

# HOW TEACHING KIDS TO CODE CAN MAKE YOU A BETTER DEVELOPER



Ramón Huidobro

 @senorhuidobro

<https://ramonh.dev/teaching-kids.pdf>

WHO'S THIS "RAMÓN"?

WHY DOES HIS HAIR LOOK NOTHING LIKE IN THIS  
DRAWING?



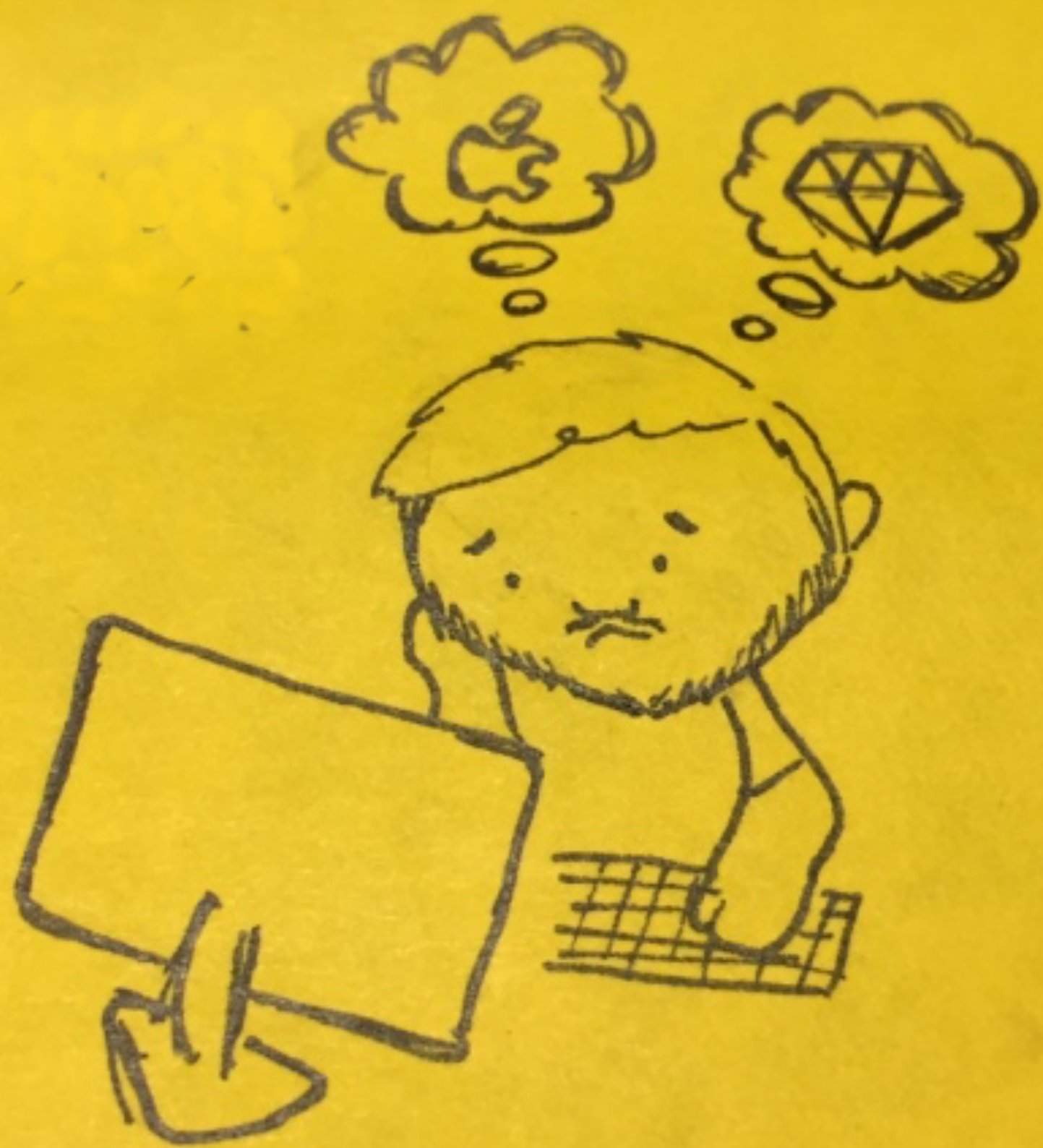
THE YEAR IS 2012...



Hi!







