Interim Project Presentation

- What's in My Pouch? -

Project Motivation

- If the cosmetics you are using do not fit your skin, you do not know which ingredients cause skin problems. Therefore, even if you change to another brand of cosmetics, the same skin problems can occur again.
 - > You may want to know specifically which ingredients of cosmetics cause skin problems.
 - > We think it would be nice if there is an app that could tell us this information.
- We find that cosmetic recommendation applications usually have a complex UI that people who are not familiar with using smartphones will be difficult to use.
 - > We want to implement a UI as simple as possible without losing information.

Project Goal

- We can get information of users' cosmetics by **photographing the name and ingredient label** of the products that caused the skin problem based on **OCR** (text recognition).
- We will classify the user's skin type into oily, dry, complex, etc., and receive the age group and gender information. In addition, we will recommend cosmetics considering the ingredient information of the products that caused the skin problem. The products similar to those that caused the skin problems are excluded from the recommendation screen or we mark a warning sign at the products.
- We will **simply configure the UI** so that all age groups can easily use this application. That is, except for cosmetics that do not match the user, only the recommended screen suitable for the individual's skin type, age group, and gender is displayed.

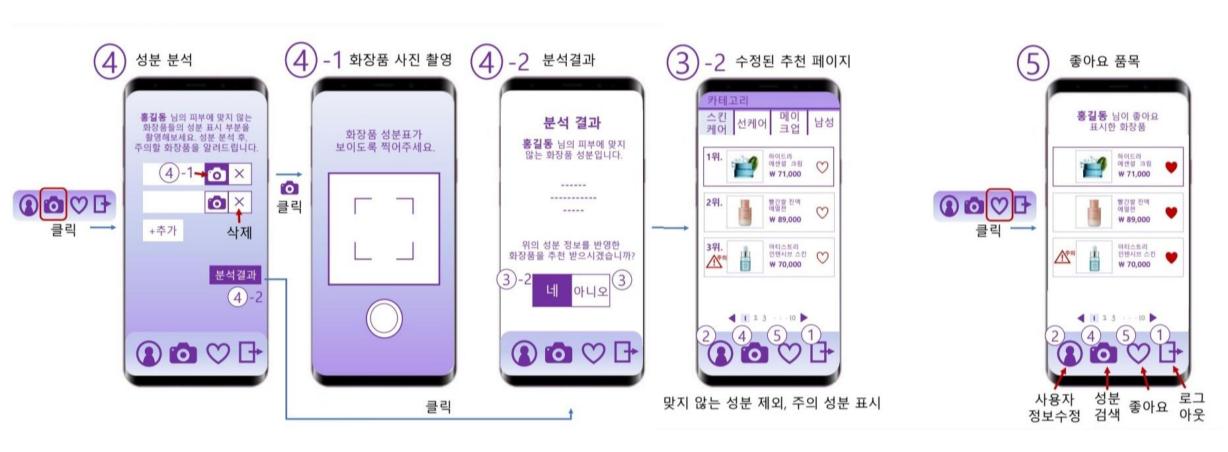
Project progress

System prototype development design



Project progress

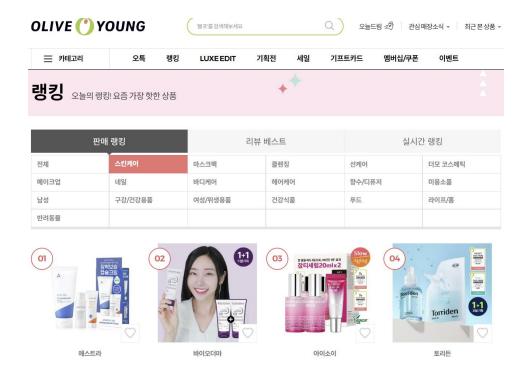
System prototype development design



Project progress

'OliveYoung' Data crawling

Information on top 100 skin care, dermo cosmetics, cleansing, makeup, sun care, and men products.



```
data_crawling_cosmetic.py > ...
         nret iist = ||
13
         ## 상품 정보 크롤링 (한 페이지에서 보이는 상품들) > 1페이지에 100개 랭킹 화장품
14
         # div class= "TabsCounts on"
         # 스킨케어, 더모코스메틱, 클랜징은 하나의 데이터셋으로, 선케어, 메이크업, 남성
15
         products = driver.find elements(By.CLASS NAME, "prd info") # 100개 상품
16
17
         for i in range(len(products)):
             rank +=1
18
             href = products[i].find element(Bv.CLASS NAME, "prd thumb").get attribu
19
             href list.append(href)
20
21
22
         for i in range(rank):
23
             driver.get(href list[i])
24
             name = driver.find element(By.CLASS NAME, 'prd name').text
             price = int(driver.find element(By.CLASS NAME, 'price-2').text[-2].repl
25
             #구매정보 클릭
26
27
             driver.find element(By.CLASS NAME, 'goods buyinfo').click()
28
             component = driver.find element(By.ID, 'artcInfo').find elements(By.TAG
29
             driver.find element(By.CLASS NAME, 'goods reputation').click()
             ## age는 맨 처음 리뷰개수 * 페이지수 + 마지막 페이지 리뷰수 로 나이대별 cn
30
31
             age = get age(driver)
32
             skin type dict = {}
33
             for s in range(3):
34
                 skin t txt = driver.find element(By.ID, 'gdasContentsArea').find el
35
                 skin t per = driver.find element(By.ID, 'gdasContentsArea').find el
                 skin type dict[skin t txt]=int(skin t per[:-1])
36
             skin_type = skin type dict
37
38
             skin concern dict = {}
39
             for s in range(3):
40
                 skin c txt = driver.find element(By.ID, 'gdasContentsArea').find el
                 skin c per = driver.find element(By.ID, 'gdasContentsArea').find el
41
42
                 skin concern dict[skin c txt]=int(skin c per[:-1])
43
             skin concern = skin concern dict
```

Next steps of our project

Data collection

Collect cosmetics data (cosmetic name, price, ingredients, etc.) using the crawling code.

OCR(Optical Character Recognition) model

Study & Work with the code of OCR model to apply to recognize text of cosmetic ingredients (collected).

App UI/UX design

Based on the prototype worked previously, implement the app according to the app usage method and order.