

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

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# Concept

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



Joy



Surprise



Sadness



Anger

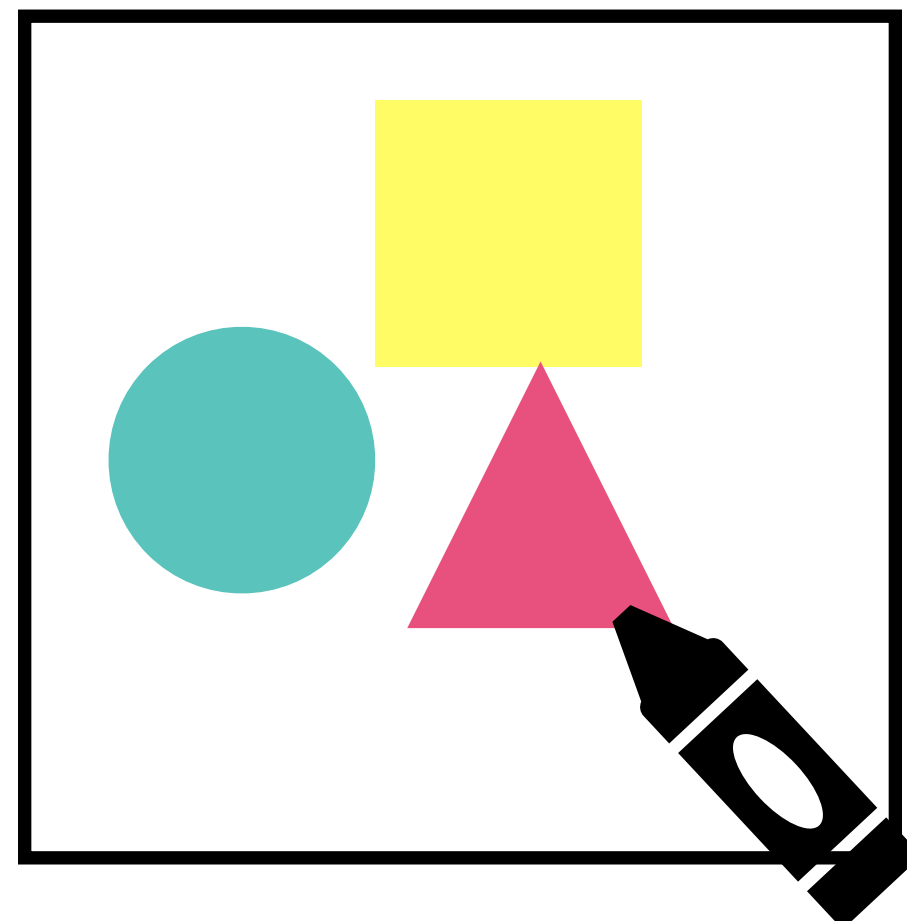
# Concept

## 2. Automatically generate color palettes



# Concept

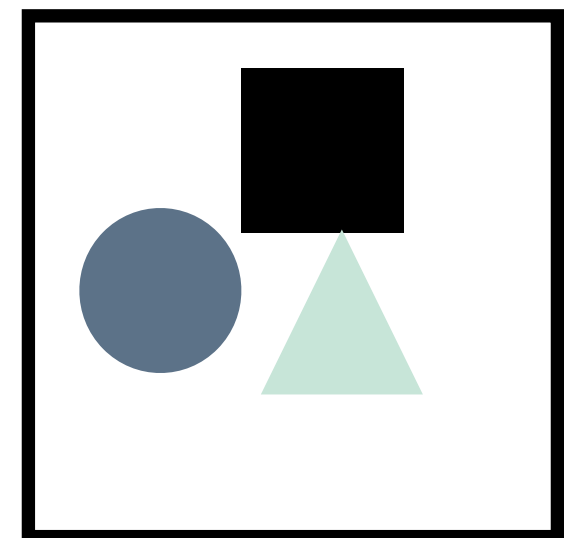
