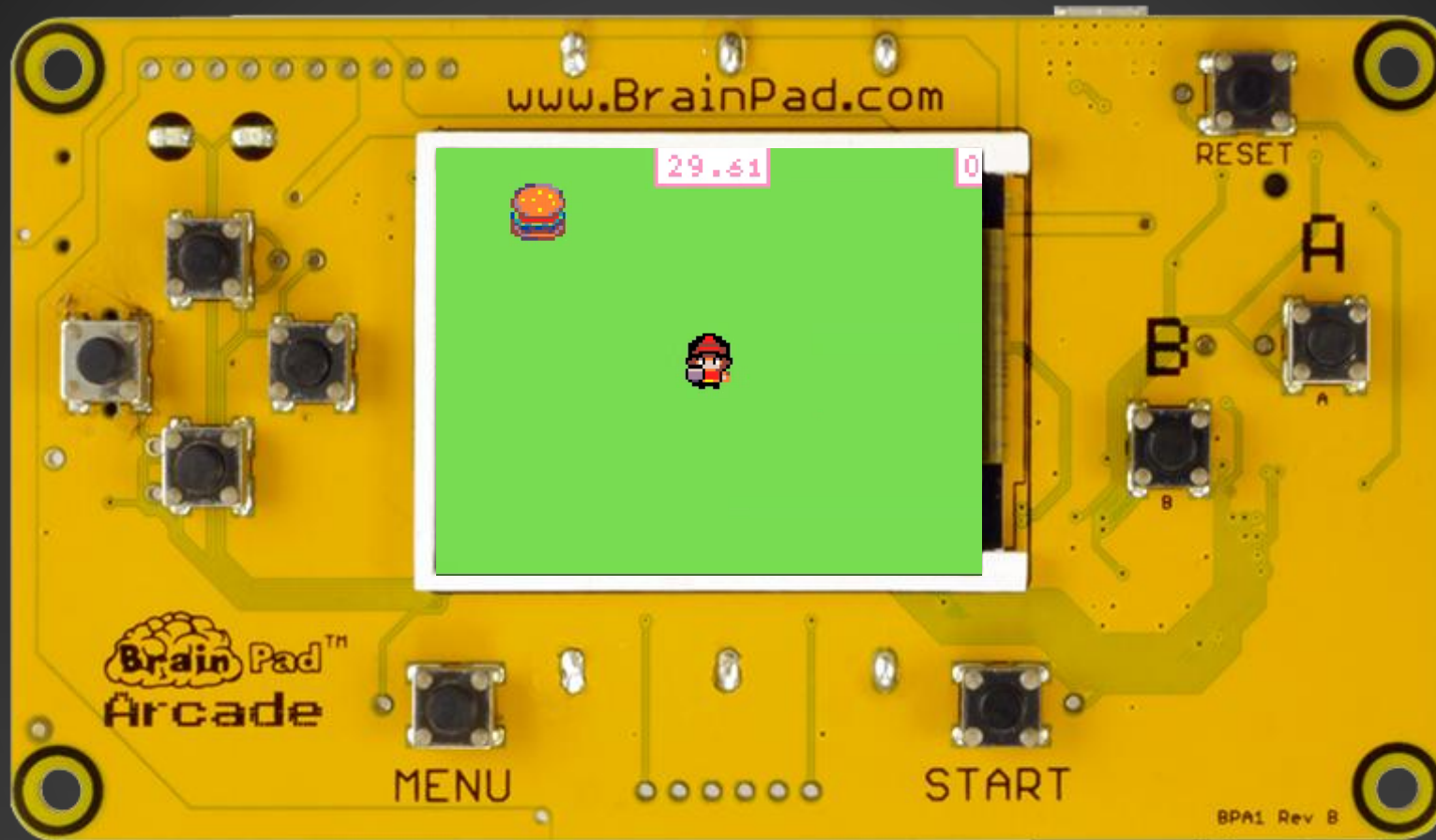


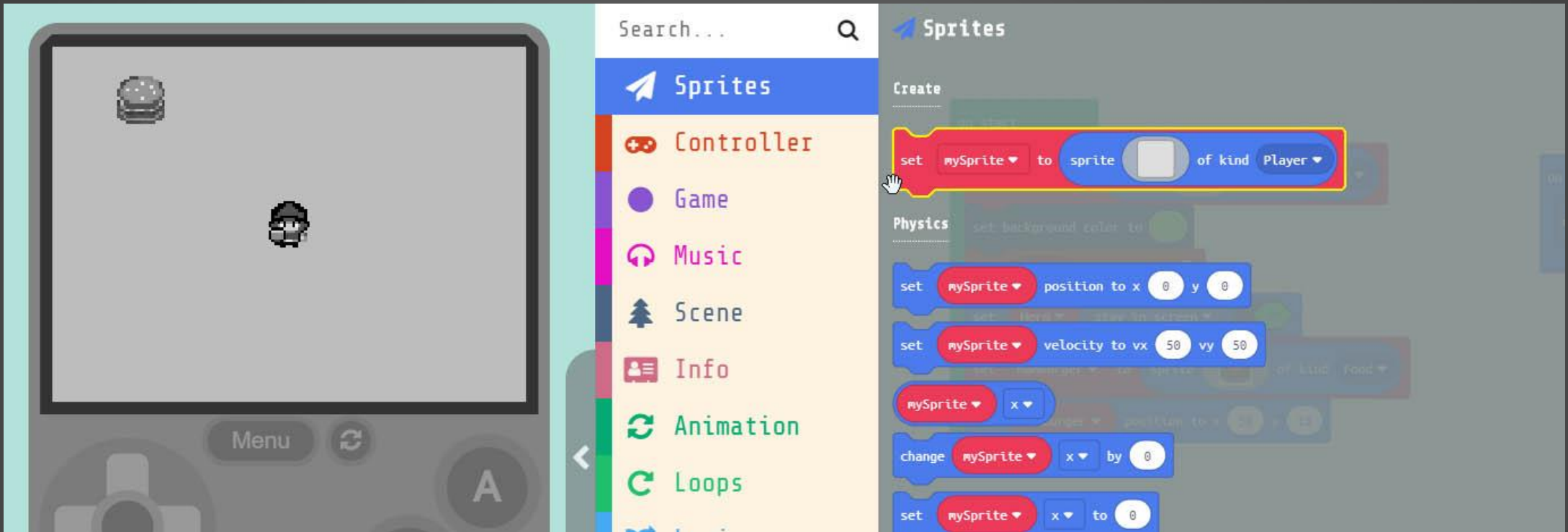


## 2-D ADVENTURE – EPISODE 02





Let's create a 2-D Adventure game.



Grab the  block  
and drag it into the  block

