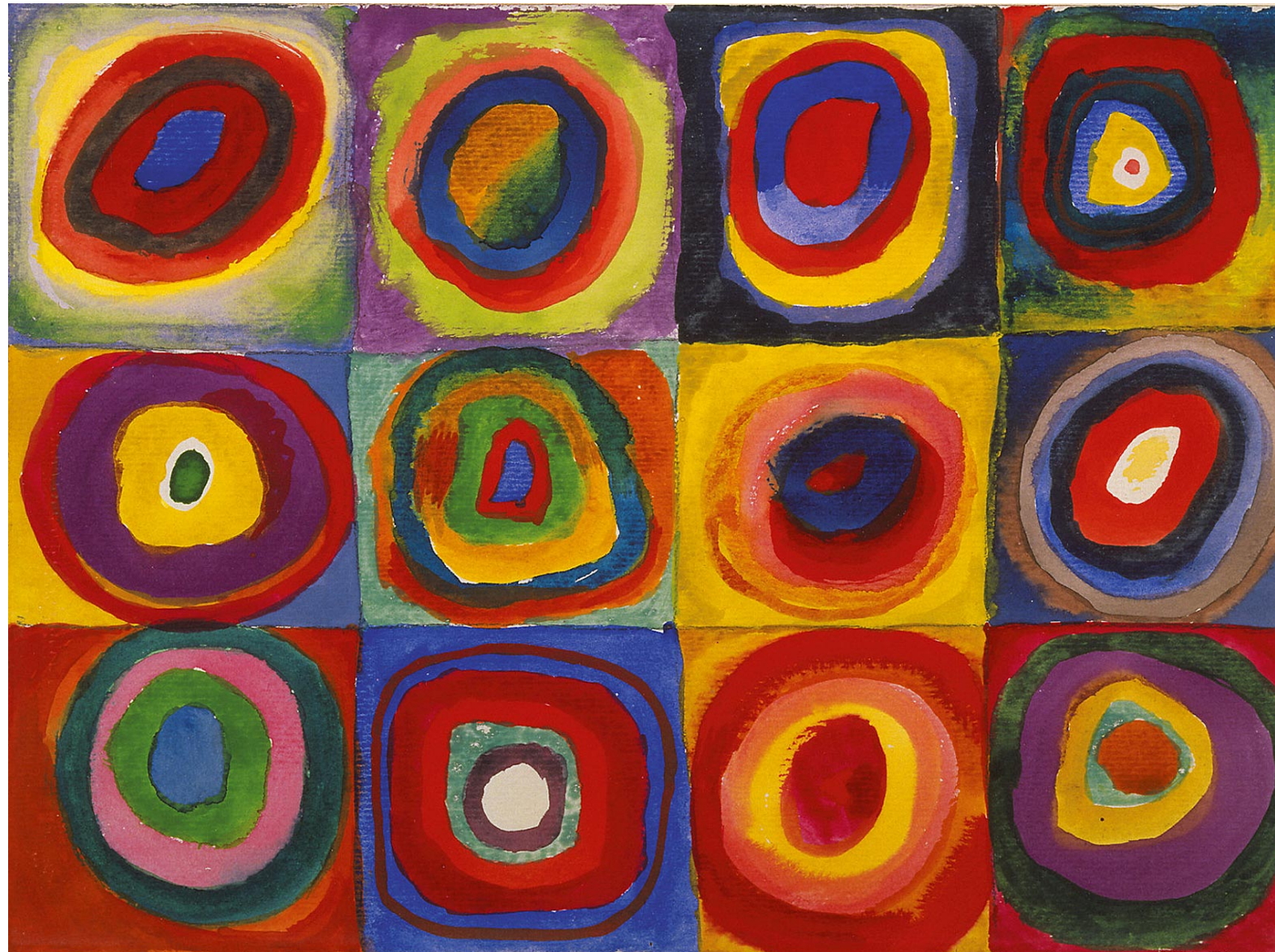


# **A computational tool for recoloring images based on user emotions**

Jungah Son

# Motivation



“Colour is a power which directly influences the soul.”

