See 옷 시옷, 옷을 보다.

One,

About "시옷"

Main Function

Differentiations

01 02 03 04

Two, Three,

Four

Results

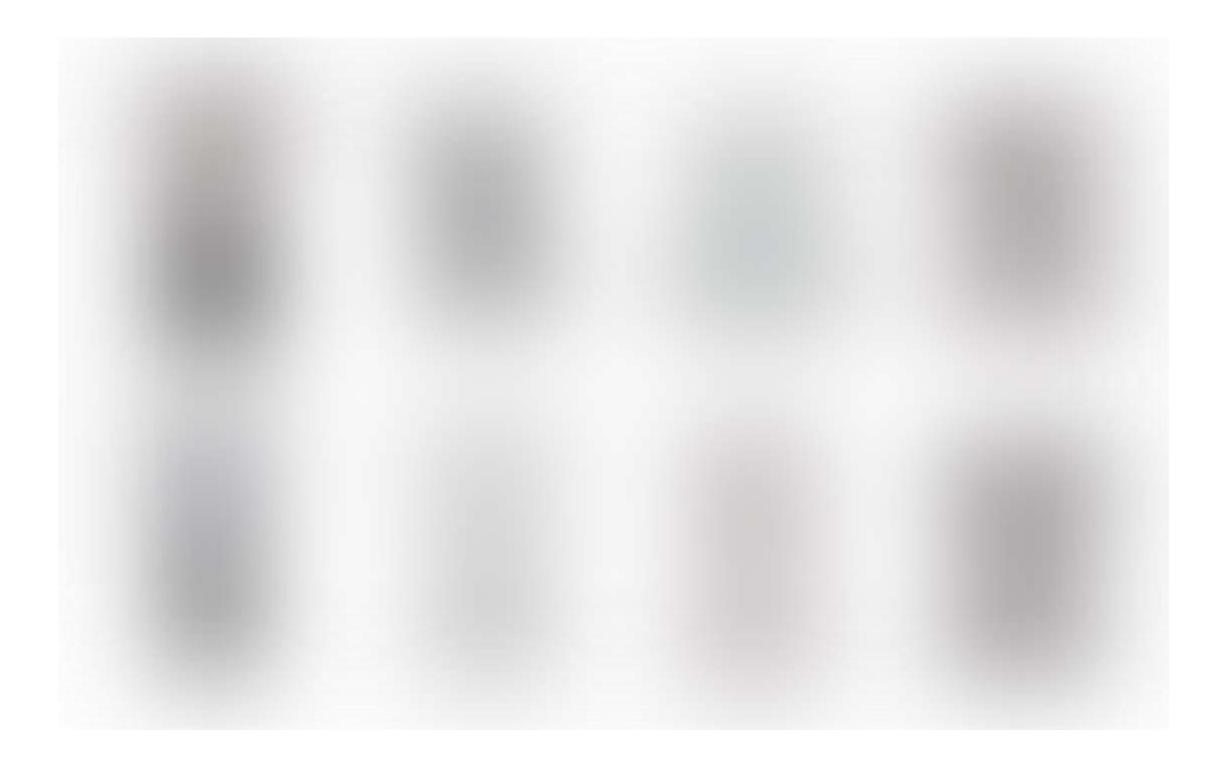
About "시옷"

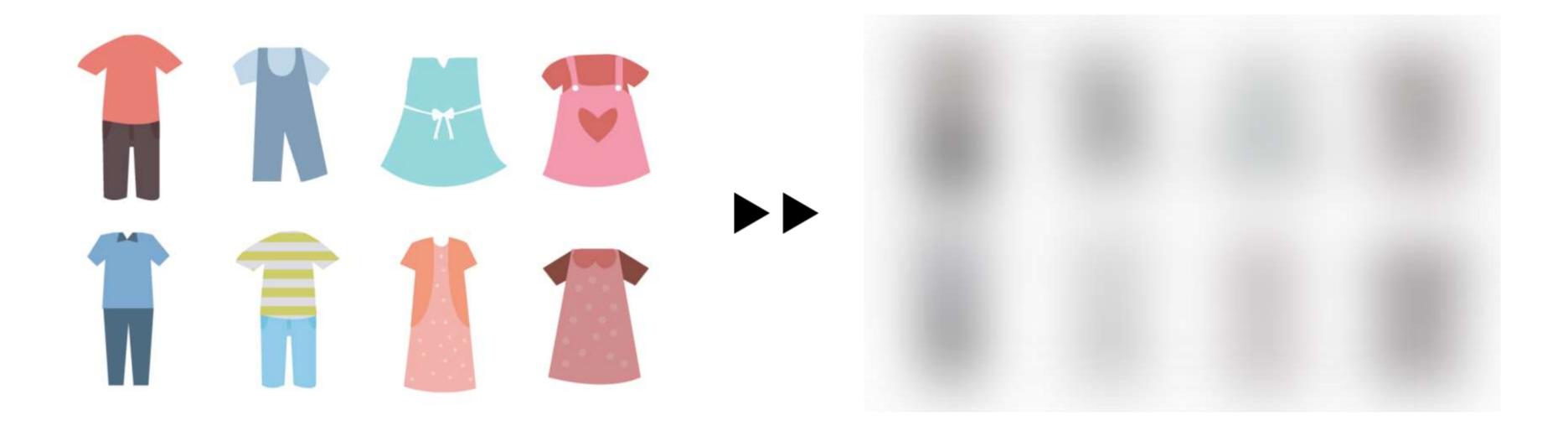


시옷은, 옷을 대신 보고 알려줍니다.