# COMPUTER GAME PROGRAMMING



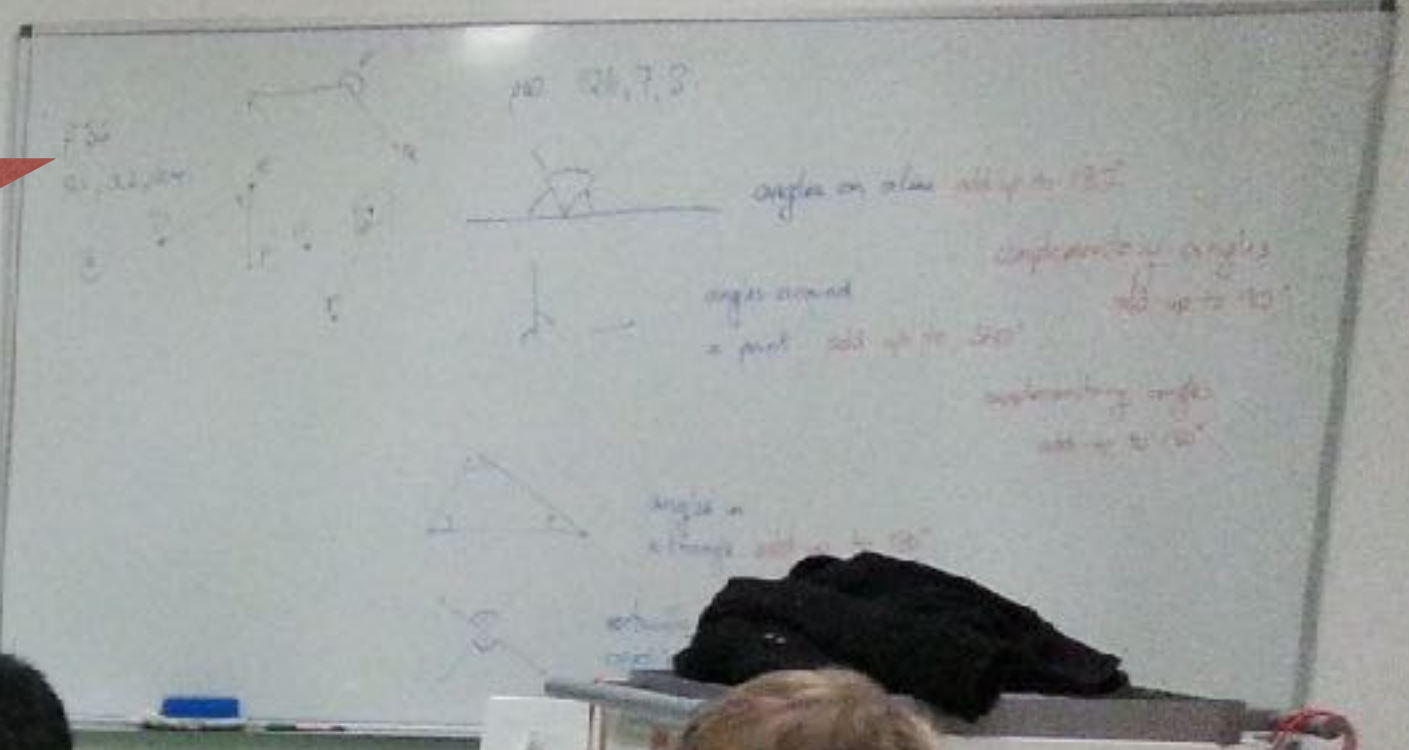


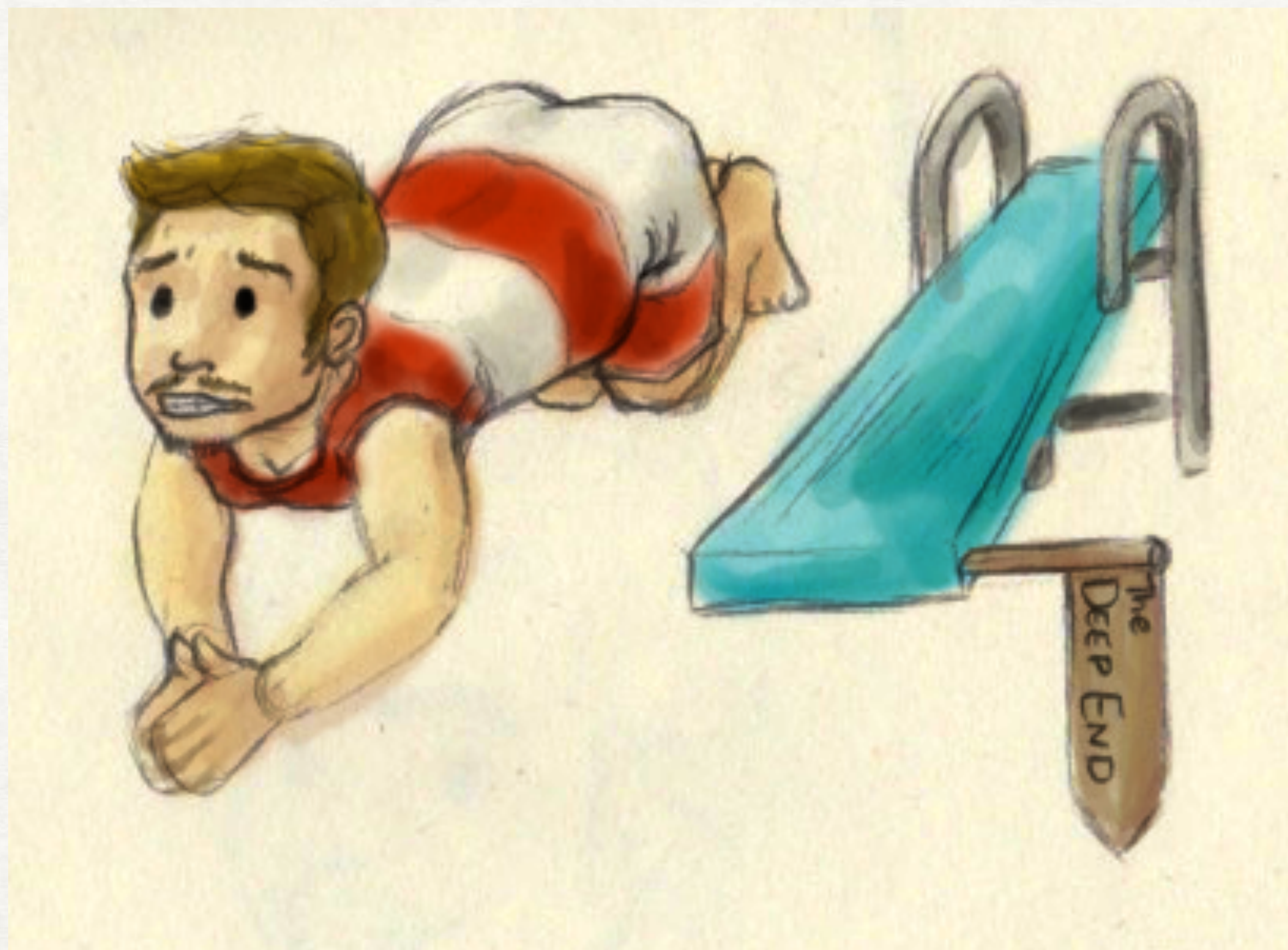




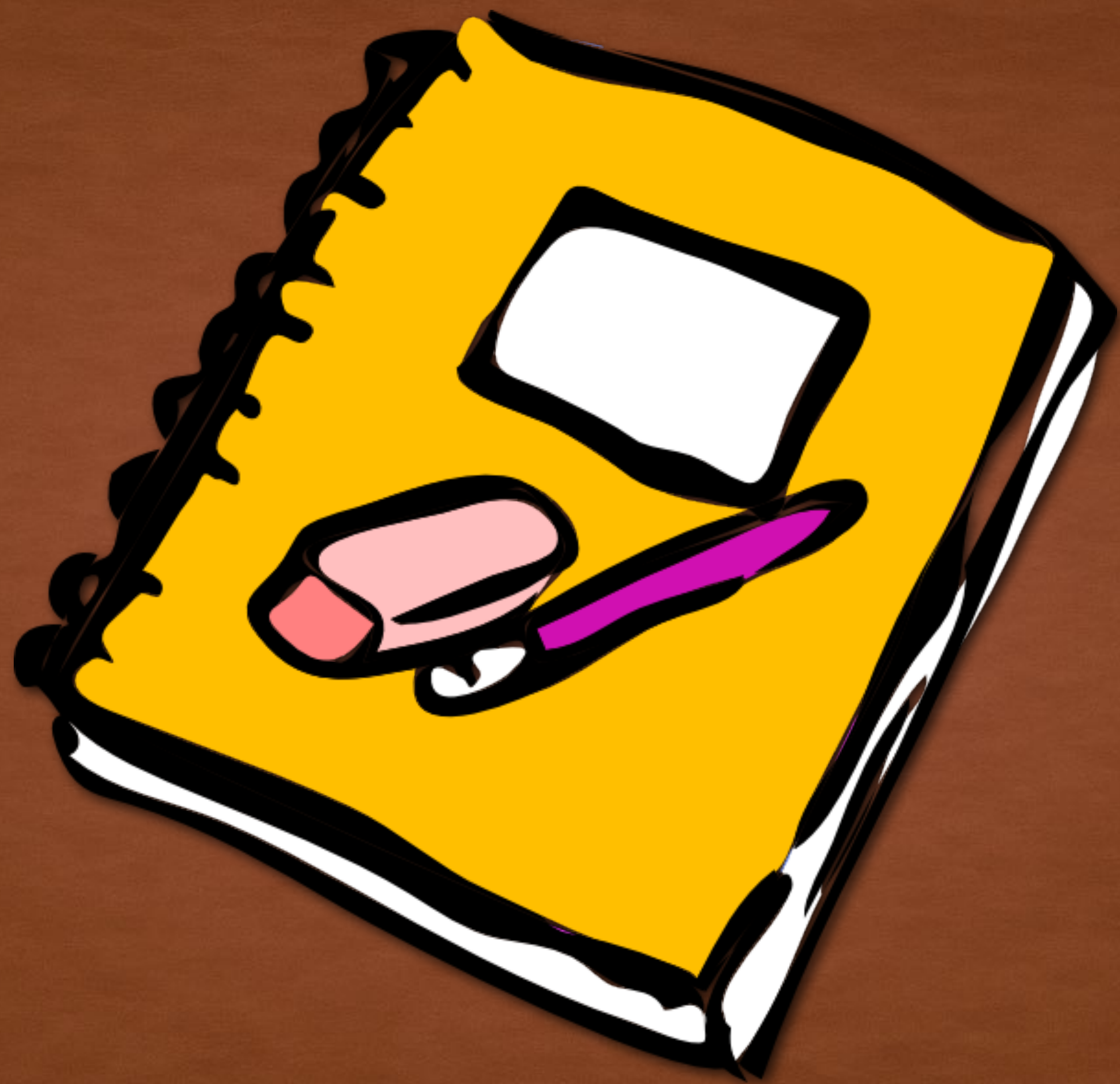
'GOSU'

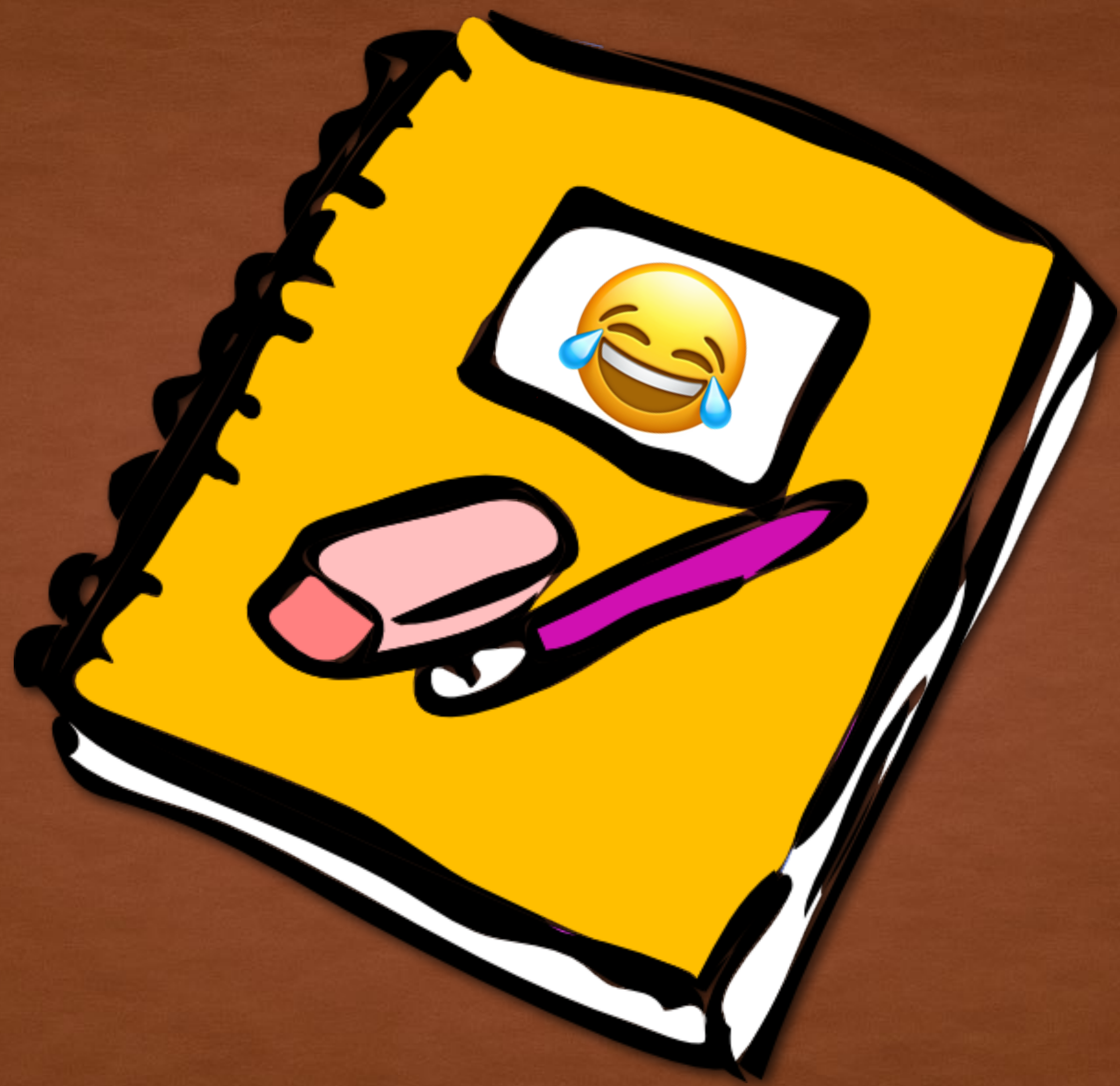
```
1: #include <math.h>
2: #include <stdio.h>
3:
4: int main()
5: {
6:     int x, y;
7:     printf("Enter x and y: ");
8:     scanf("%d %d", &x, &y);
9:     printf("x: %d, y: %d\n", x, y);
10:    return 0;
11: }
```