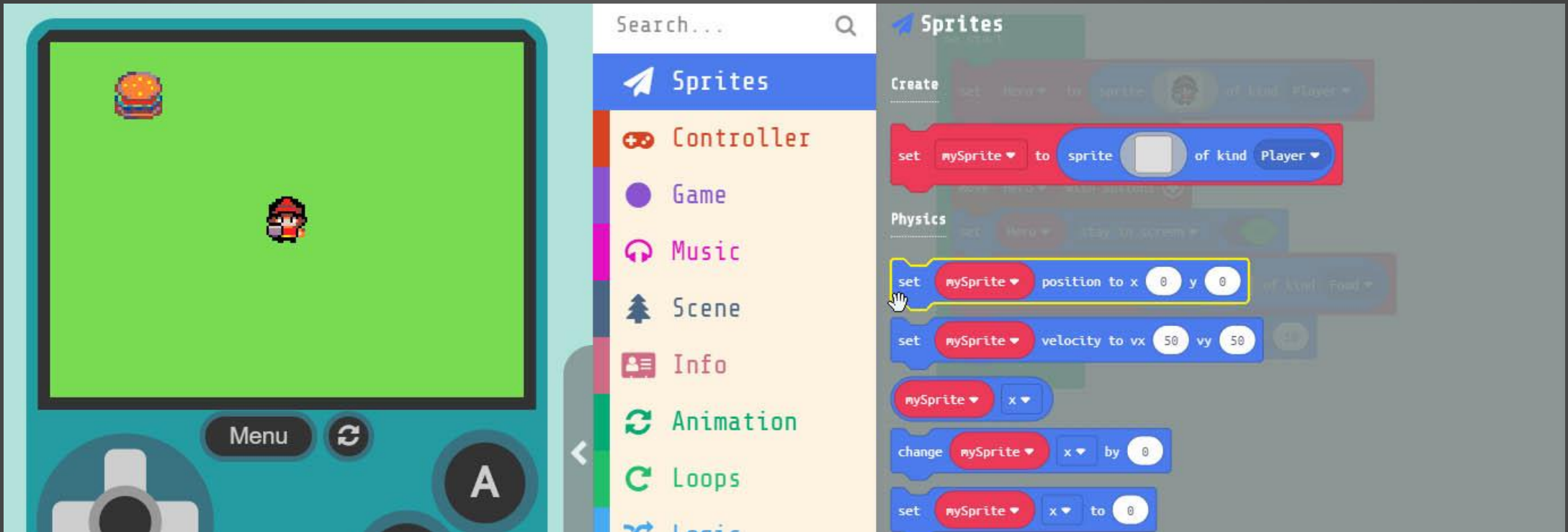


Change the name to 'Hamburger'  
and the kind to 'Food'

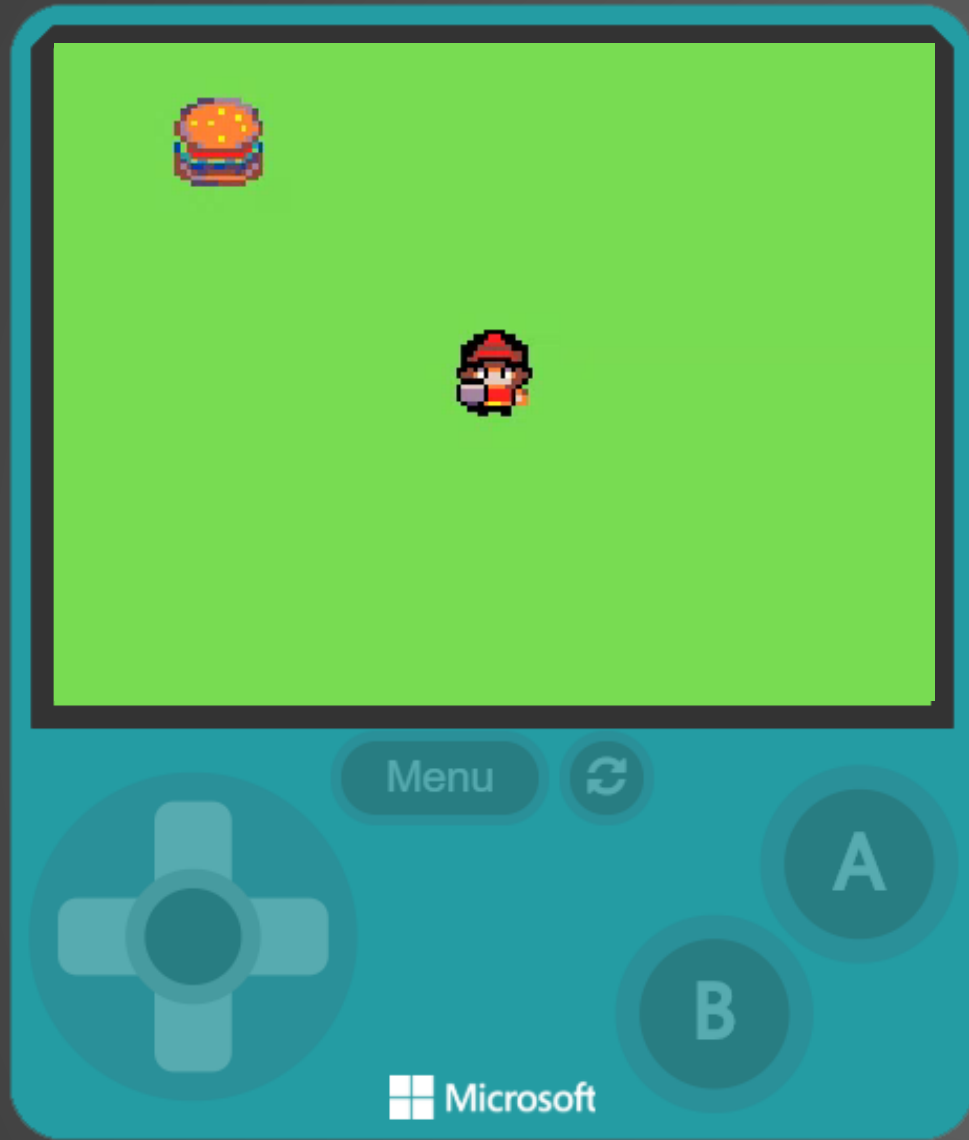
This is just like the one in the  
'on start' block.