10



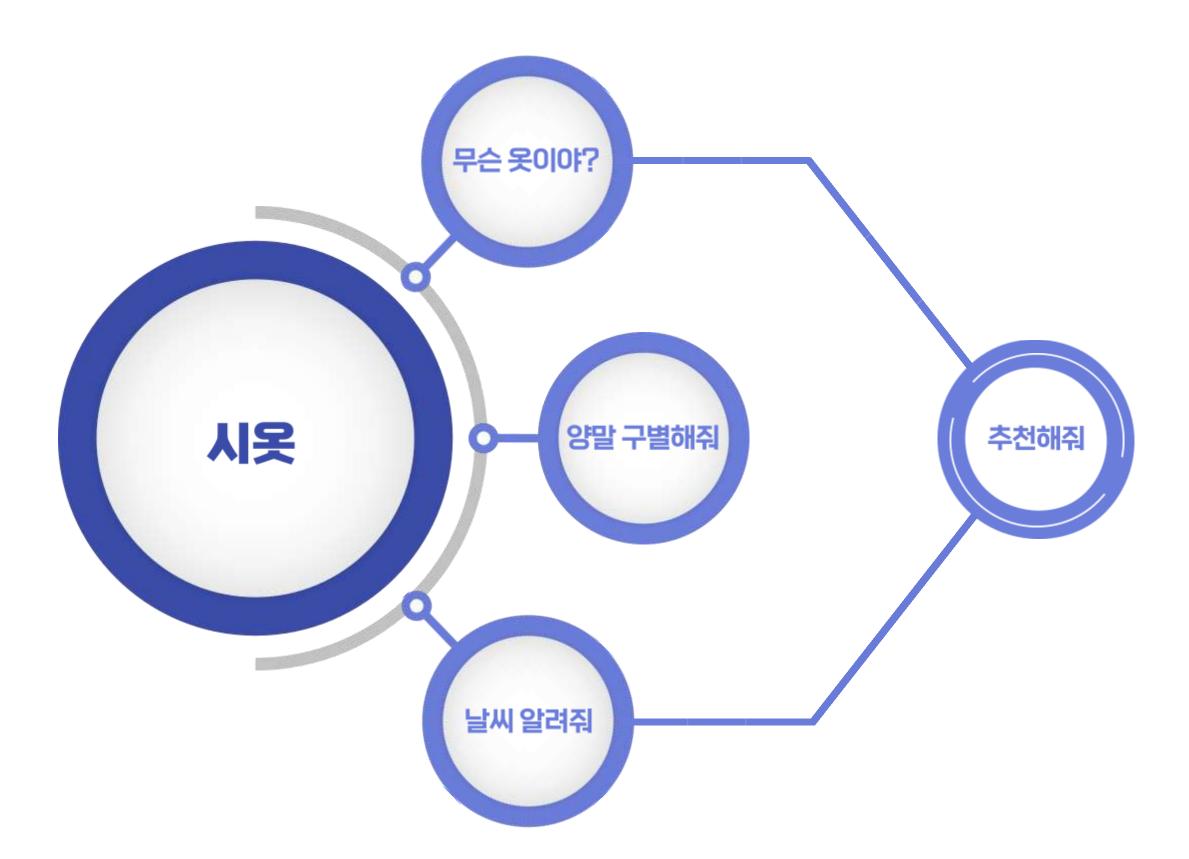




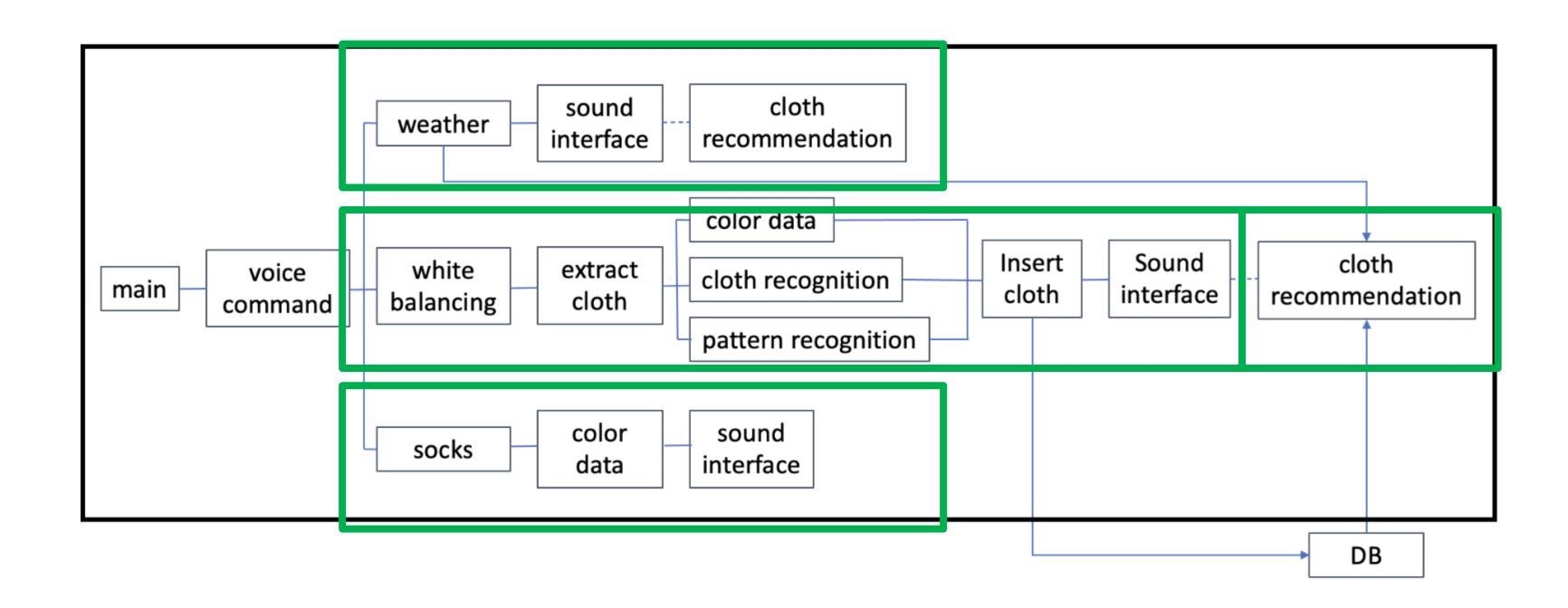