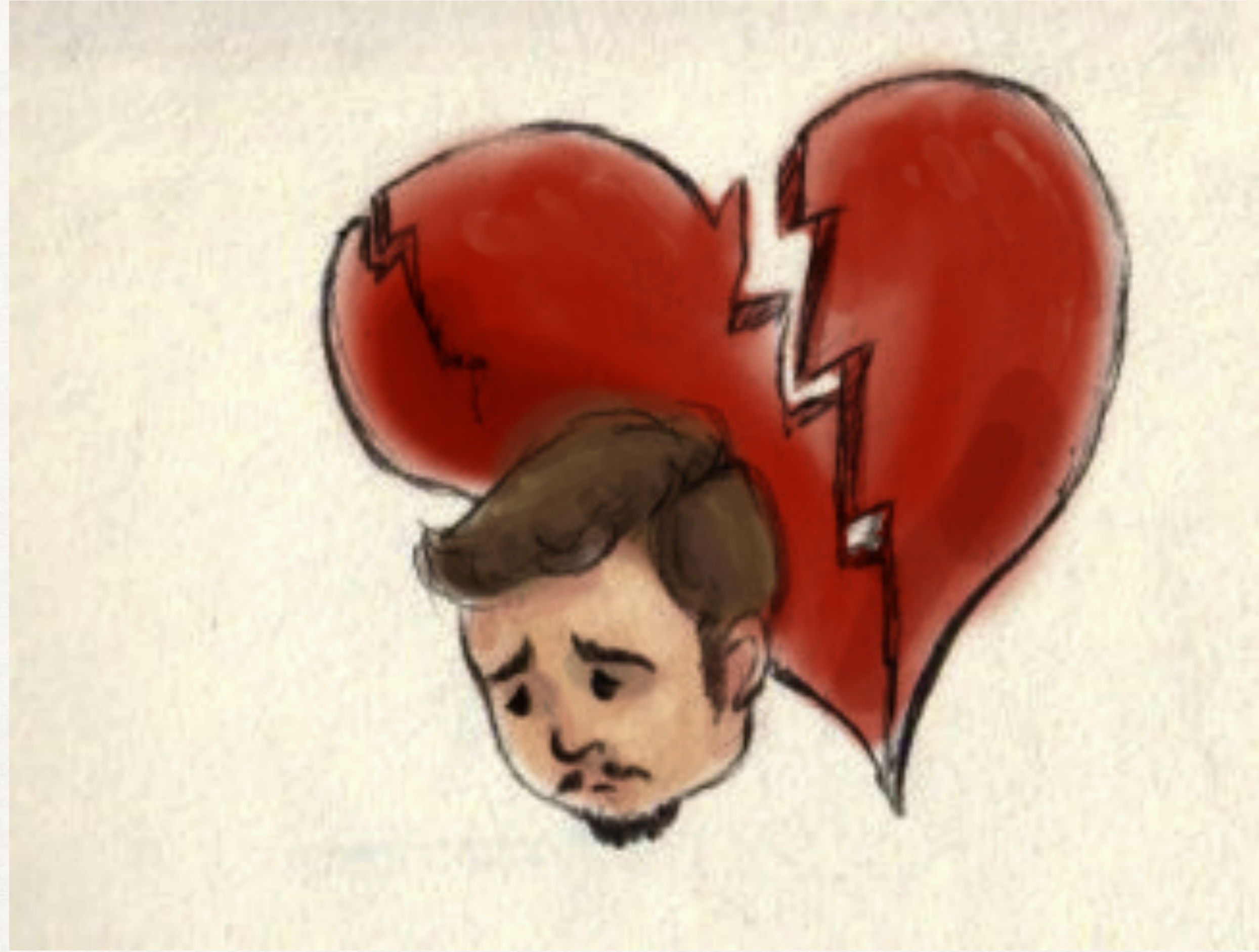














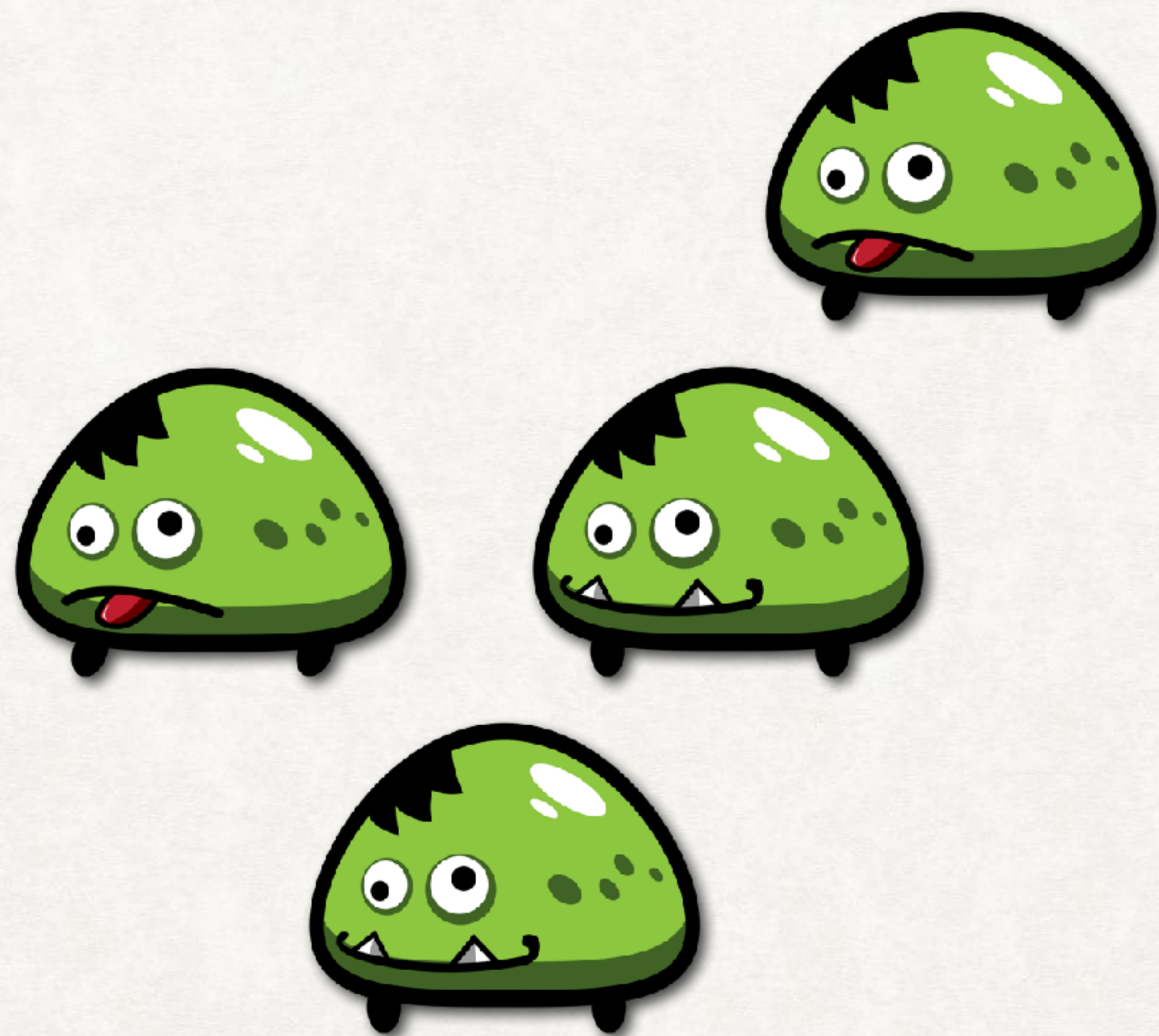


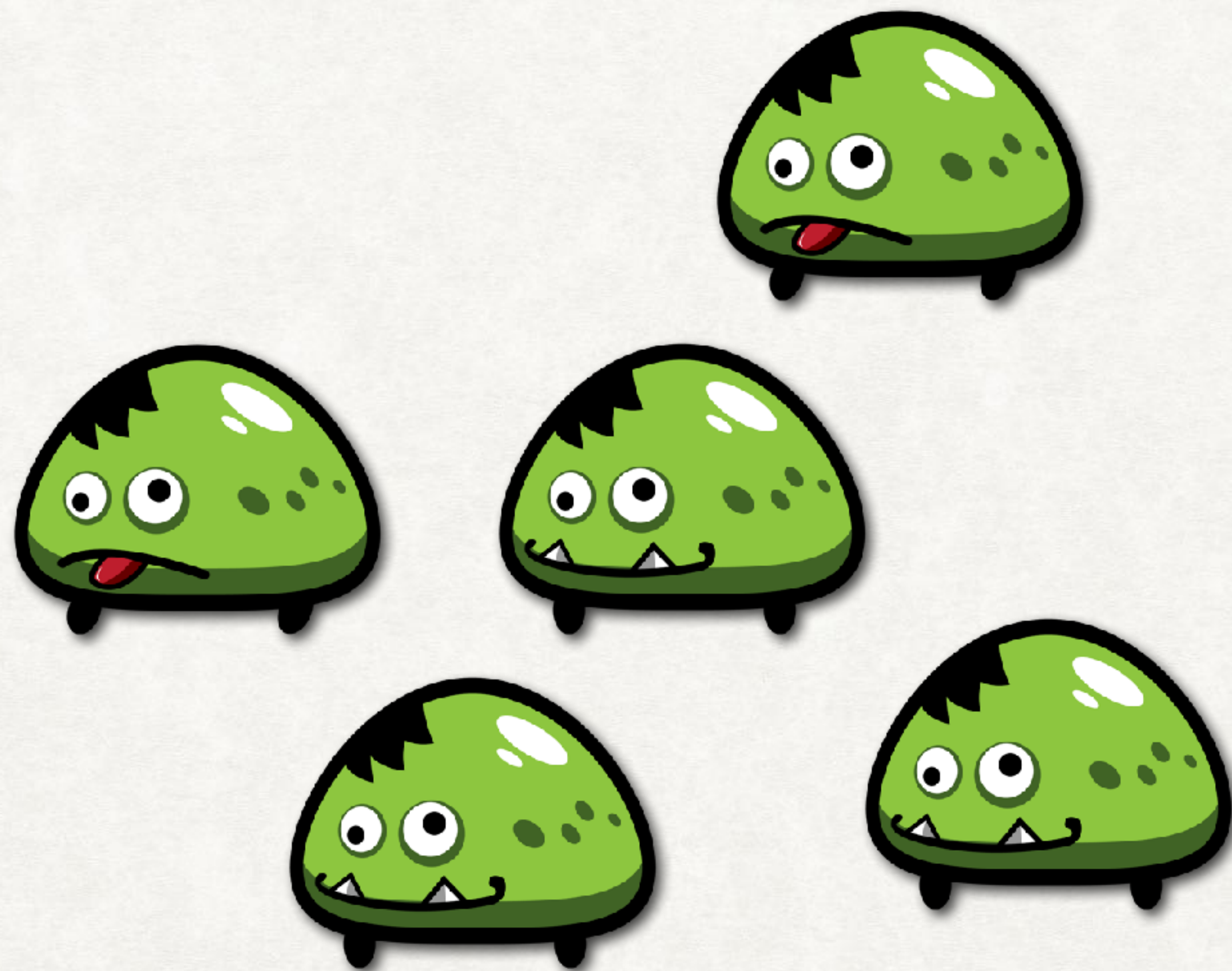
- **Break ALL the things**
- Appreciate that which I take for granted
- Learn by doing, understand by practising
- Simple != Easy to understand
- Showing and reading code is important

