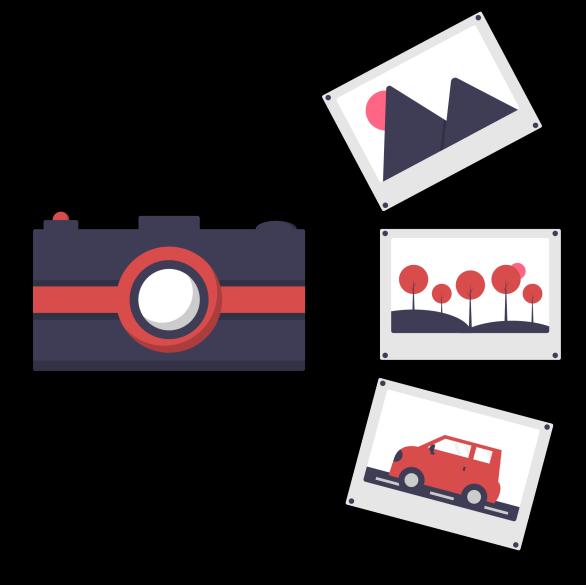
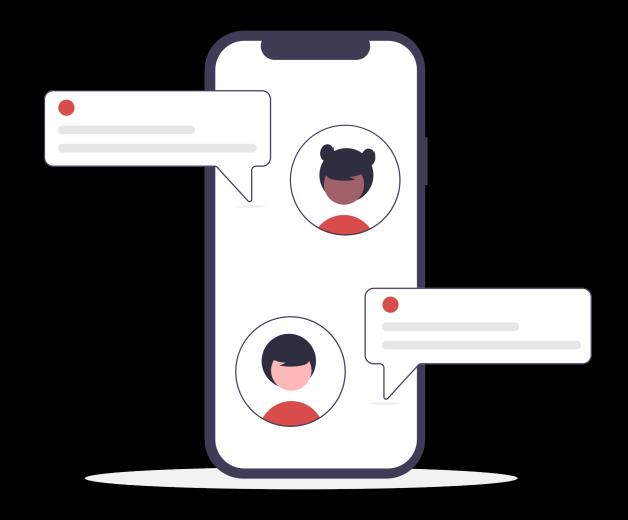
code_in_place_2021

Section 04



Watercooler

- How have coding changed your day-to-day life?
- What is your favorite color(s)?
- What superhero-esque superpower would you like to have?



Shared Agreements

- ✓ Use professional, courteous, and thoughtful language

 Be mindful of your peers when speaking and asking questions
- ✓ Assume your peers have good intention
 Even if their words or actions cause concern, remember that we're all learning together.
- ✓ Ask questions