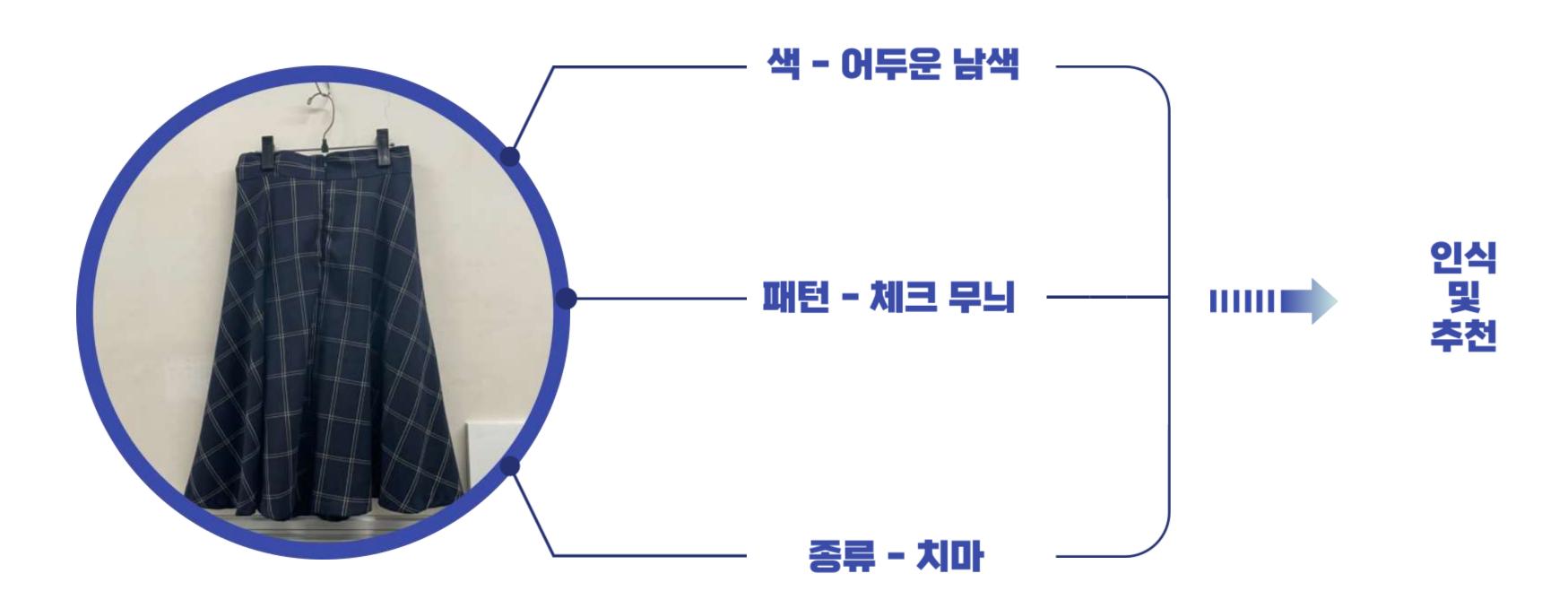
옷의 정보를 음성으로 알려주자!