Now when we get the 'Hamburger'  
a new one will appear.





Grab the  block  
and drag it into the  block



After we add the new block, change the variable name to 'Hamburger'.

But it's still not quite right. We need to generate a random position



# Computer Term:

## RANDOM NUMBERS

Computers need something to help them generate truly random numbers. A 'seed' value is used to help, otherwise a computer just generates numbers that appear random. MakeCode takes care of all behind the scenes, so we don't have to worry.

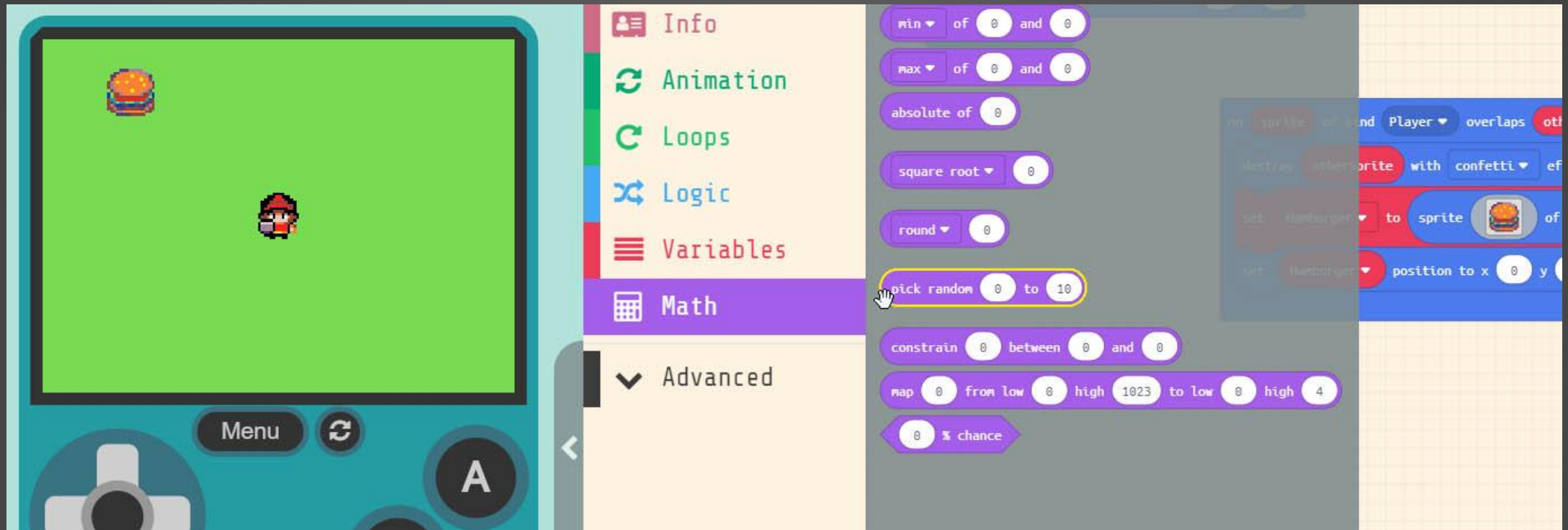
EXAMPLE:



pick random

0

to

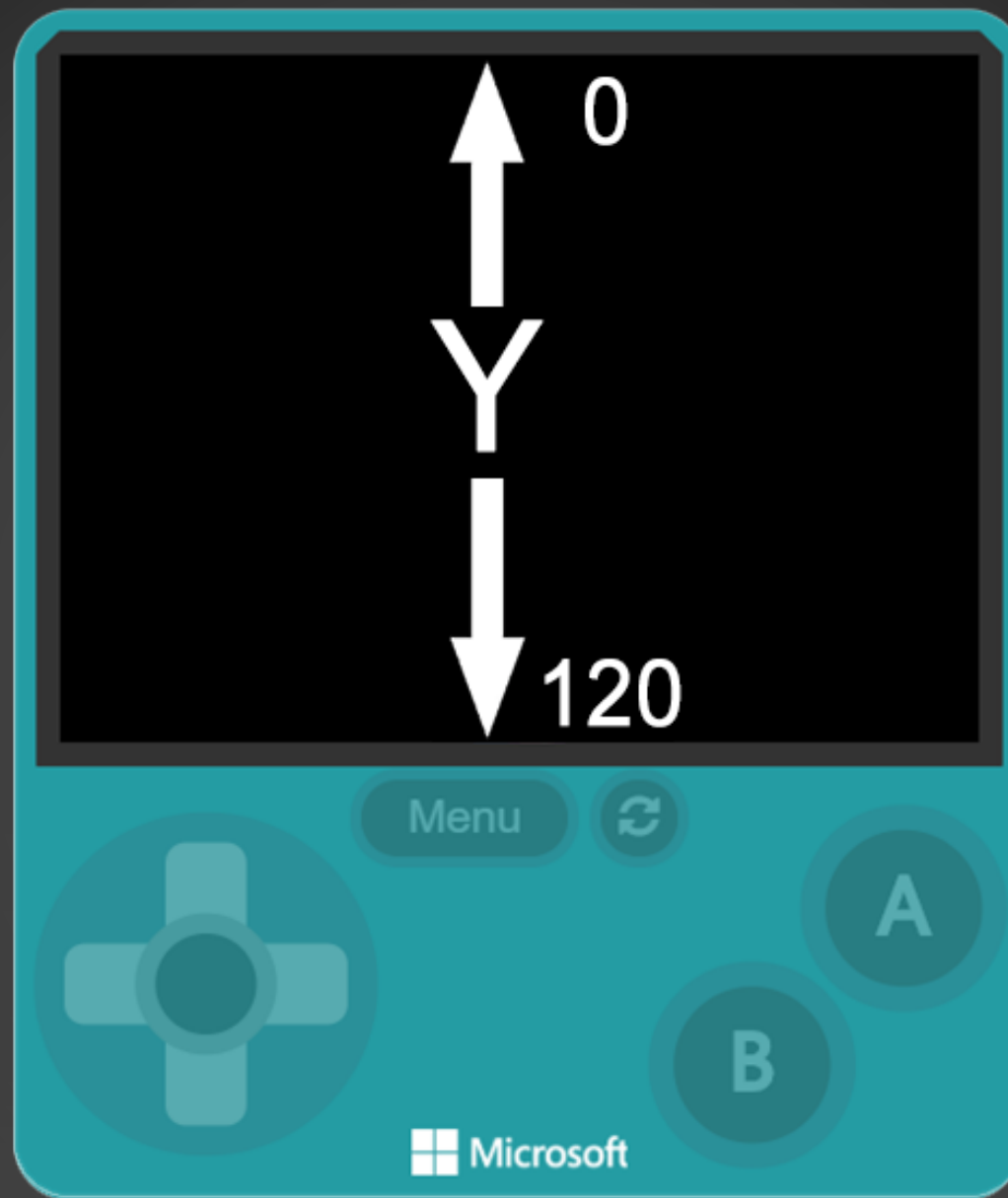
10

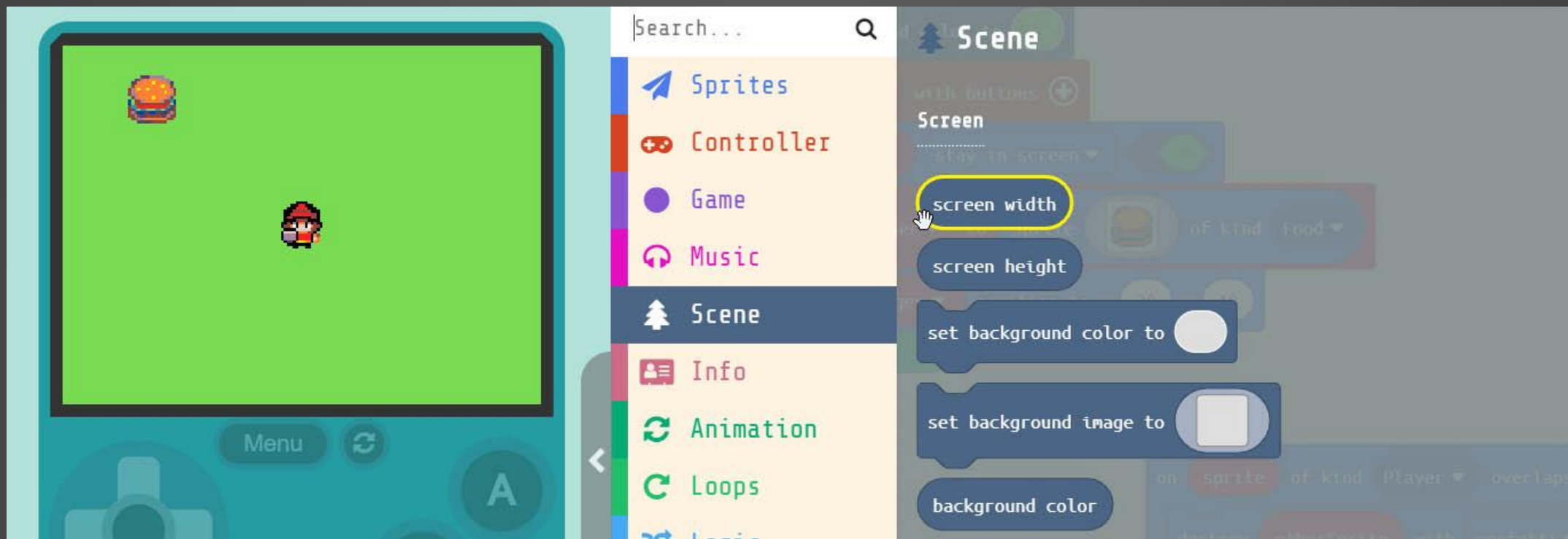


Grab 2 of the  blocks  
drag both into the  block  
Inside the 'x' and 'y' parameter.