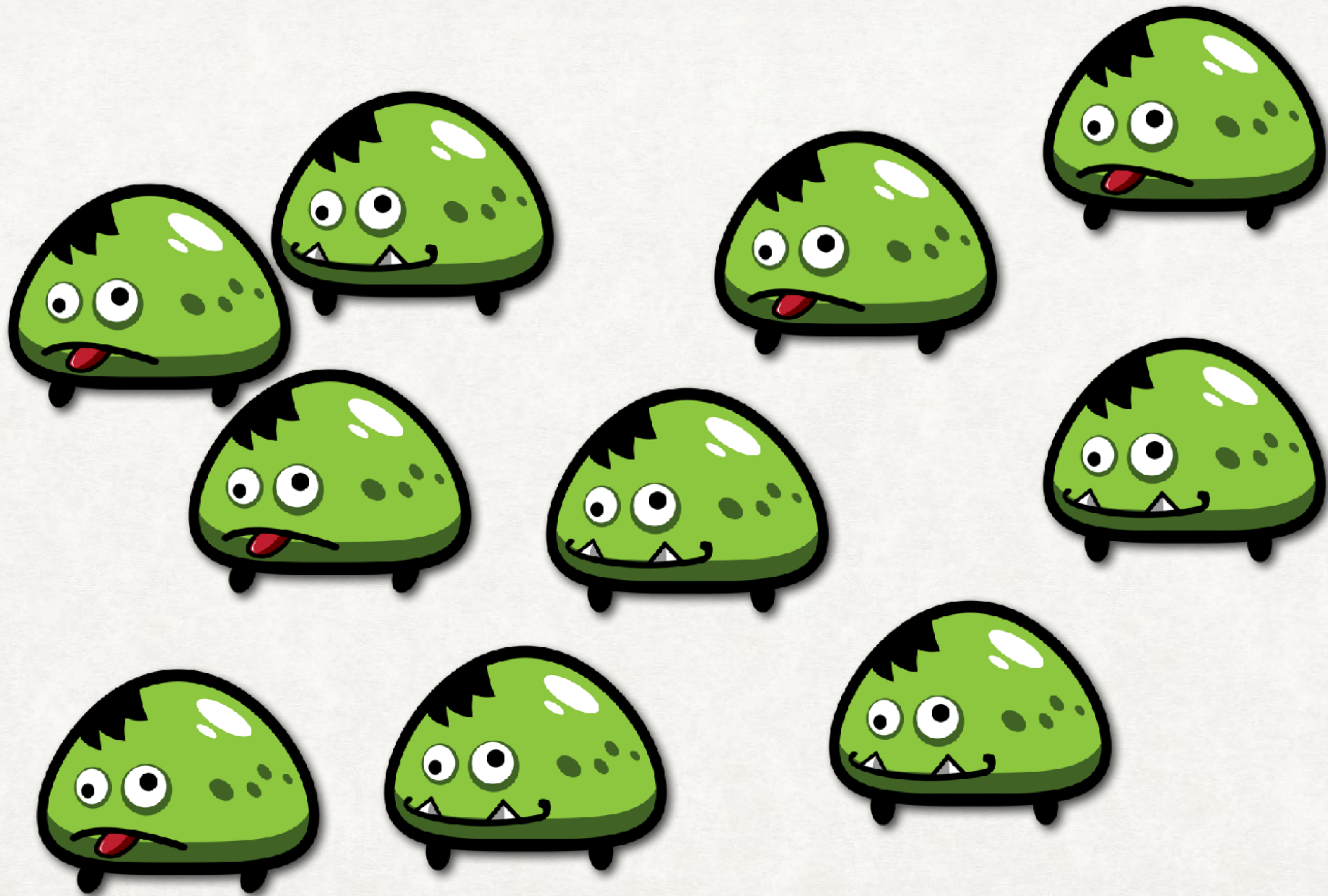


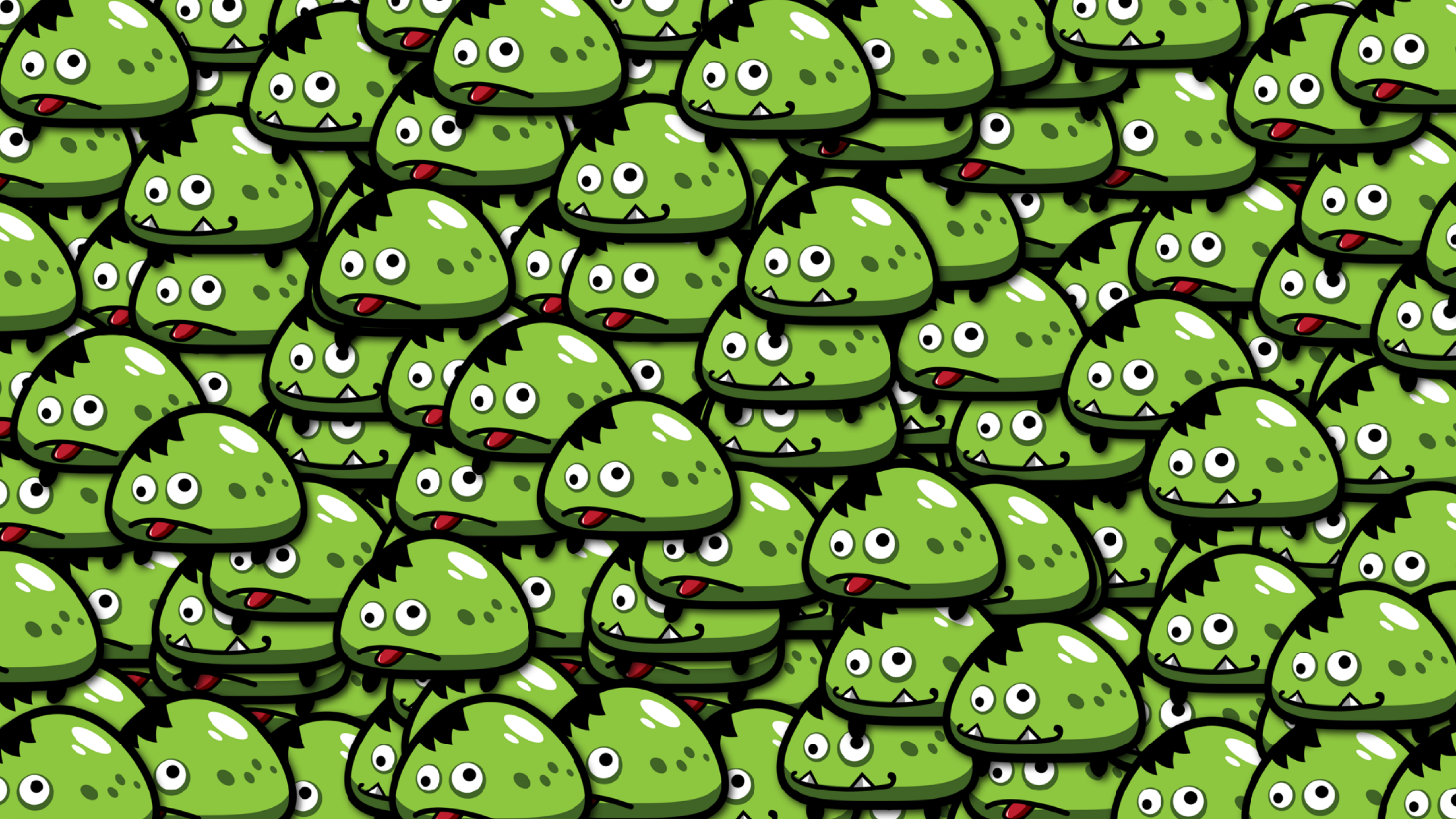
**Their speed...  
it's over 9000!**



















AWESOME!