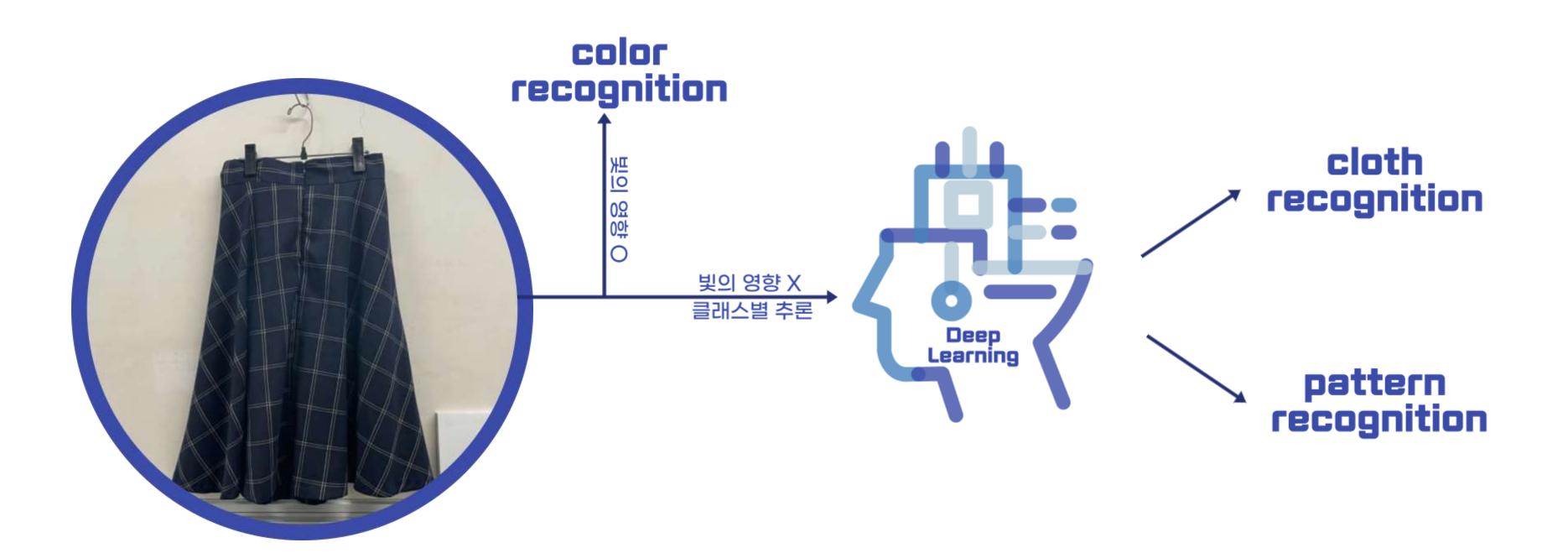
Command



Software Architecture







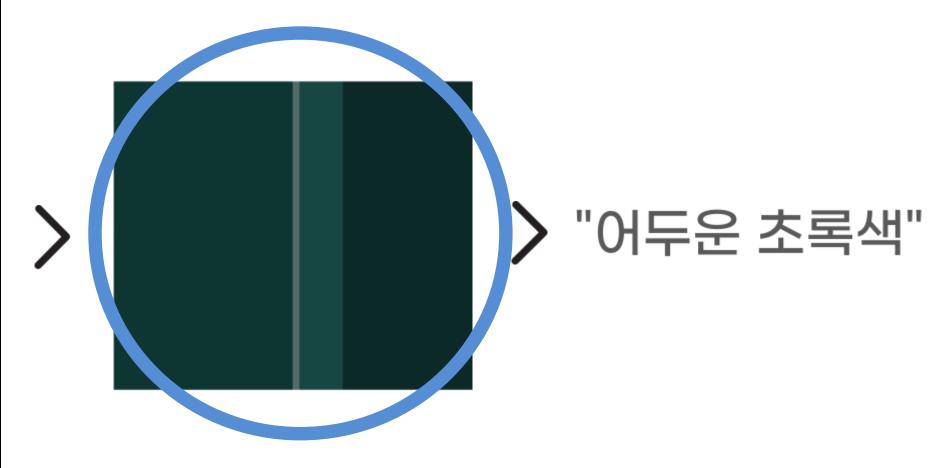
Color Extraction



origin

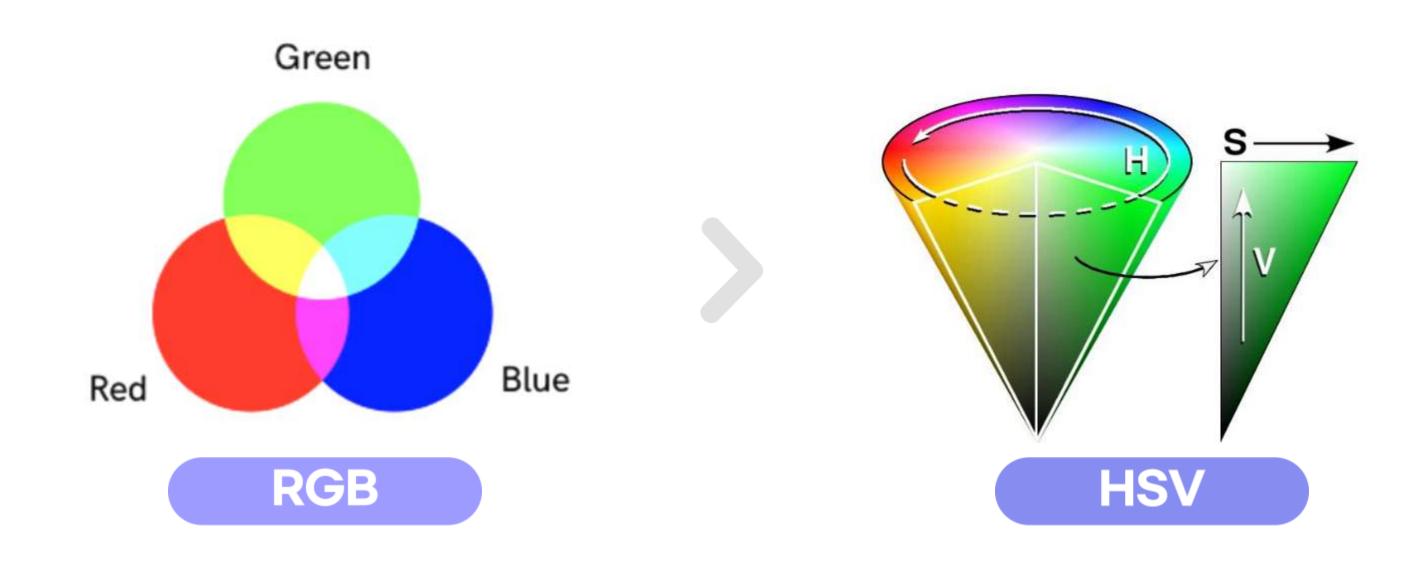


white balancing remove background



clustering color(k=4)

