

Interim Project Presentation

- What's in My Pouch? -

2021003581 손강희
2021029443 전예은
2020095178 최윤선

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.


OLIVE YOUNG '올프'를 검색해보세요 [오늘드림](#) [관심매장소식](#) [최근본 상품](#)

☰ 카테고리 **오톡** **랭킹** LUXE EDIT 기획전 세일 기프트카드 멤버십/쿠폰 이벤트

랭킹 오늘의 랭킹! 요즘 가장 핫한 상품


판매 랭킹		리뷰 베스트		실시간 랭킹	
전체	스킨케어	마스크팩	클렌징	선크어	더모 코스메틱
메이크업	네일	바디케어	헤어케어	향수/디퓨저	미용소품
남성	구강/건강용품	여성/위생용품	건강식품	푸드	라이프/홈
반려동물					

01




에스트라

02




바이오더마

03



아이소이

04



토리덴

```
data_crawling_cosmetic.py > ...
11 href_list = []
12 rank = 0
13 ## 상품 정보 크롤링 (한 페이지에서 보이는 상품들) > 1페이지에 100개 랭킹 화장품
14 # div class= "TabsCounts on"
15 # 스킨케어, 더모코스메틱, 클렌징은 하나의 데이터셋으로, 선크어, 메이크업, 남성
16 products = driver.find_elements(By.CLASS_NAME, "prd_info") # 100개 상품
17 for i in range(len(products)):
18     rank +=1
19     href = products[i].find_element(By.CLASS_NAME, "prd_thumb").get_attribute("href")
20     href_list.append(href)
21
22 for i in range(rank):
23     driver.get(href_list[i])
24     name = driver.find_element(By.CLASS_NAME, 'prd_name').text
25     price = int(driver.find_element(By.CLASS_NAME, 'price-2').text[-2].replace(',',''))
26     #구매정보 클릭
27     driver.find_element(By.CLASS_NAME, 'goods_buyinfo').click()
28     component = driver.find_element(By.ID, 'artcInfo').find_elements(By.TAG_NAME, 'div')
29     driver.find_element(By.CLASS_NAME, 'goods_reputation').click()
30     ## age는 맨 처음 리뷰개수 * 페이지수 + 마지막 페이지 리뷰수 로 나이대별 count
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_element(By.ID, 'skin_t').text
35         skin_t_per = driver.find_element(By.ID, 'gdasContentsArea').find_element(By.ID, 'skin_t_per').text
36         skin_type_dict[skin_t_txt]=int(skin_t_per[:-1])
37     skin_type = skin_type_dict
38     skin_concern_dict = {}
39     for s in range(3):
40         skin_c_txt = driver.find_element(By.ID, 'gdasContentsArea').find_element(By.ID, 'skin_c').text
41         skin_c_per = driver.find_element(By.ID, 'gdasContentsArea').find_element(By.ID, 'skin_c_per').text
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.