**“IT’S TOO MUCH FOR  
MY LAPTOP”!**

**HAVING FUN IS  
IMPORTANT!**

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```
name = "Ana"  
puts name
```



```
name = "Ana"  
puts name
```

=> "Ana"

```
puts name  
name = "Ana"
```

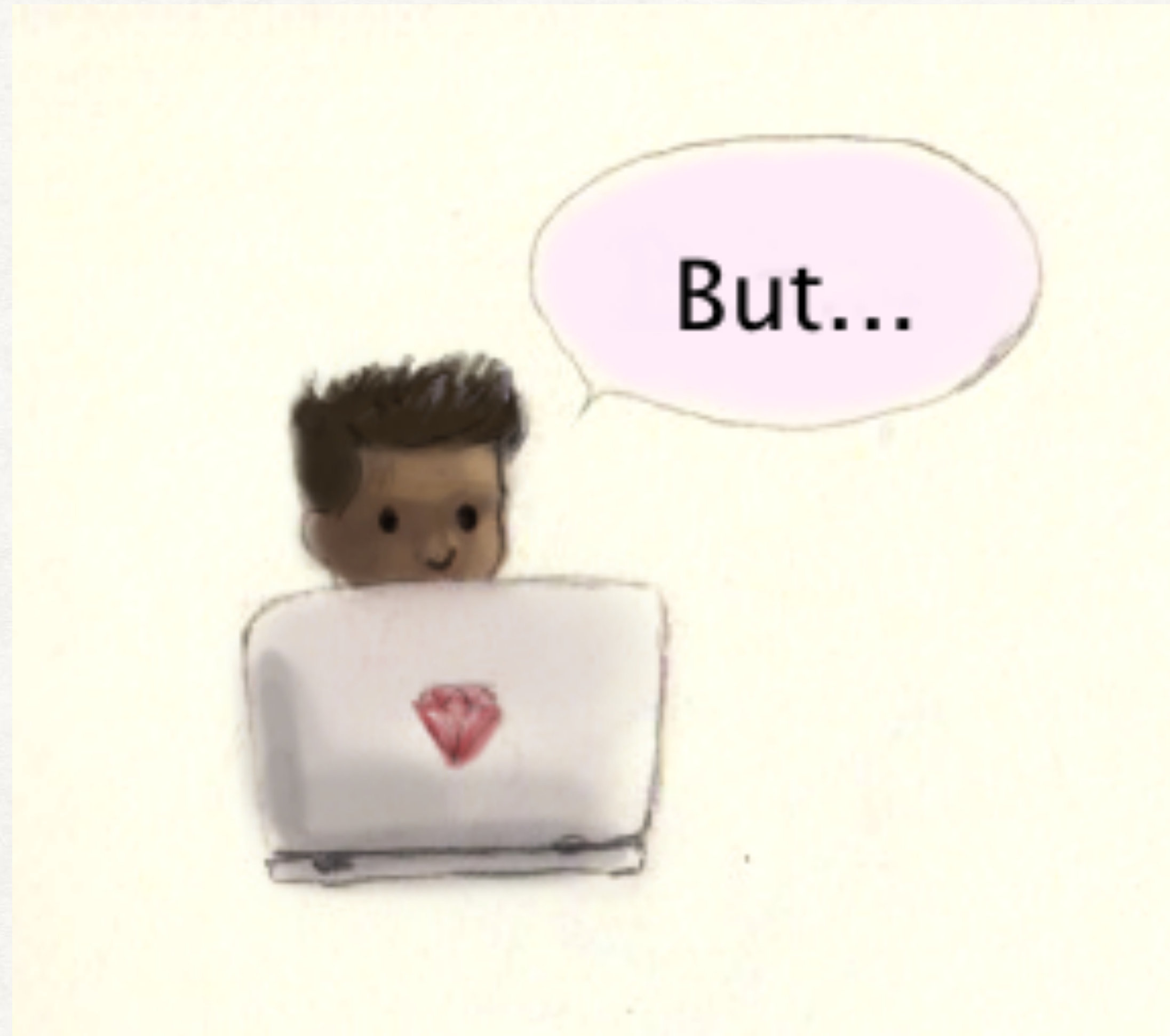




```
puts name  
name = "Ana"
```

```
NameError: undefined local variable or method `name' for ma
```







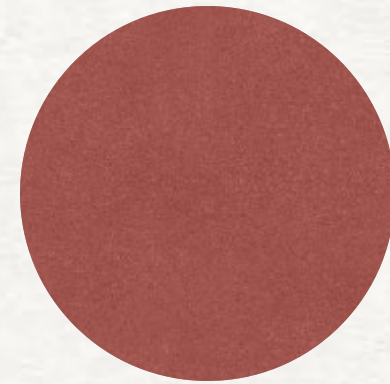


**GRAPHICS!**

Super game 4000!

Super game 4000!

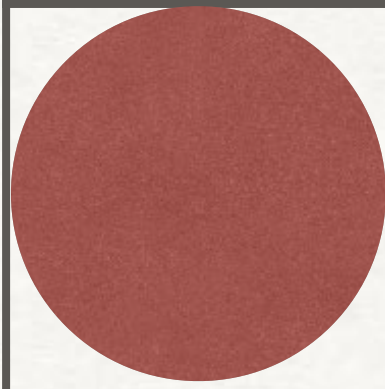
$(x, y)$





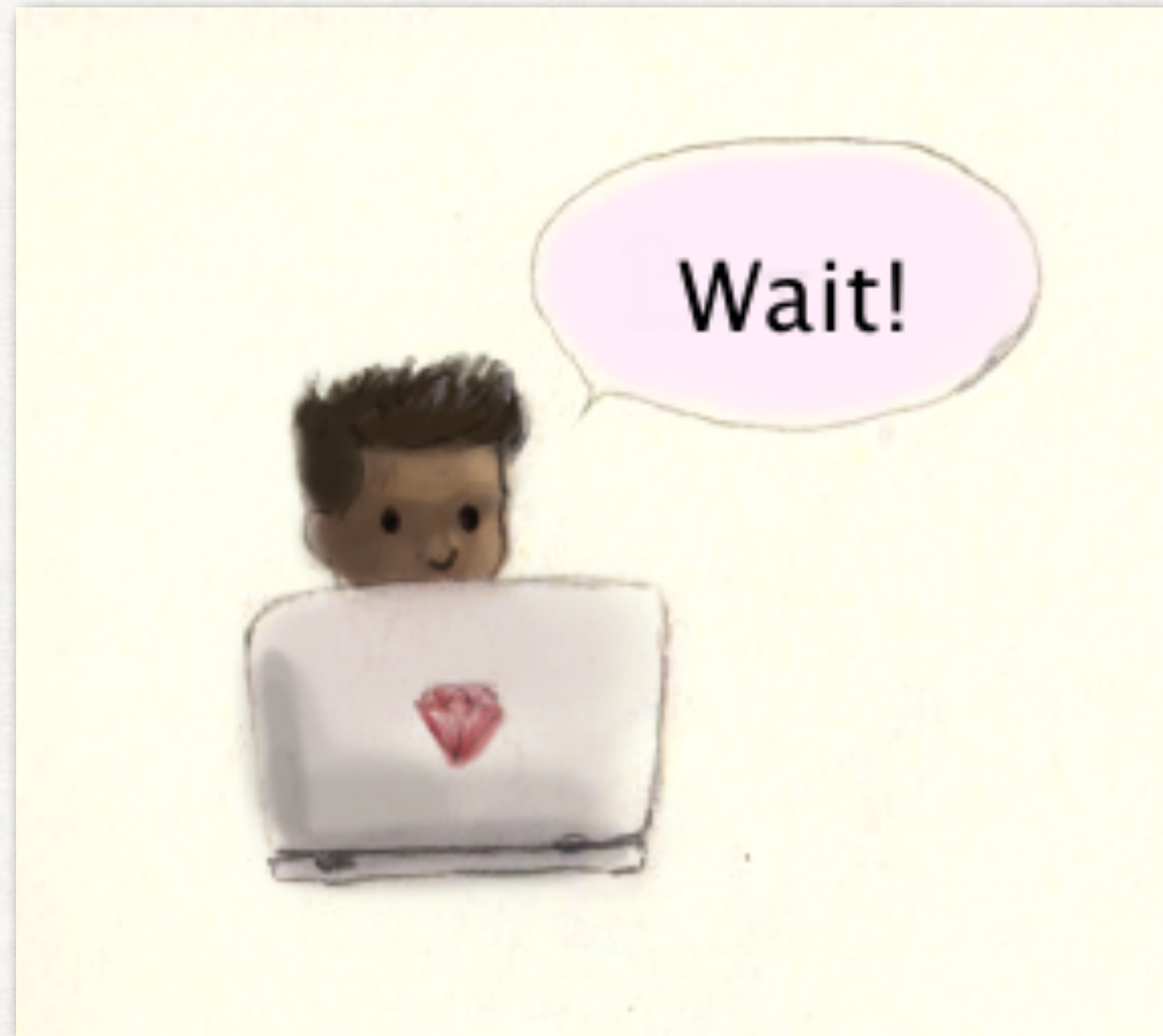
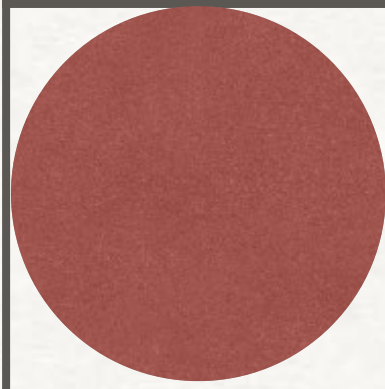
Super game 4000!

(0, 0)



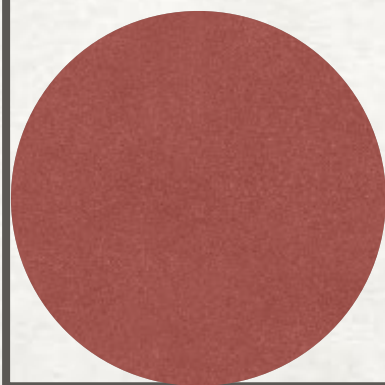
Super game 4000!

(0, 0)



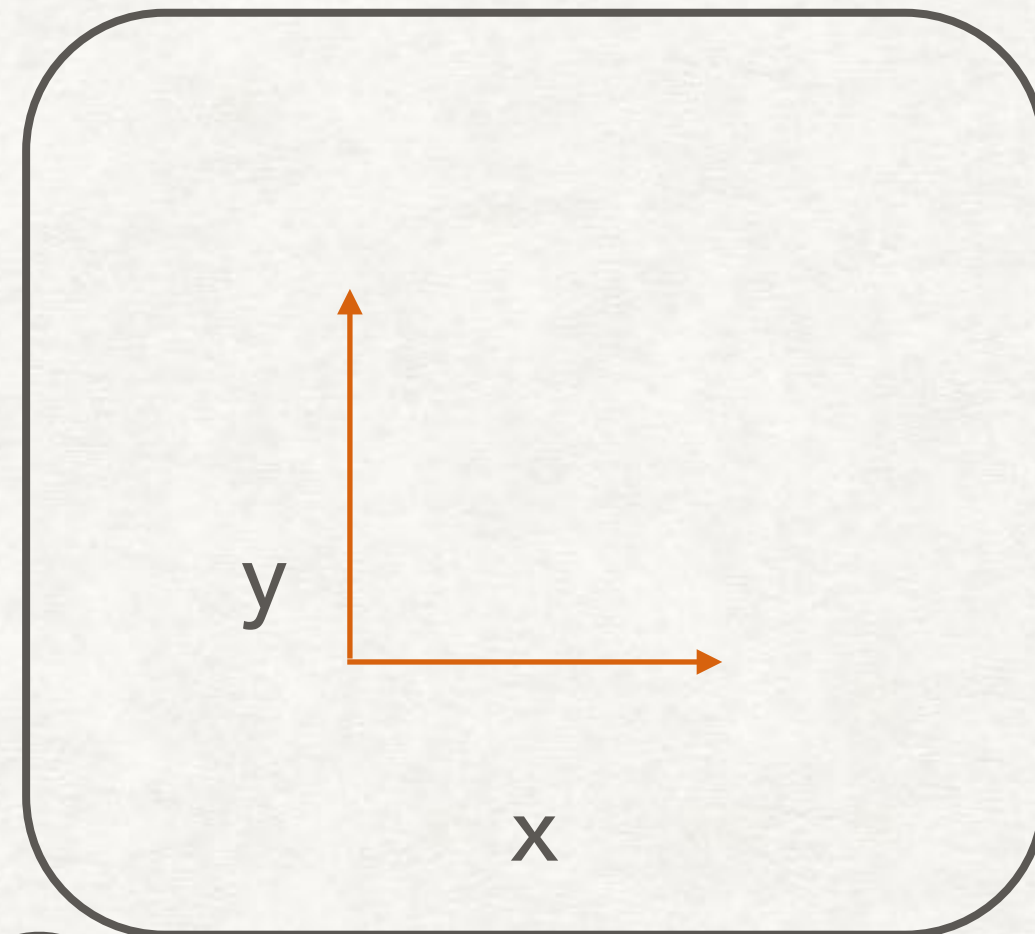
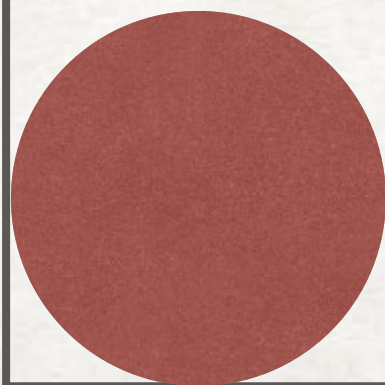
Super game 4000!