Color Extraction 개선



Color Extraction 개선

시각장애인분들이 파란색, 노란색등 단순한 색깔 이름이 잘 와닿지 않으므로 "부드러운", "상큼한" 등의 표현이 추가되었으면 좋겠다는 의견 수용



```
- 부드러운 노란색
```

부드러운 라벤더색

□ 부드러운 분홍색

□ 부드러운 아이보리색

□ 상큼한 민트색

□ 생기있는 초록색

이무운 갈색

이무운 남색

□ 어두운 초록색

□ - 어두운 회색

□ 어두컴컴한 검정색

- 우아한 올리브색

-- 0: "부드러운 베이지색"

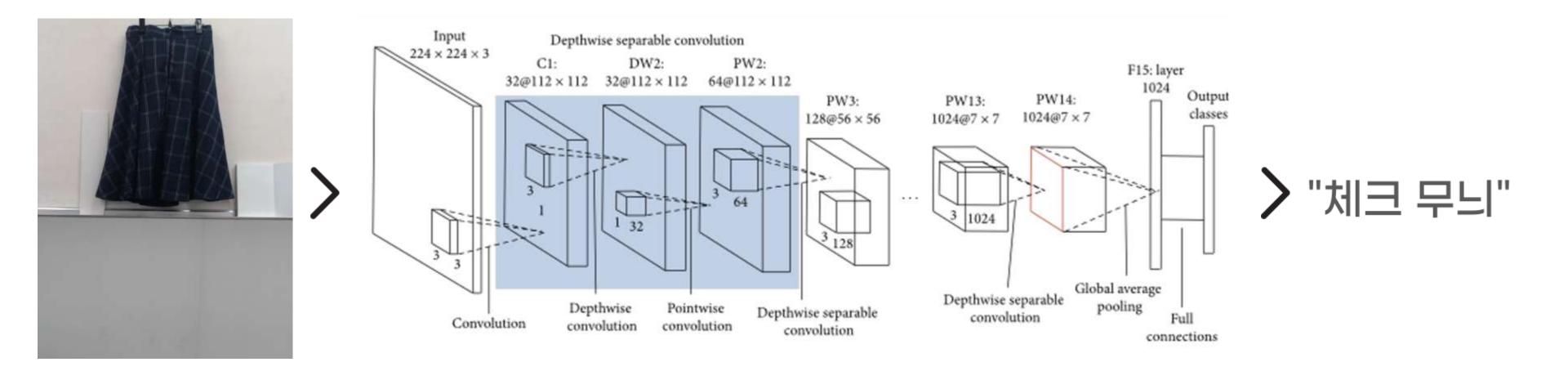
-- 1: "부드러운 아이보리색"

--- 2: "어두컴컴한 검정색"

- 3: "점잖은 남색"