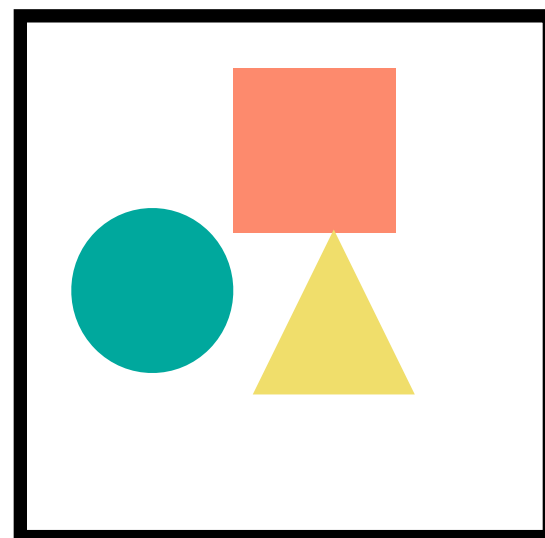
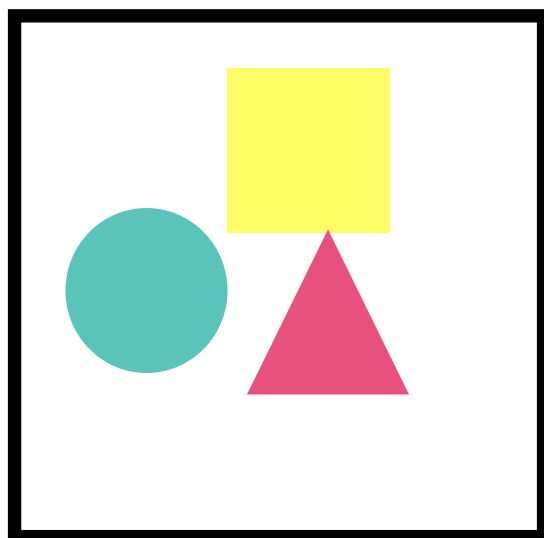
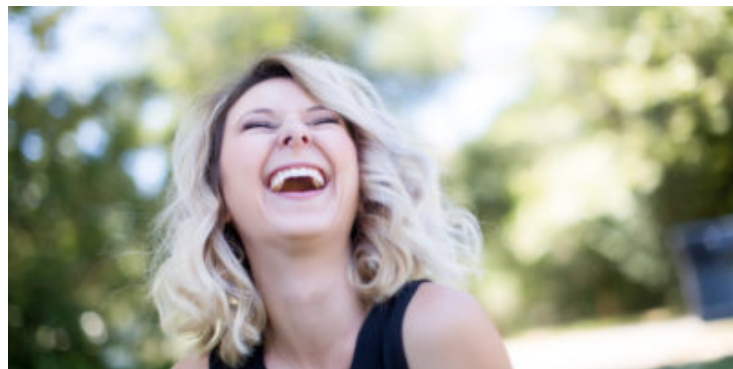
## 3. User activity (pick 1 palette and create a painting with it)





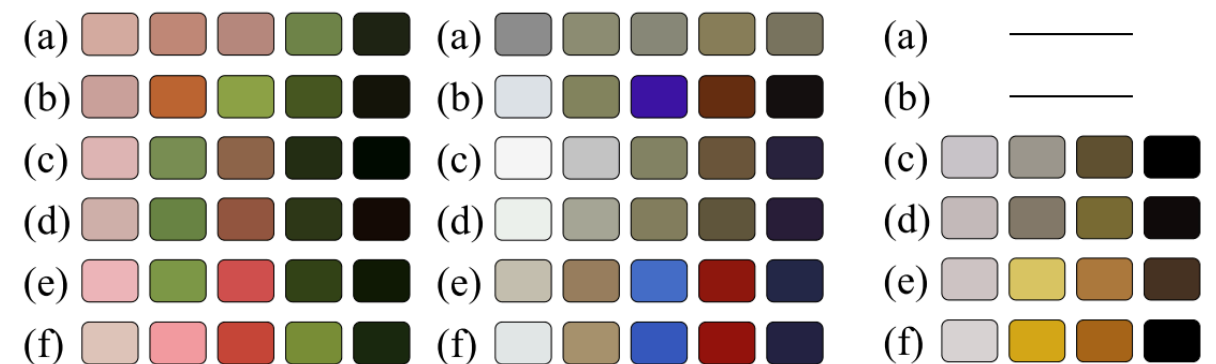
# Concept

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



# 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