- *Wassily Kandinsky, Concerning the Spiritual in Art*



# Concept

## 1. User Input (photographs corresponding to user's emotions)



Happiness



Surprise



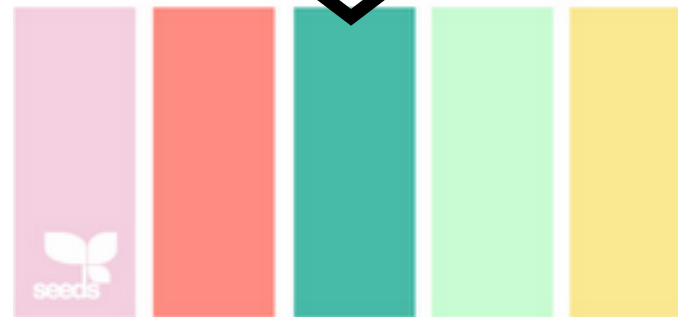
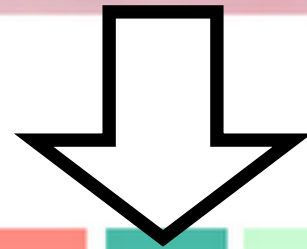
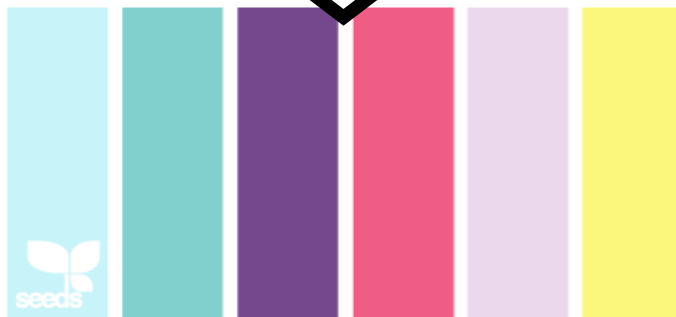
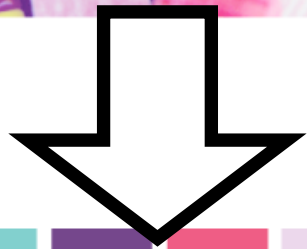
Sadness