은은한 복숭아색

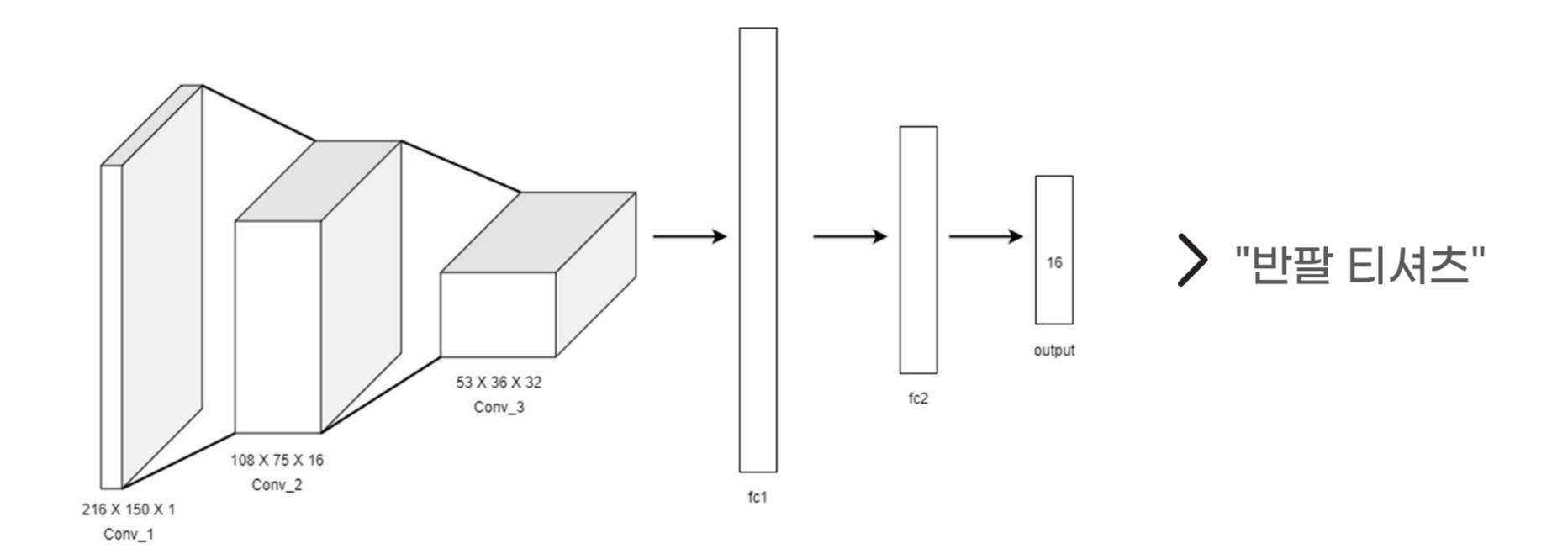
Pattern



Cloth Classification



Cloth Classification



Cloth Classification 개선

KOBOTEN

Training Data

SAMPLES

Crawling

Class 수

10개



Accuracy of the network on the test images: 92 %

CLASS AC

클래스멀 정확도

MNIST

Model

Class 1 0.69 68

Class 2 0.74 76

Class 3 0.75 91

Class 6 0.93 73

Class 7 0.83 54

Class 8 0.88 89

Class 9 0.91 89

Class 10 0.74 58

Class 11 0.97 96

Class 12 0.96 73

Class 13 0.80 35

Class 14 0.73 48

Class 15 0.94 70

Class 16 0.82 61

Class 17 0.92 75

Class 18 0.93 76



Accuracy of the network on the test Images: 83 % Accuracy of 가방: 96 % Accuracy of 긴 겉옷: BB % Accuracy of 긴팔 셔츠 : 85 % Accuracy of 긴팔 원피스 : 72 % Accuracy of 긴팔 티셔츠 : 72 % Accuracy of 긴팔 후드티 : 78 % Accuracy of LHAI: 78 % Accuracy of 나시 원피스: 87 % Accuracy of 반바지: 94 % Accuracy of 반팔 셔츠 : 81 % Accuracy of 반팔 원피스 : 77 % Accuracy of 반팔 티셔츠 : 74 % Accuracy of 샌들: 96 % Accuracy of 스니커즈 : 86 % Accuracy of 슬림핏바지 : 60 % Accuracy of 앵클부츠 : 97 % Accuracy of 일자핏바지: 89 % Accuracy of 짧은 겉못 : 72 %

Accuracy of 긴팔 원피스 : 87 % Accuracy of 긴팔 티셔츠 : 90 % Accuracy of 민소매 원피스 : 95 %

Accuracy of 기단I건 : 85 %

Accuracy of 긴팔 셔츠: 88 %

Accuracy of 민소매 티셔츠 : 90 %

Accuracy of 반당 원피스: 83 % Accuracy of 반당 원피스: 83 % Accuracy of 반당 티셔츠: 94 %

Accuracy of 스키니 : 97 %

Accuracy of 일자 긴바지 : 89 %

Accuracy of 자켓 : 87 %

Accuracy of 치마: 97 % Accuracy of 코트: 89 %

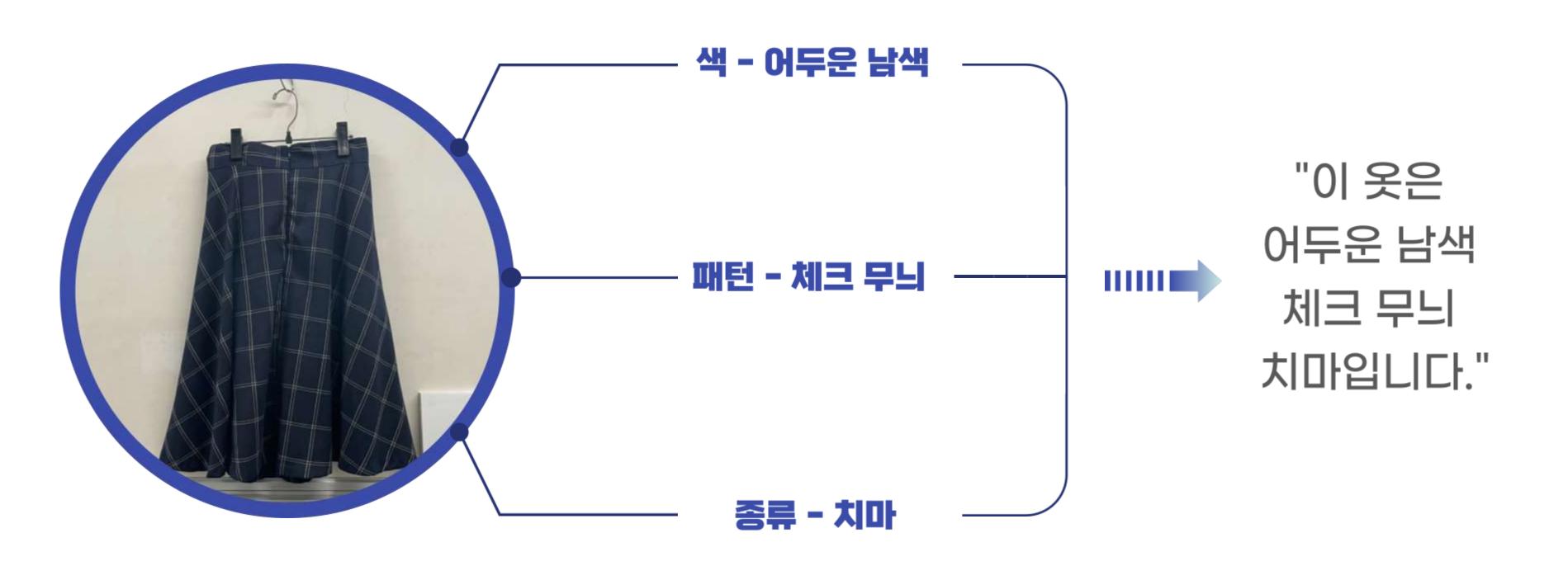
Accuracy of 패딩: 93 % Accuracy of 긴팔 후드티: 95 %