(0, 0)



# Super game 4000!

(0, 0)







[HTTPS://WWW.YOUTUBE.COM/WATCH?V=3BJU2DRRTCM](https://www.youtube.com/watch?v=3BJU2DRRTCM)

**28500FPS**

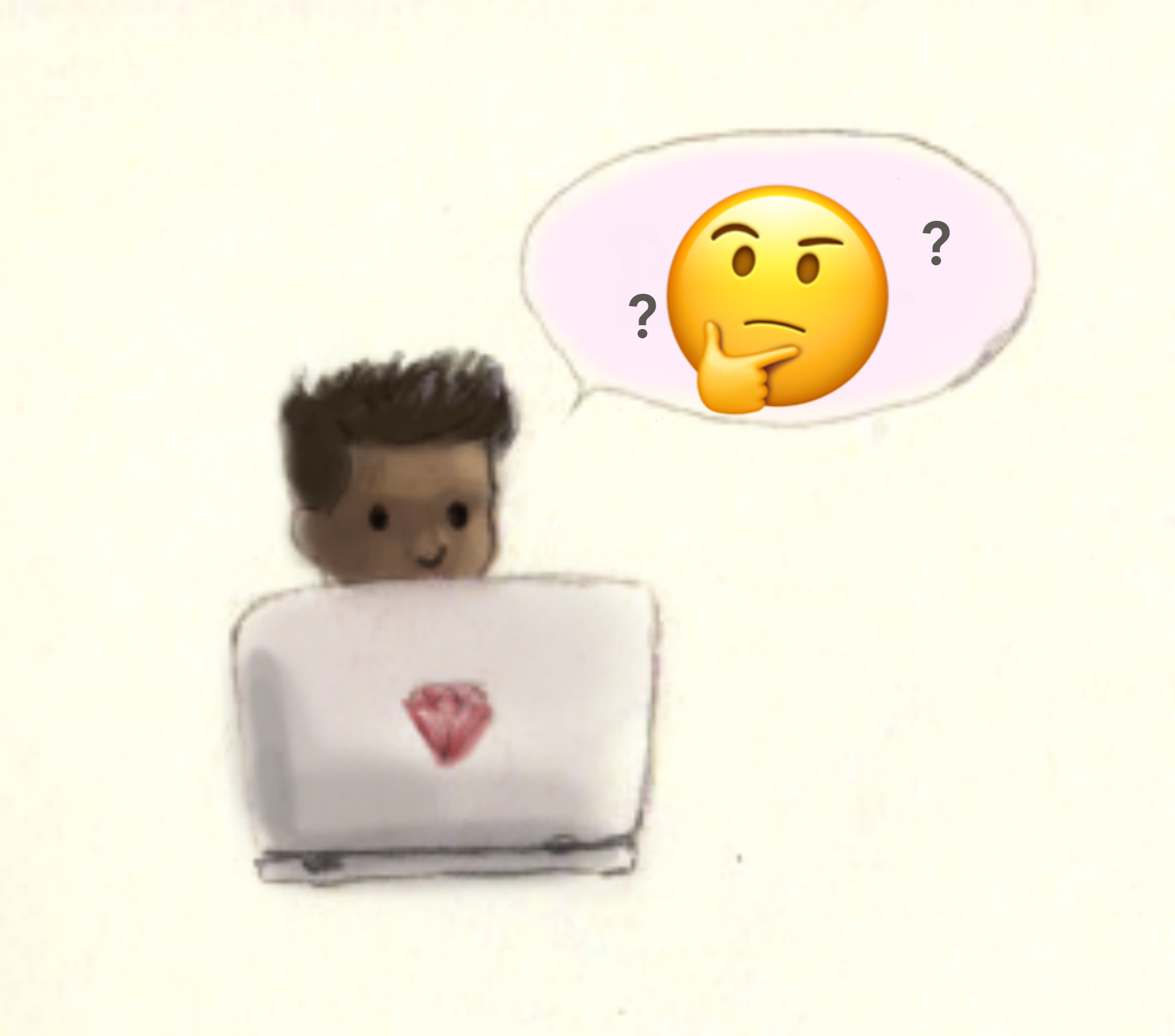
AWESOME!





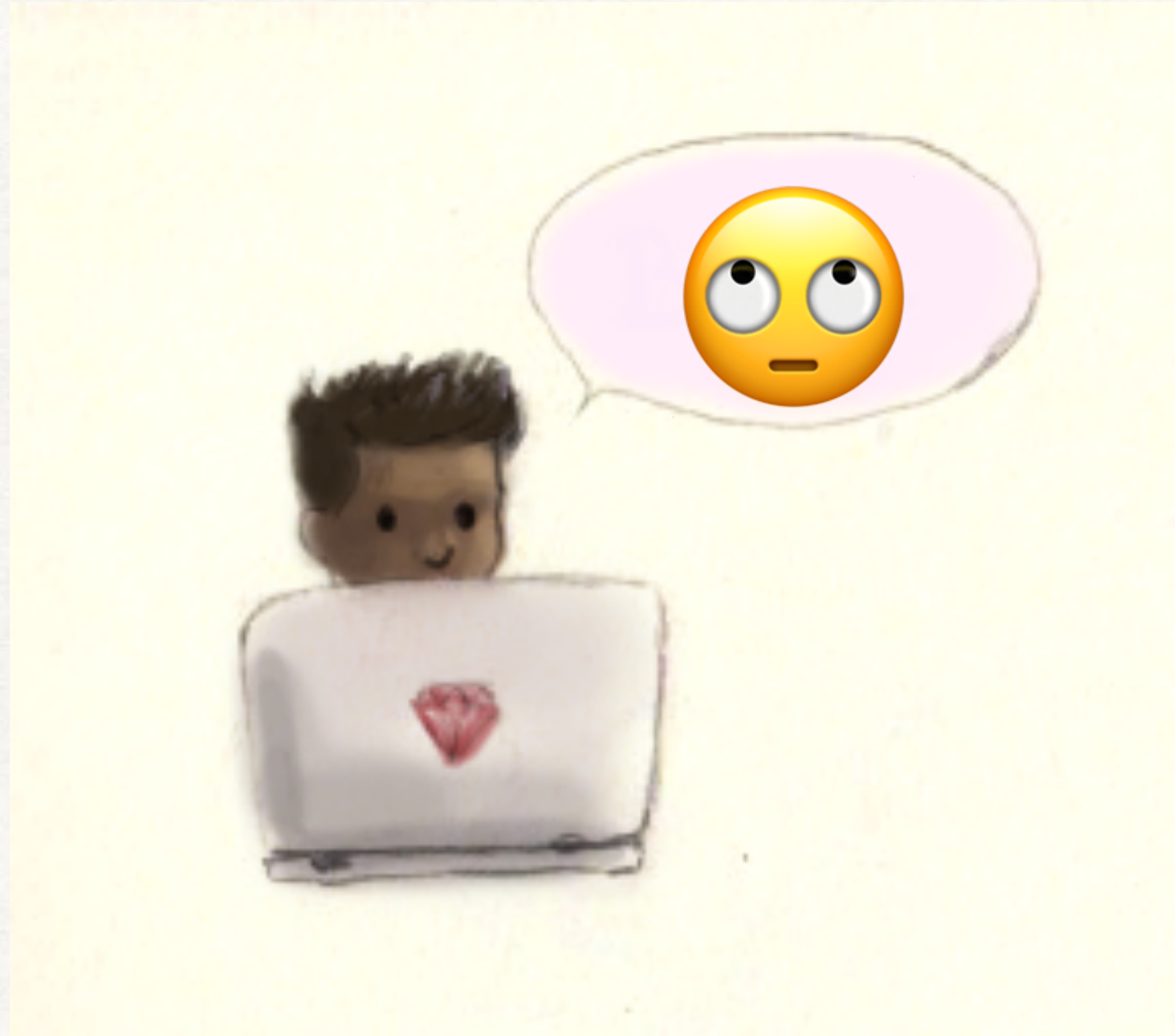
- Break ALL the things
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**"OK EVERYONE, THIS IS  
WHAT AN ARRAY IS!"**

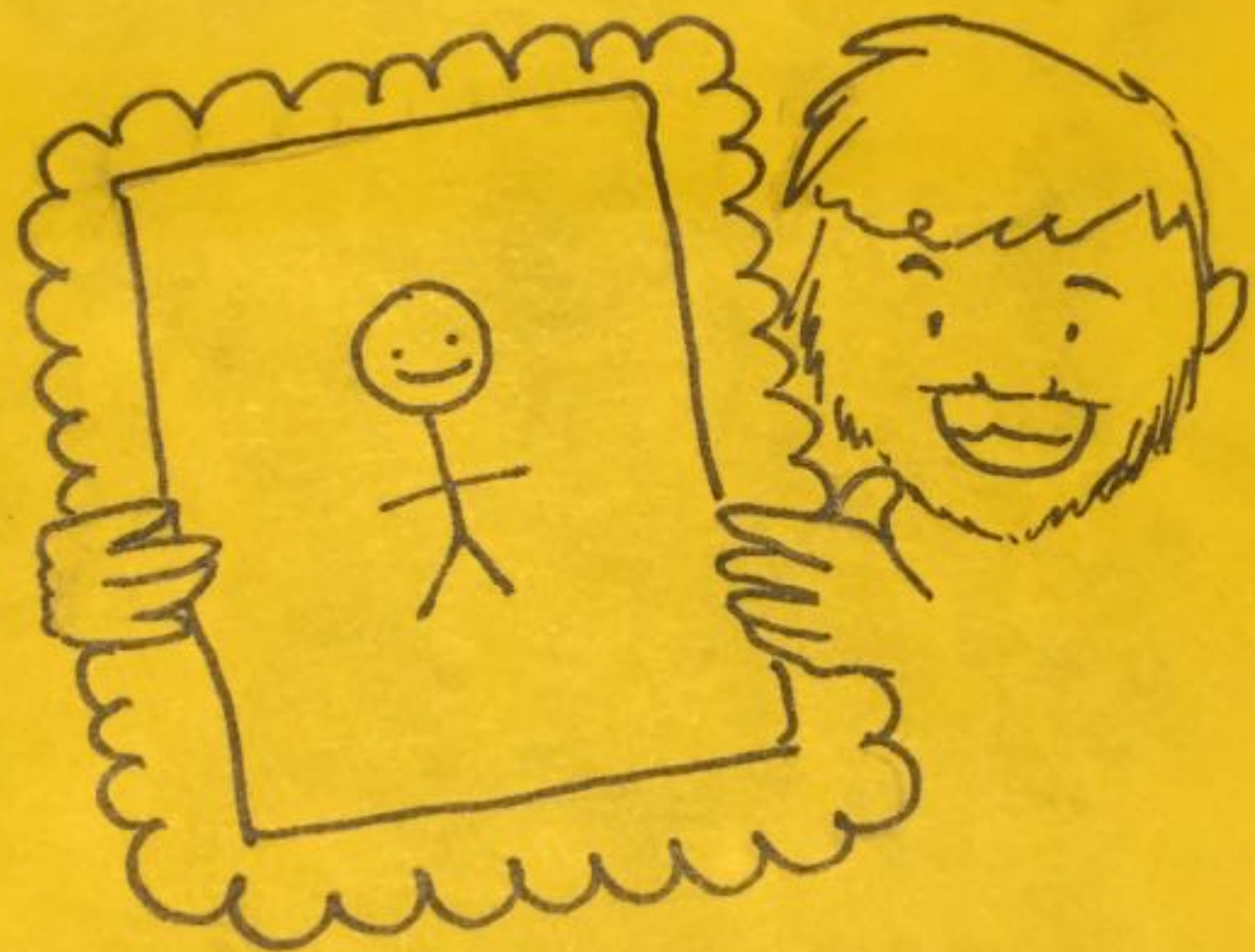


# ALRIGHT EVERYBODY! LET'S...

- Make a new array with 50 enemies
- Add an enemy to the array
- Move each enemy five pixels to the right
- Kill every single enemy









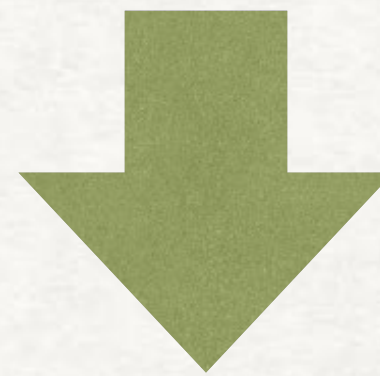




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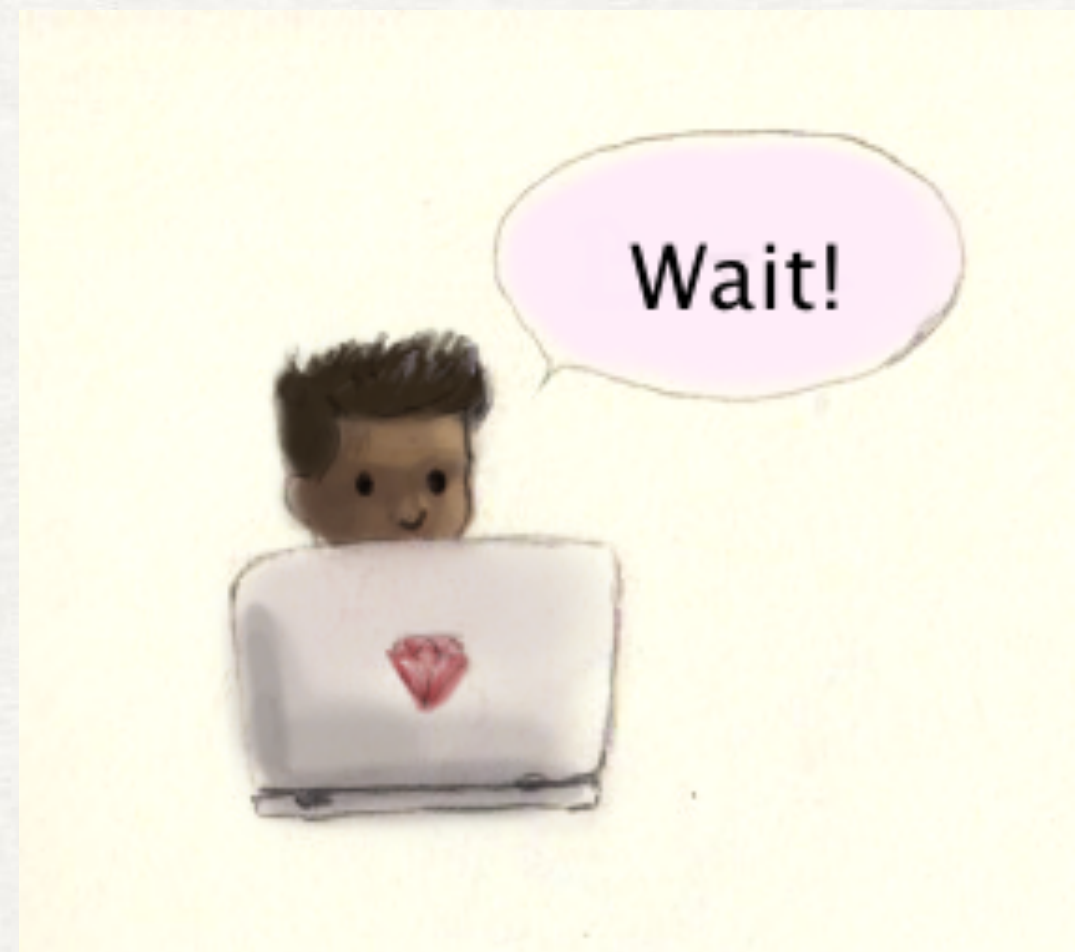
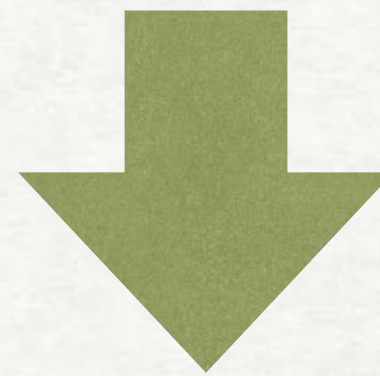
```
def update  
  @player.x = @player.x + 5  
end
```