The x & y  
parameters  
represents  
pixels on  
the screen



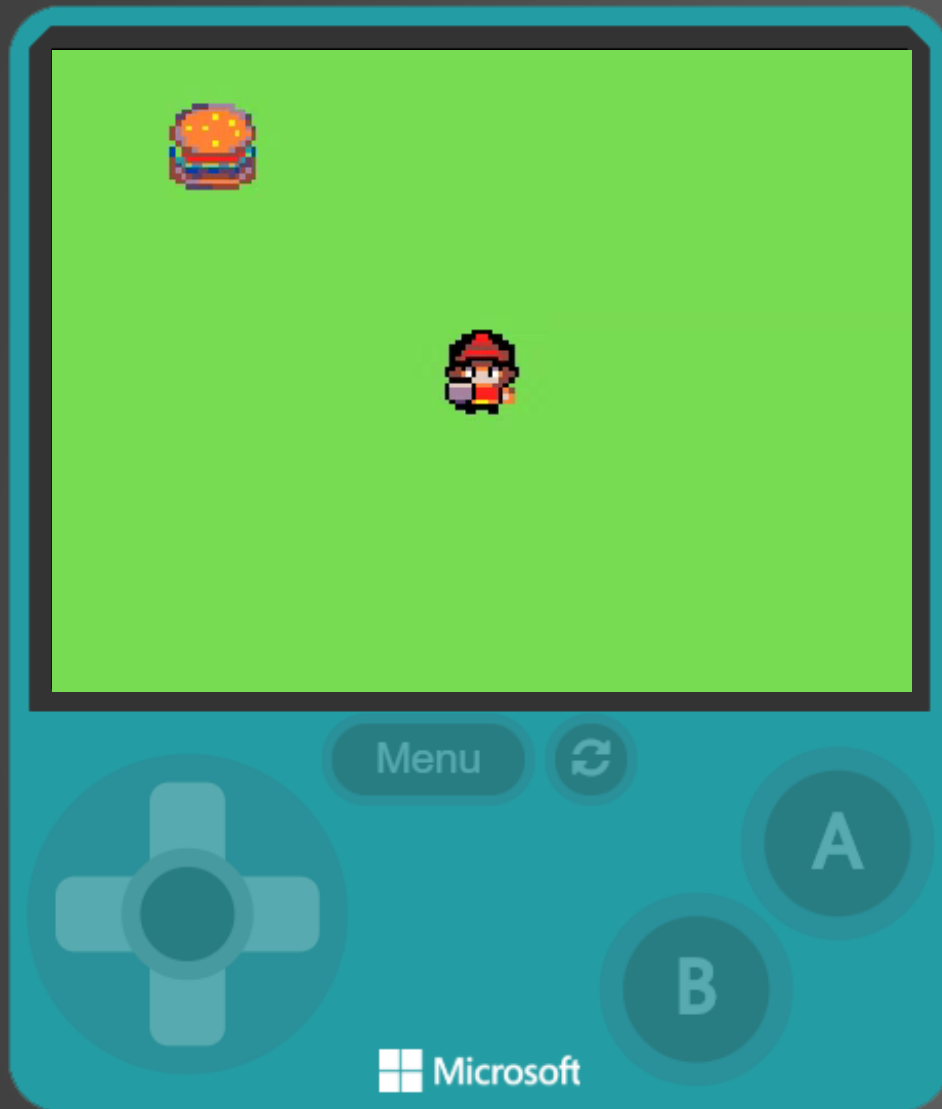


Grab **screen width** & **screen height** blocks

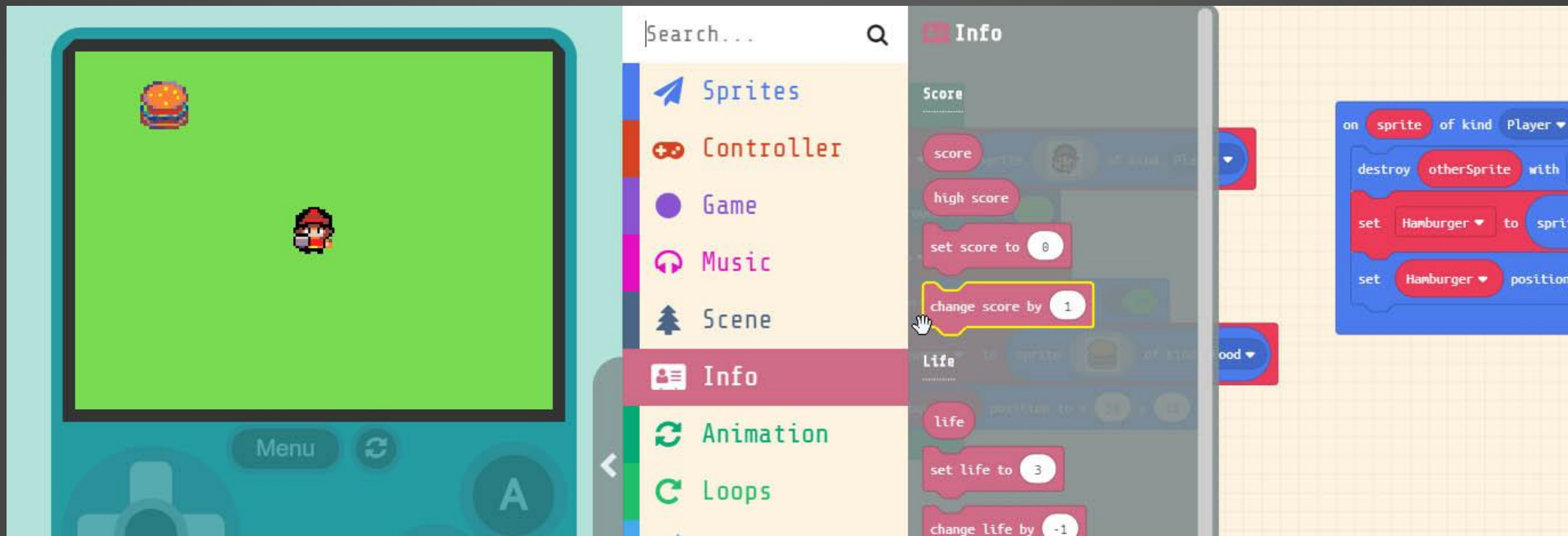