Teachable Machine

CNN

Accuracy of 利田: 98 %

CNN



"양말 구별해 줘"

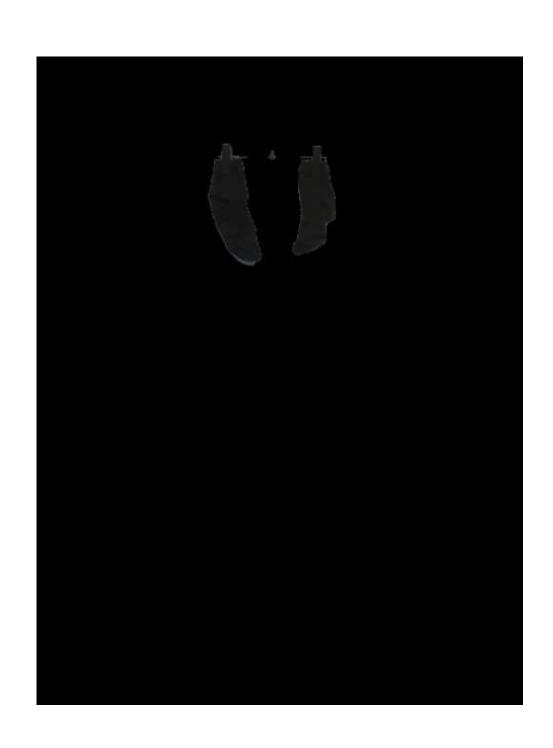




"두 양말의 색이 달라요. 왼쪽은 검정색, 오른쪽은 회색입니다.

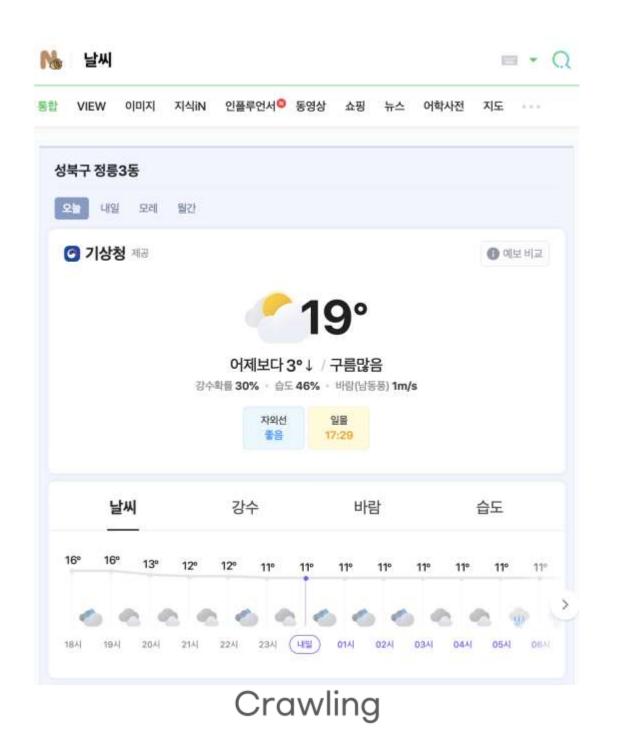
"양말 구별해 줘"





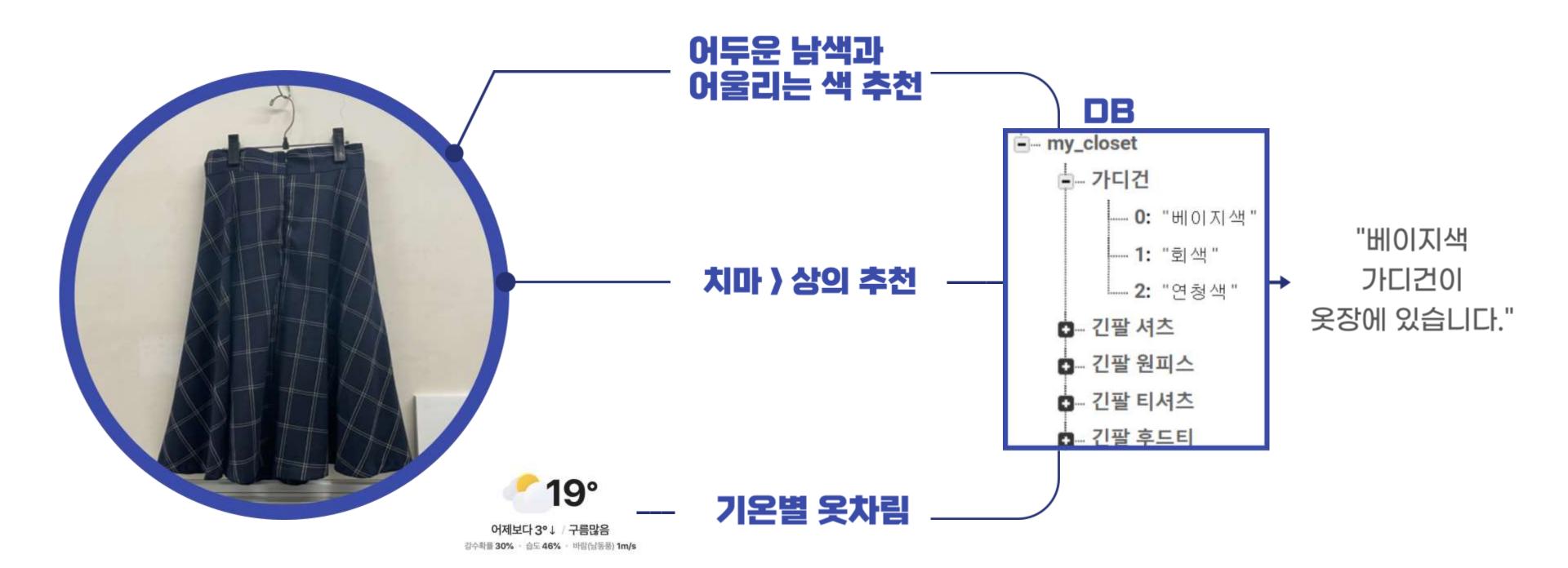
"두 양말의 색이 검정색으로 같아요"

