# **Concealer Recommendation**

## **Problem Statement**

Every year, thousands of dollars are wasted on concealer testers at makeup boutiques. Not only this, but countless hours are spent on choosing the best concealer shade to suit your skin.

### **Solution**

Using data computer vision, we can detect the skin tone of the person, and suggest the most optimal concealer & redirect the user to the page to purchase the product based on the RGB values obtained, all this can be done at the convenience of the customer's home

#### **Details About The Code**

Used the following libraries: NumPy, Pandas, cv2 and selenium

Created a csv file with the colour name, R, G, B values and link to the website for purchase

We loaded haar cascade, an Object Detection Algorithm used to identify faces in an image

We then converted the image to greyscale

If faces are found, the function face\_cascade.detectMultiScale

Would return the position of the image

We used these positions to plot a box around the detected face

We created a function to obtain the RGB values based on where the mouse has been clicked, after giving the x & y coordinates of the image

We created a call back function to directly execute the above function whenever some mouse action took place

Based on the RGB values obtained we find the colour which is closest to having the same RGB values

Using selenium, we open the browser & redirect to the page to buy the product

#### **Outcome From The Code**