```
def update  
  @player.x = @player.x + 5  
end
```



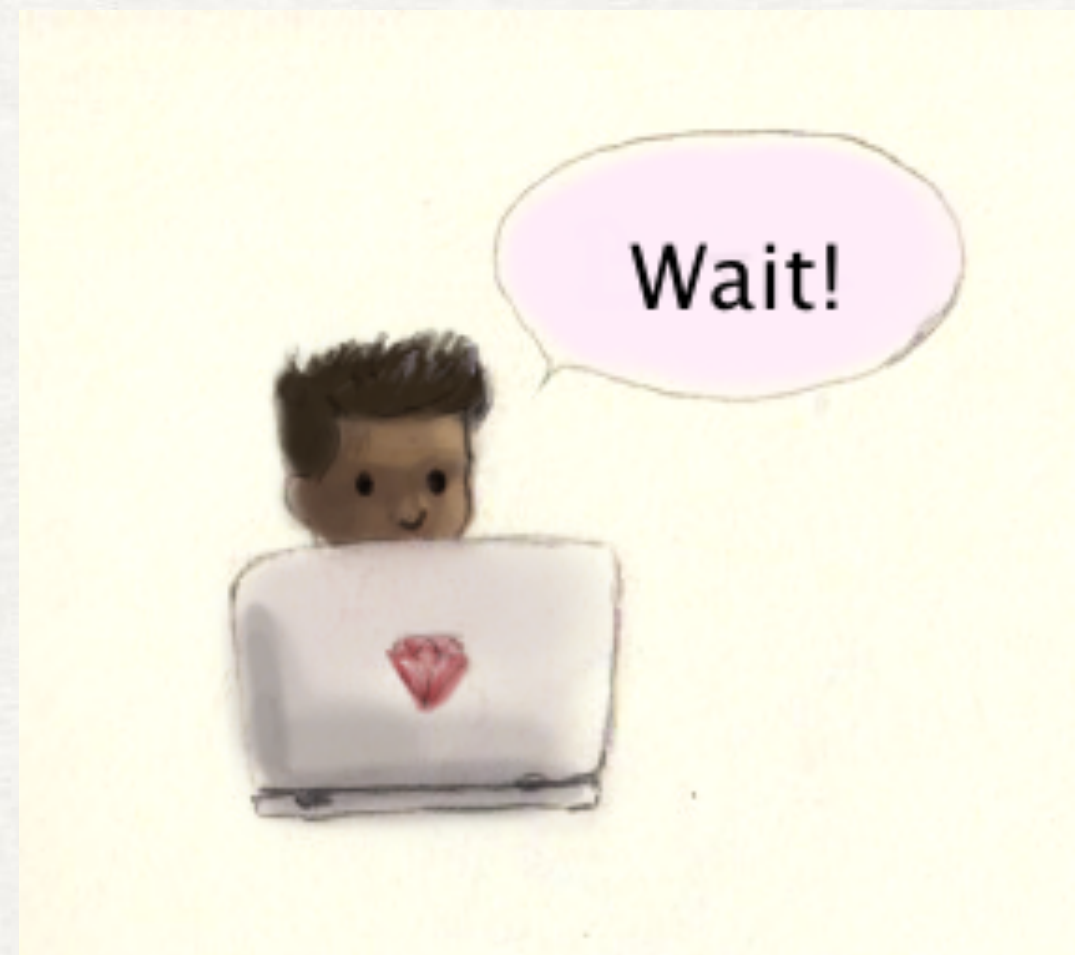
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```