drag it into the


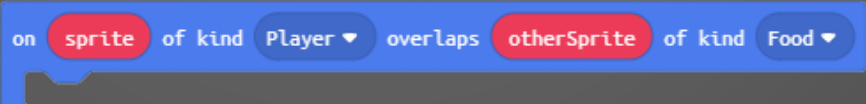


Where the 'x' and 'y' parameters = 10.

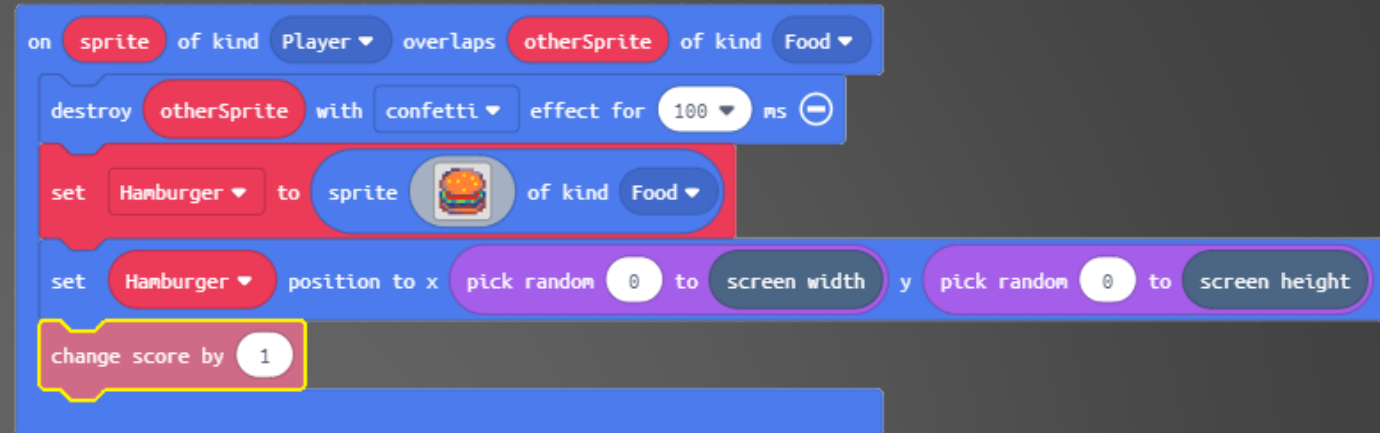
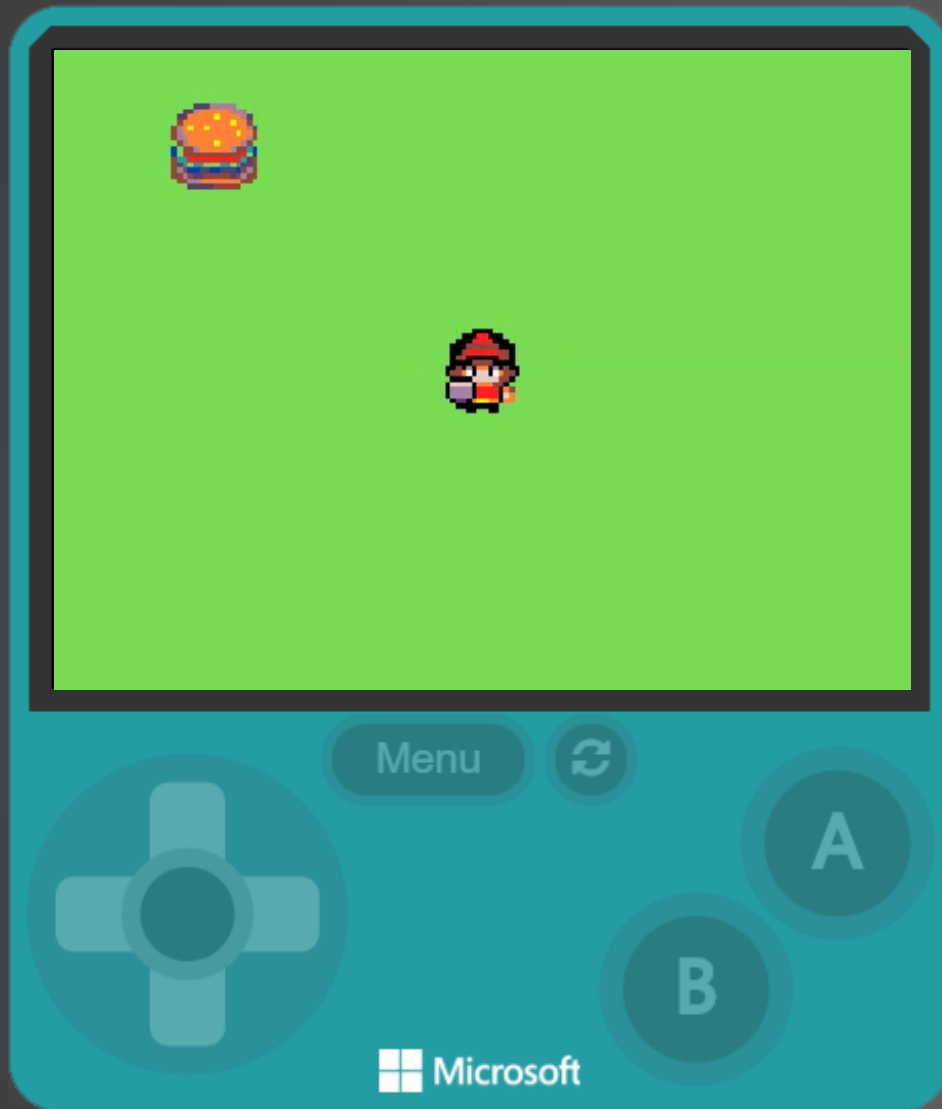