"날씨 알려줘"



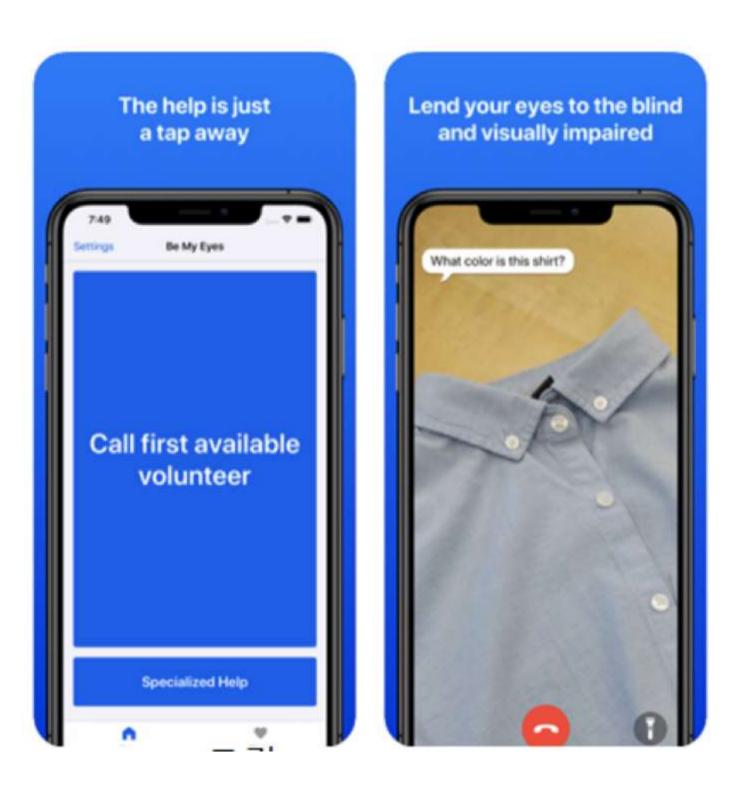
"날씨 정보" "우산, 겉옷 필요성"

"추천해 줘"

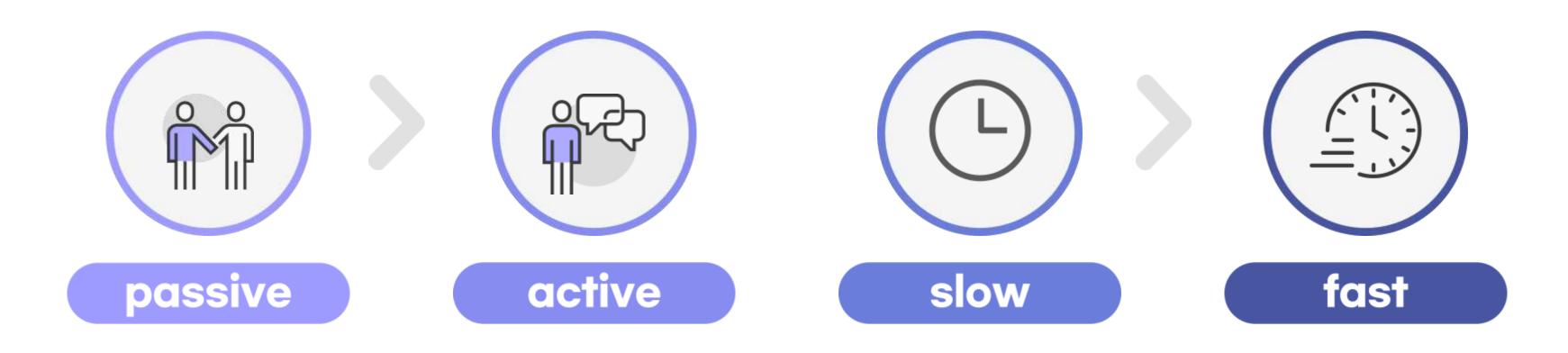


Differentiations





Results 기대 효과

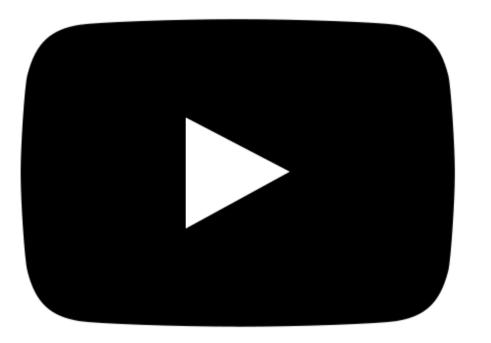


Results

향후 계획



"시연 영상"



3人1号115