```
def update  
  @player.x = @player.x + 5  
end
```



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def update
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```



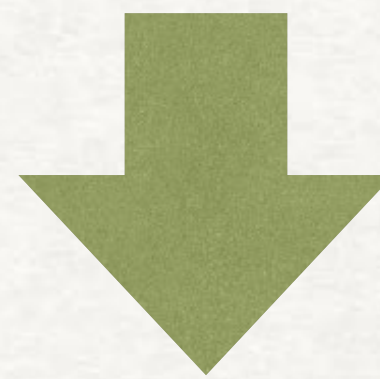
```
def update
  @player.x += 5
end
```



```
@player.x = [@player.x - 5, 0].max
```



```
@player.x = [@player.x - 5, 0].max
```



```
@player.x = @player.x - 5  
if @player.x < 0  
    @player.x = 0  
end
```

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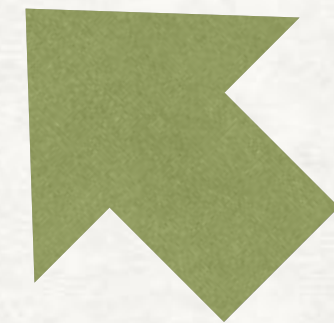
“IT’S BROKEN - \\_(ツ)\_/ -”

"IT'S BROKEN -\\_(\ツ)\\_/-"

```
def update
  @asteroids.each do |asteroid|
    asteroid.move_down
    if @player.collided_with?(asteroid)
      @player.explode
      game_over
      break
    end
  end
end
```

"IT'S BROKEN -\\_(\ツ)\\_/-"  
DONEC QUIS NUNC

```
def update  
  @asteroids.each do |asteroid|  
    asteroid.move_down  
    if @player.collided_with?(asteroid)  
      @player.explode  
      game_over  
      break  
    end  
end
```



**SUDDENLY, PAIR  
PROGRAMMING HAPPENED**





I'M READING LOTS OF CODE  
NOW AND IT'S GREAT!

**PAIR PROGRAMMING  
IS PRETTY SWEET!**

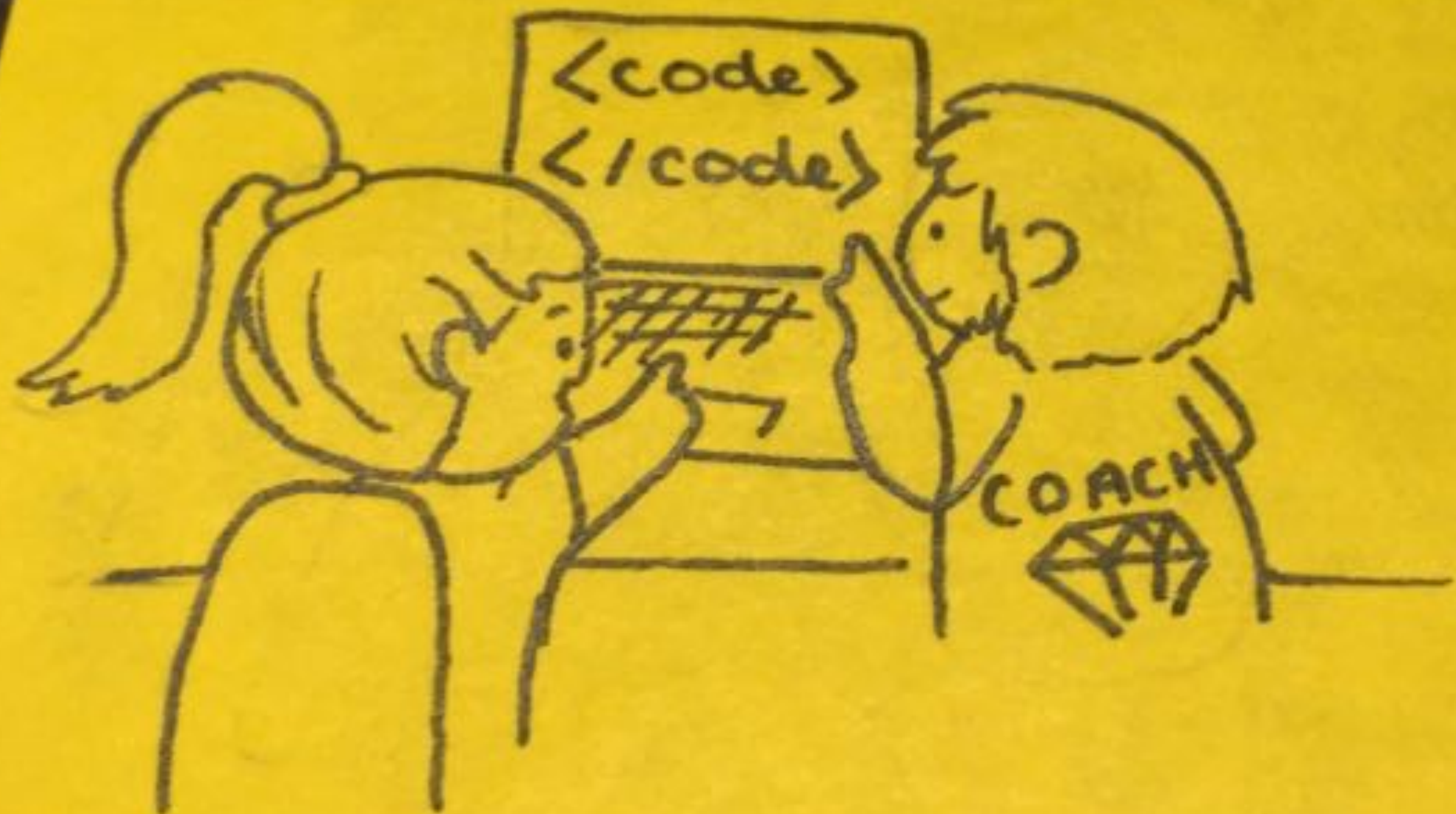
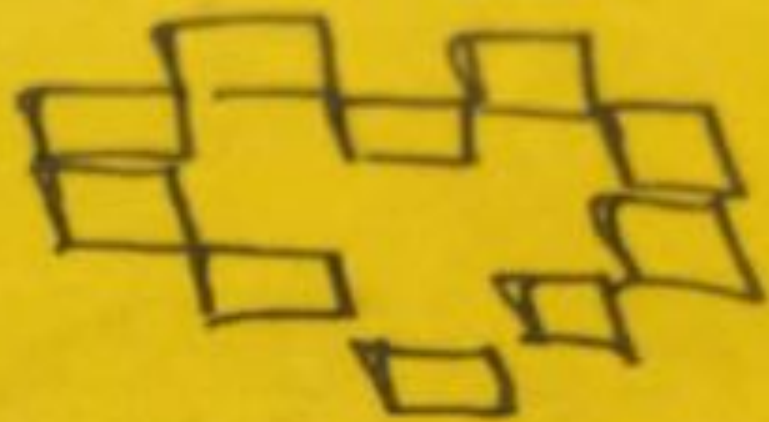
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CONFIDENCE

sektor

5











**BUT RAMÓN, THAT WAS SEVERAL  
YEARS AGO! WHAT ABOUT NOW?**

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- Showing and reading code is important
- **Skills carry over between platforms**
- It's totally fine not to know something and ask questions















OH BUT HEY, ...

**SKILLS I'VE PICKED UP IN OTHER  
PROJECTS CAN BE USEFUL HERE!**

- Break ALL the things
- Appreciate that which I take for granted
- Learn by doing, understand by practising
- Simple != Easy to understand
- Showing and reading code is important
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- **It's totally fine not to know something and ask questions**

HEY, WHAT'S THE DIV IN  
A <DIV> STAND FOR?



THEN



THEN



THEN



**OMG WOW I  
HAVE NO IDEA  
LET'S LOOK IT  
UP RIGHT THIS  
INSTANT!!!**



**NOW**

LOOKING STUFF UP IS A  
HIGHLY VALUABLE SKILL.

- Break ALL the things
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**TEACH ANYONE!**



Birgit Klemenz  
[birgit.klemenz@gmail.com](mailto:birgit.klemenz@gmail.com)



Ramón Huidobro  
 @senorHuidobro



Pilar Huidobro  
  @Tamacodechi



Birgit Klemenz  
[birgit.klemenz@gmail.com](mailto:birgit.klemenz@gmail.com)



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