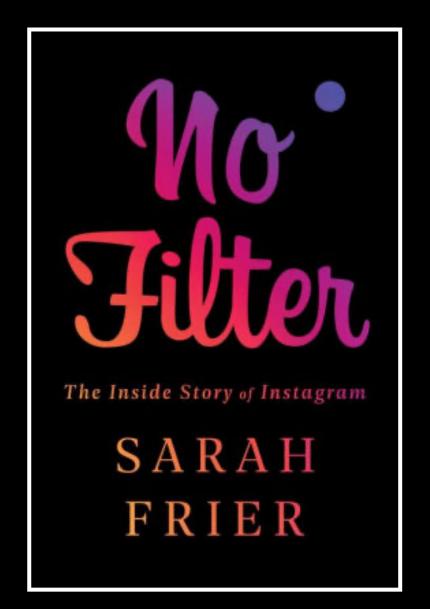
 There is NO silly question

Review concepts

- Images
- Functions

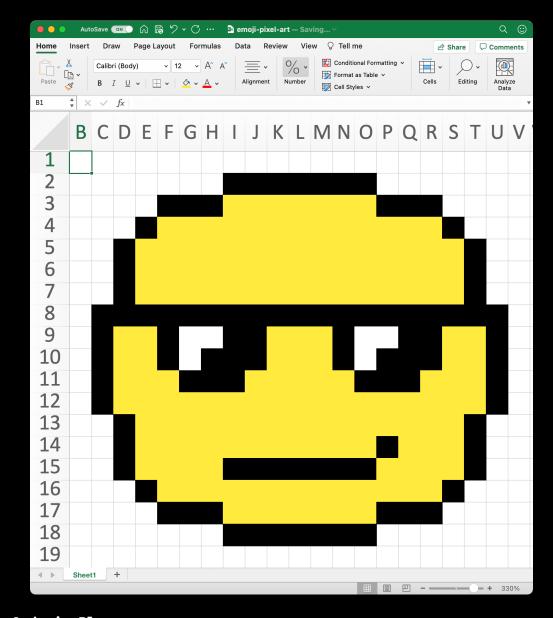
Dickwyn, Code in Place

Visual storytelling







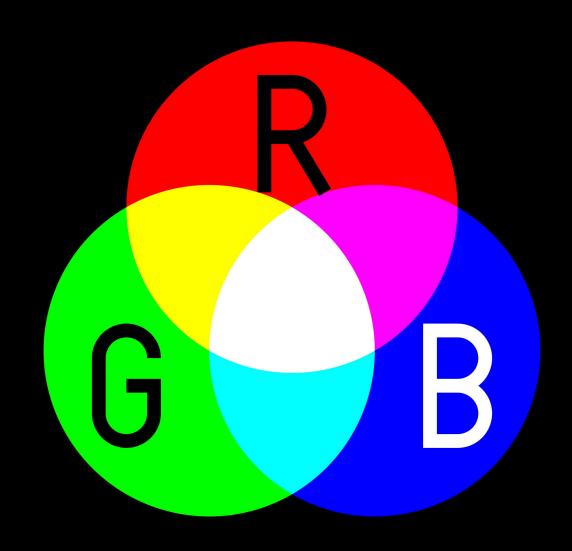


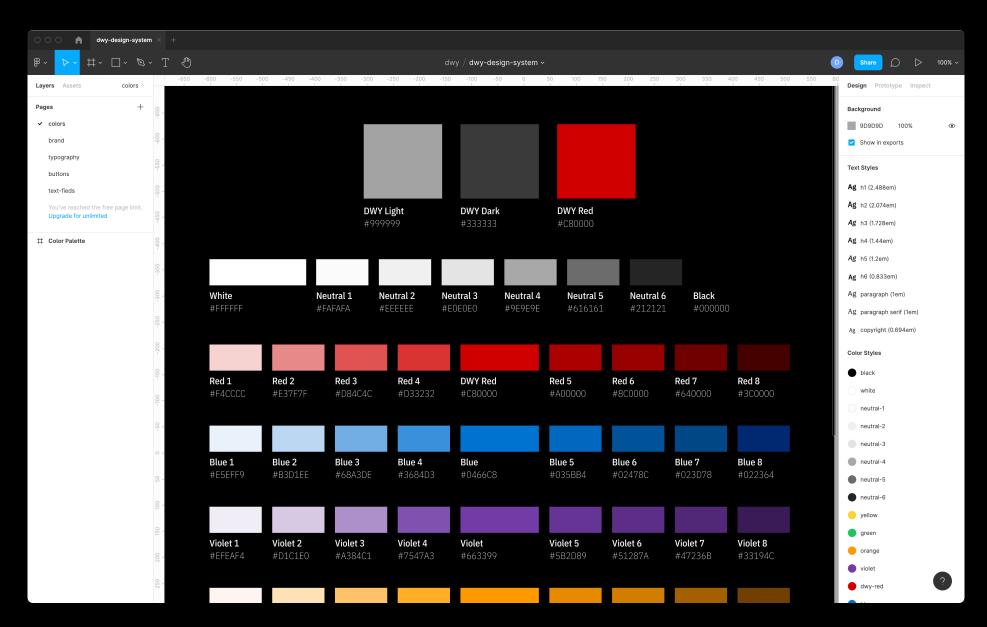
Dickwyn, Code in Place

Pixel Art

RGB

- R = Red
- G = Green
- B = Blue
- Values represented as integers between 0 and 255





Dickwyn, Code in Place







$$R = 200$$

$$G = 0$$

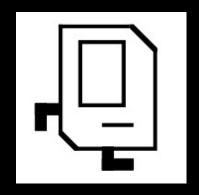
$$B = 0$$



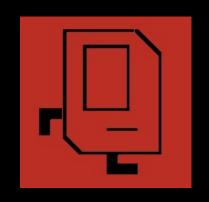
$$R = 153$$

$$G = 153$$

$$B = 153$$



original

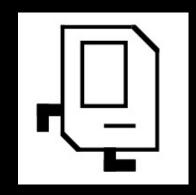


```
def make_image_red(image):
                  for pixel in image:
                     if pixel.red != 0:
                       pixel.red = 200
                     pixel.green = 0
                     pixel.blue = 0
                  return image
manipulated def main():
                  karel = SimpleImage("karel.png")
                  karel_red = make_image_red(karel)
                  karel_red.show()
```

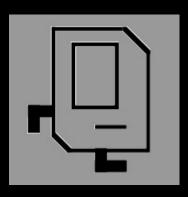
Dickwyn, Code in Place

```
karel = SimpleImage("karel.png")
for y in range(karel.height):
  for x in range(karel.width):
     pixel = karel.get_pixel(x,y)
     if pixel.red == 255:
         pixel.red = 153
     if pixel.blue == 255:
        pixel.blue = 153
     if pixel.green == 255:
        pixel.green = 153
karel.show()
Dickwyn, Code in Place
```

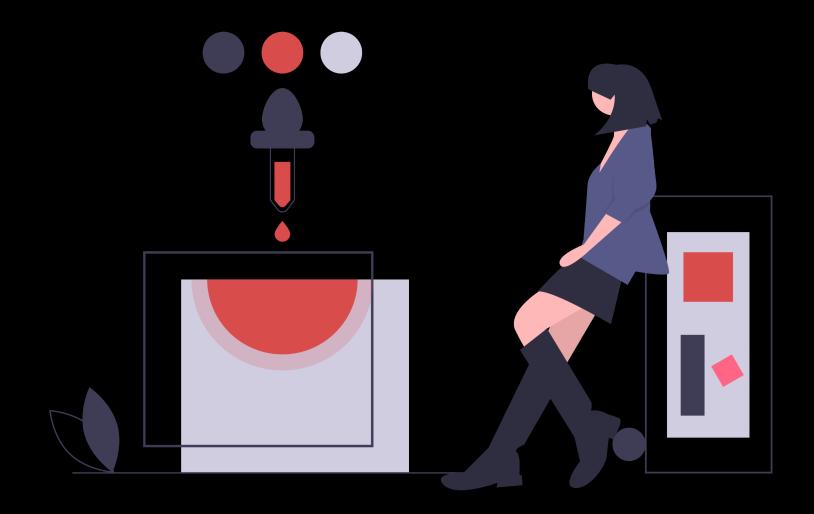
original



manipulated



Hands-on





Story time!

- Computers and technology are everywhere
- Logical problem solving
- Imagination
- Inspiration from other activities