Now when we grab the 'Hamburger' the code inside our overlap event, creates a new 'Hamburger' and places the new one in a random location on the screen.



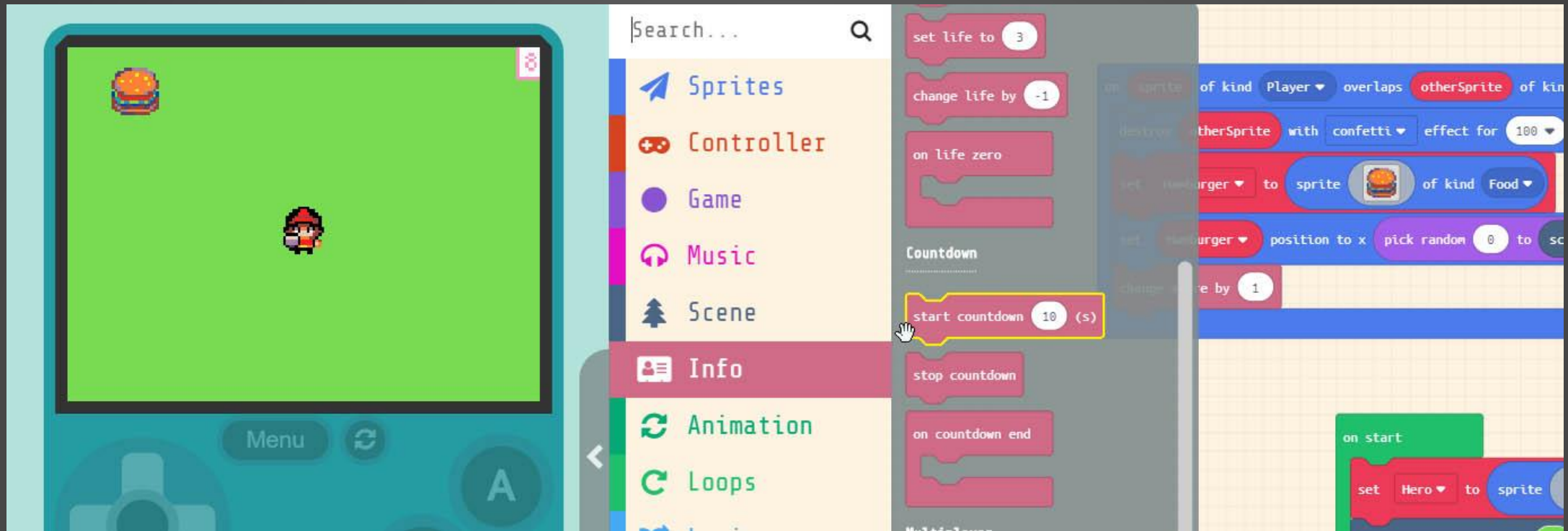
Grab the  block  
drag it into  block.



