

# Coding KittyWumpus:



Scroll Down for some examples and resources mentioned in the video

# Something Fishy with the Power Ups

These blocks control part the behavior of the tasty treat for KittyWumpus.

When the player's "sprite" (image) touches the fish sprite, the fish is "destroyed" (removed). Then a 10 second timer starts and 3 "Lives" (hearts) are added.



```
on sprite of kind Player overlaps otherSprite of kind fish
  change life by 3
  start countdown 10 (s)
  destroy otherSprite
  servo write pin P2 to 10
  pause 100 ms
  servo write pin P2 to 125
  pause 100 ms
```



The other blocks control KittyWumpus' tail on the physical avatar, which is moved by a servo connected to a Meowbit that's paired with a KittenBot.

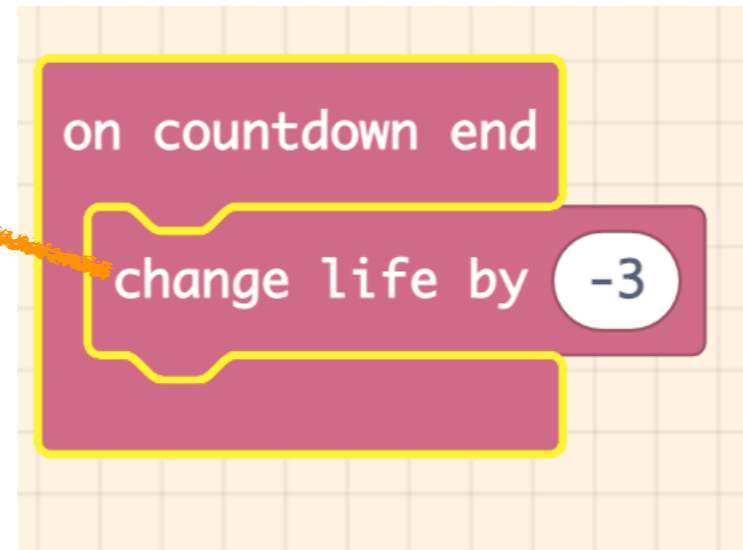
```
on destroyed sprite of kind fish
  set myFish to sprite of kind fish
  pause 5000 ms
  pause 5000 ms
  pause 5000 ms
  place myFish on top of tilemap col pick random 39 to 45 row pick random 35 to 40
```



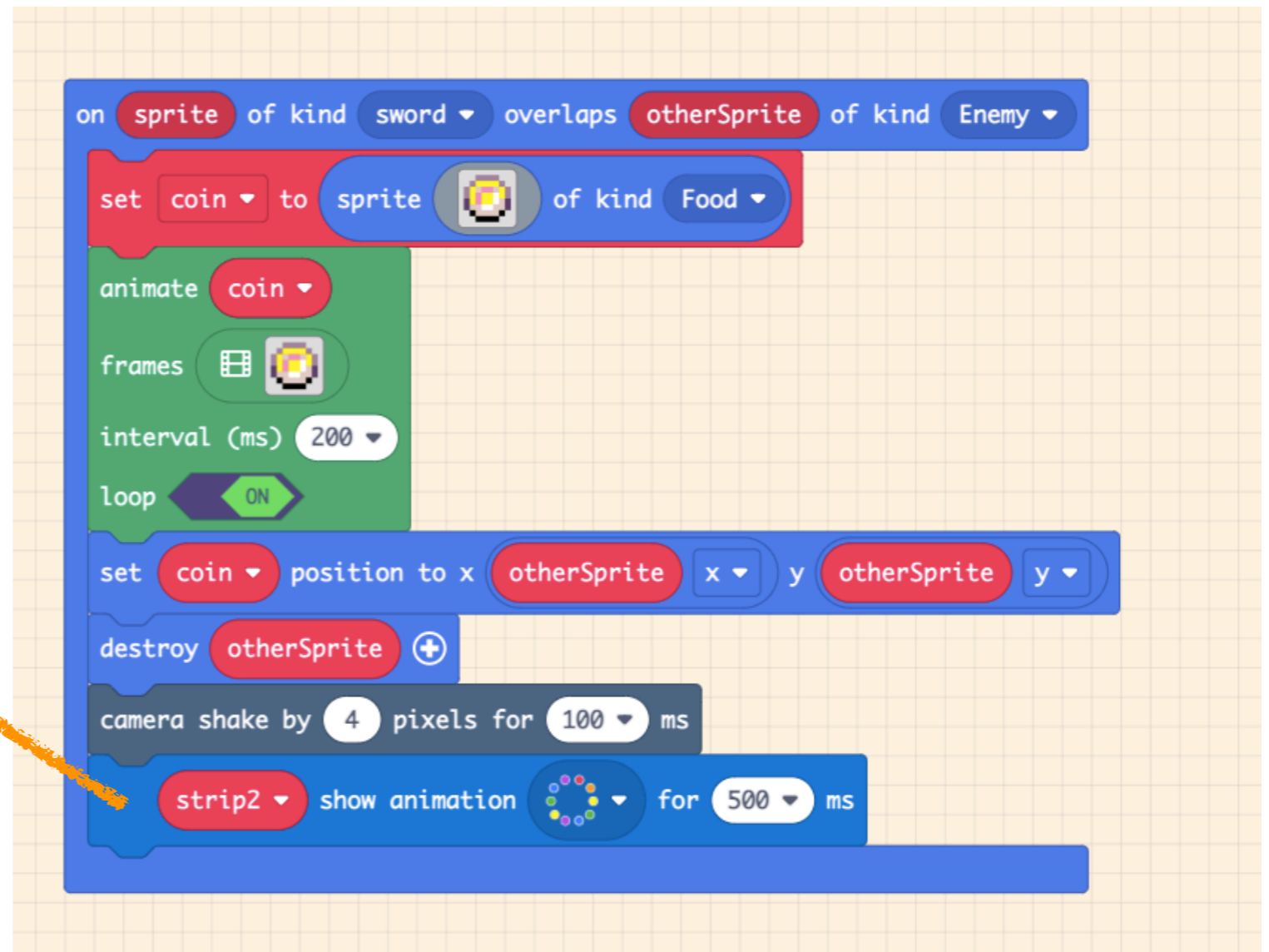
Whenever a fish is "eaten" (destroyed), a new one is created and after a 15 second pause, reappears in a new, random location within the dungeon entrance.



Also, once the countdown ends, the 3 lives that were added are removed.



This is a simple remix of the original code. The last block will activate a rainbow effect on the NeoPixel ring that's on KittyWumpus.



Here is another example of remixed code. Here, the original blocks controlling the behavior of the snakes has been repurposed to act as KittyWumpus' danger sensor!



```
forever
  for element value2 of array of sprites of kind Enemy
  do
    if mySprite y < value2 y + 80
      set all pixels to red
      pause 500 ms
      clear
      servo write pin P1 to 65
      pause 100 ms
      servo write pin P1 to 135
      pause 100 ms
    else
      set all pixels to green
      servo write pin P1 to 65
```

When the player's sprite is within range of any snake (based on x,y coordinates), then the KittyWumpus avatar will raise a paw with another servo motor while its NeoPixels will blink red. If the player is a safe distance away, then the lights will indicate green, and the paw will return (or remain) in its original position.

# Mentioned in the Video:

The original game, "Castle Crawler"

Parts, Purposes, Complexities

Agency by Design

Computational Tinkering

Physical Computing

Mechatronics

Remixing



i.lab