Anger

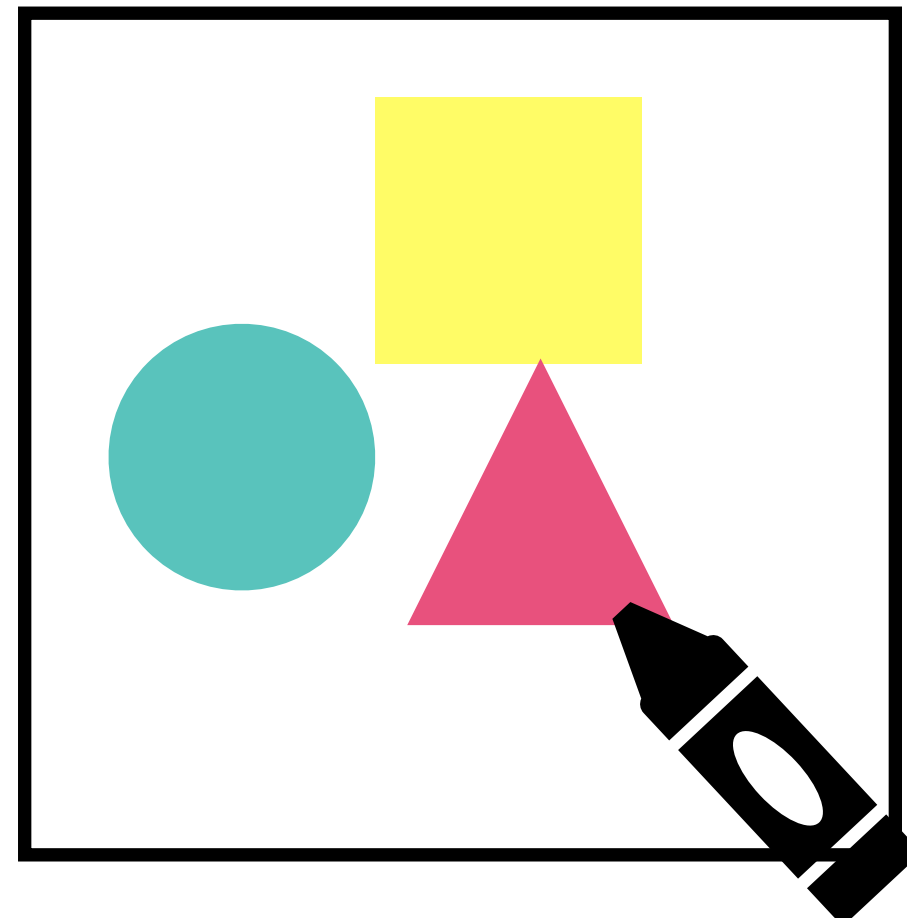
# Concept

## 2. Automatically generate color palettes



# Concept

## 3. User activity (pick 1 palette and create a painting with it)





# Concept

## 4. Detect user emotion and generate recolored image based on it

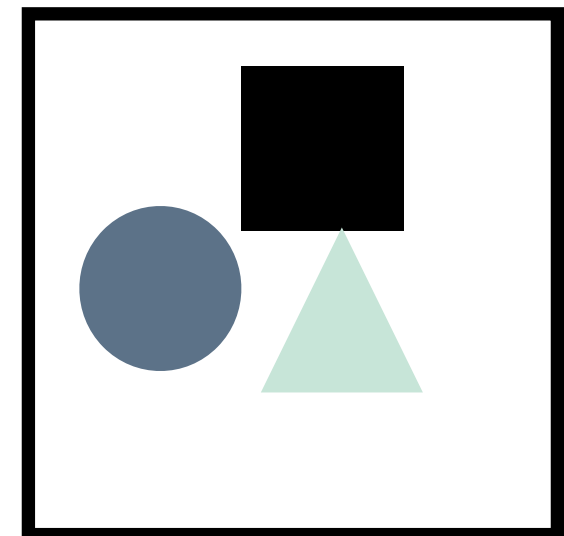
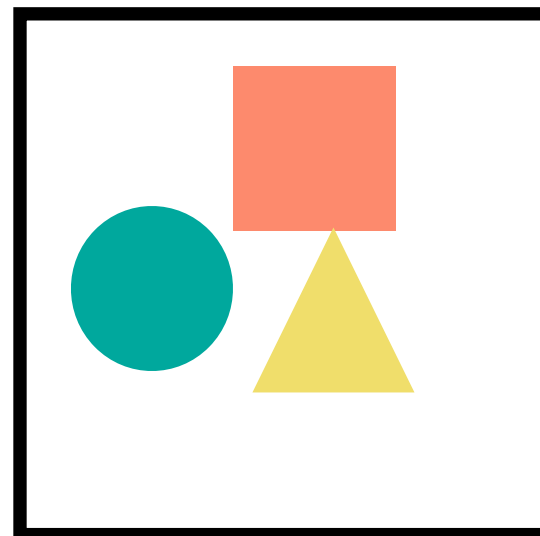
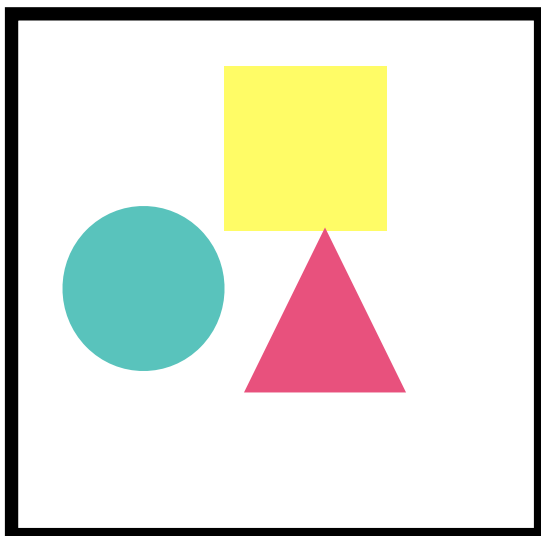
Happiness



Surprise

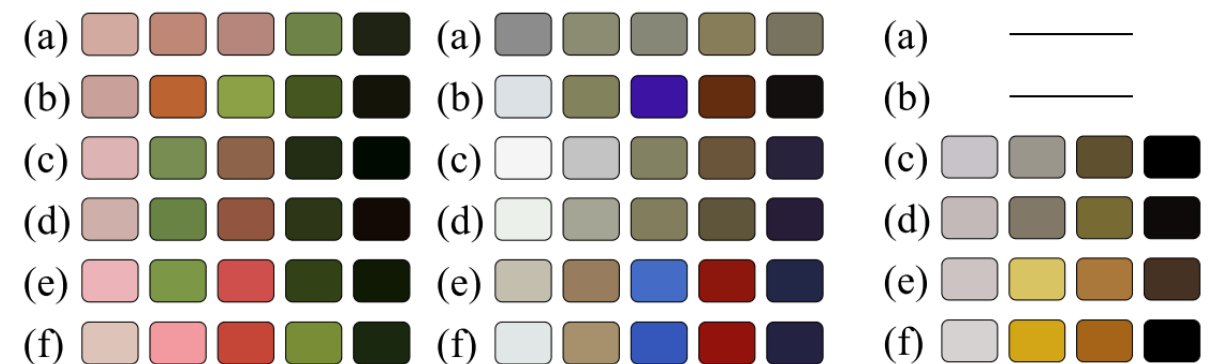


Sadness



# Primary implementation challenges

- Finding a suitable color palette for each image
- Facial emotion detection



Zhang et. al (2017)

# Primary design challenges

- Choosing the number of colors in one palette
- User modification of the palettes
- How to recolor images with different palettes



# The success of my project depends on ...

- Performance of facial emotion detection
- User satisfaction