

**Games and animations using Python** 



# Python Programming is Perfect for Beginners.



Simple uncomplicated syntax. Writing code in Python is similar to writing commands in plain English.

You can transform your ideas into reality using loads of different technologies and online resources.



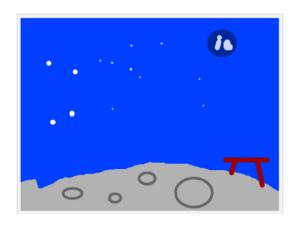
We'll be using Mu, a Python code editor for beginner programmers

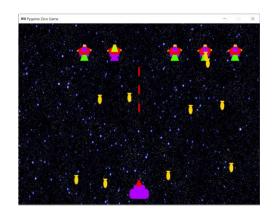
We'll also be using apps like Paint.net and Audacity to make our own sprites and sound effects

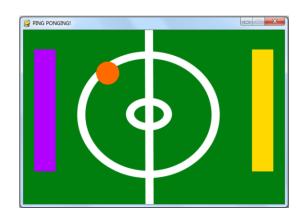


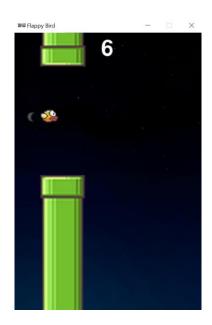




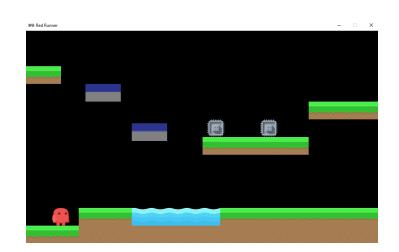


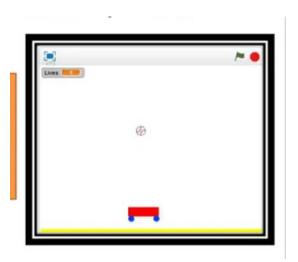






We'll create games & animations similar to those you created in Explorers & Advancers







## Why CoderDojo

- A place for young people interested in tech to meet up
- A coding <u>club</u> (Learn to code?)
- Learn to think algorithmically
- Learn soft skills



#### Why BODGERs

- Move from Scratch to text based programming
- Done is better than perfect
- Learn to use resources
- Be creative



## Why Python

- Syntax is easy to understand
- Lots of resources available (Libraries, Packages)
- Cross-platform (Raspberry Pi, Micro:bit)
- Used in the real world



## **Install Mu**

https://codewith.mu/en/download



#### **Hello World**

```
print('Hello, World!')
```

# Hello again

```
name = input("what is your name? ")
print('Hello ' + name)
```



#### **First Game**

```
WIDTH = 600
HEIGHT = 300
alien = Actor('alien')
alien.topright = 0, 10
def draw():
    screen.clear()
    screen.fill((255, 255, 255))
    alien.draw()
def update():
    alien.left += 2
    if alien.left > WIDTH:
        alien.right = 0
def on mouse down(pos):
    if alien.collidepoint(pos):
        sounds.eep.play()
```