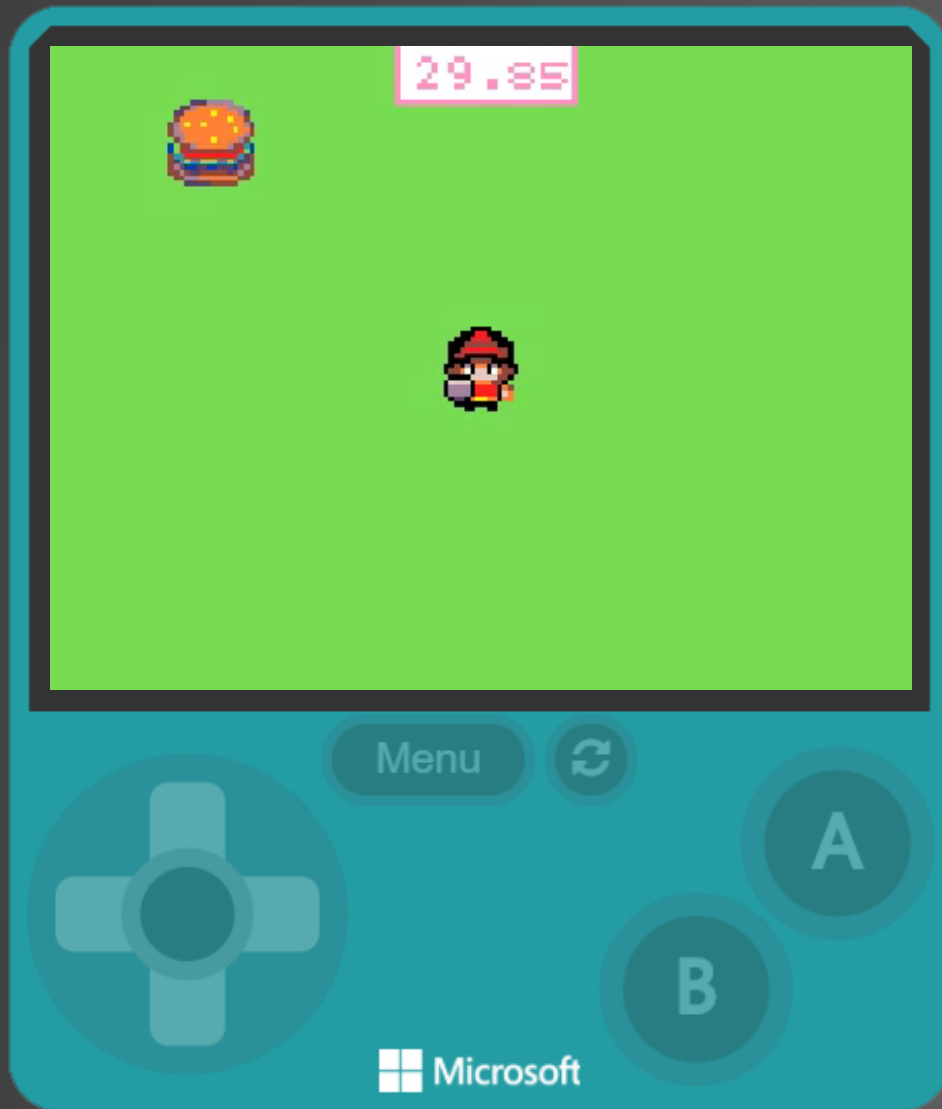


Now every time we grab a 'Hamburger' we get a point.

Let's add some challenge, by adding a timer to the game.



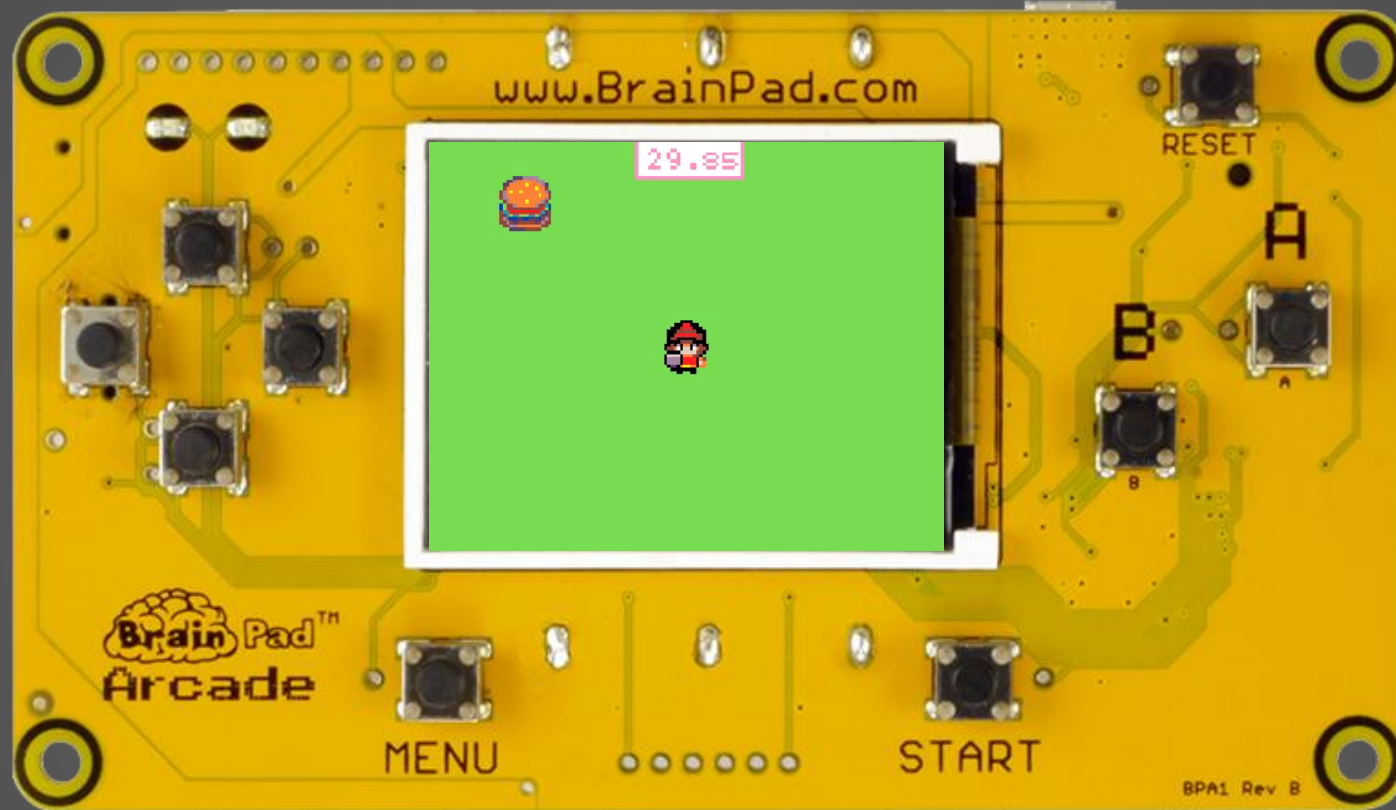
Grab the  block  
drag it into  block.



Change the parameter to '30' sec.

Now we have a GAME!!!

# Hardware Break



Now let's load what we have on to the BrainPad.



# EXTRA CREDIT

