

Remote Mouse System

Computer Vision
Project 4

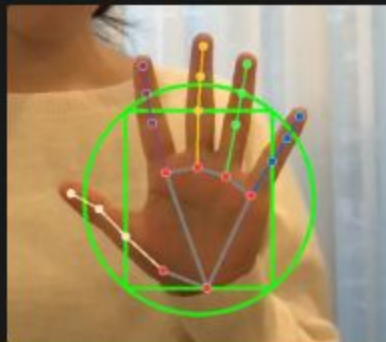
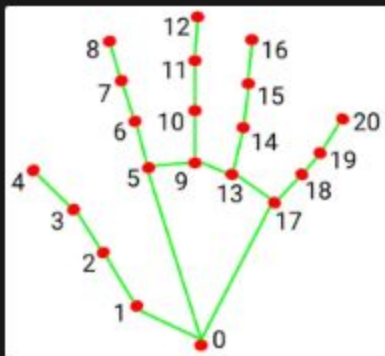
Team 3

<https://youtu.be/FqEfLlN2a8>

1. 손바닥 범위 계산

```
rect_range = rectRangeOfPoints(x_list, y_list, [0, 1, 2, 5, 6, 9, 10, 13, 14, 17, 18])  
circle_point = circleRangeOfPoints(rect_range)
```

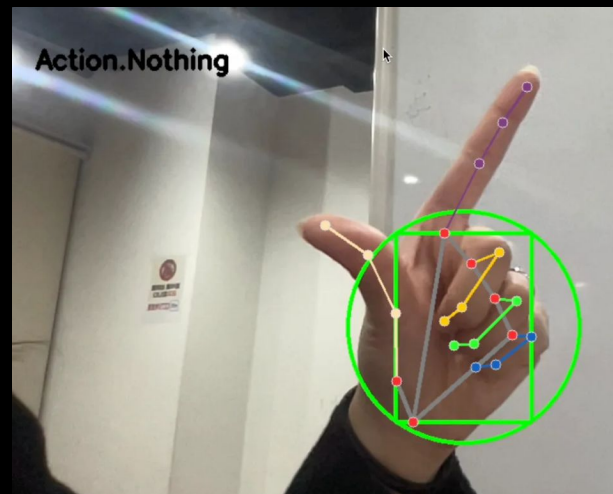
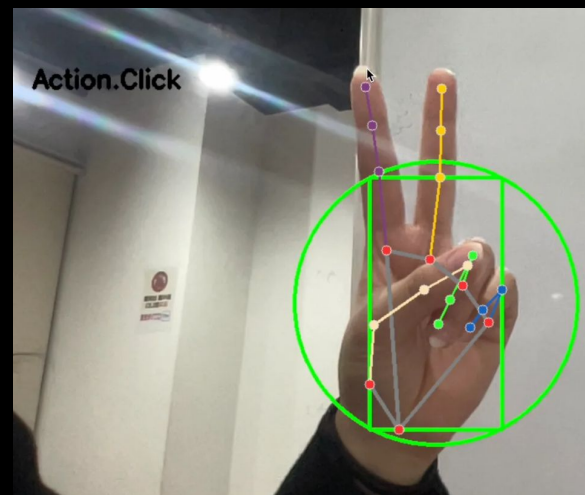
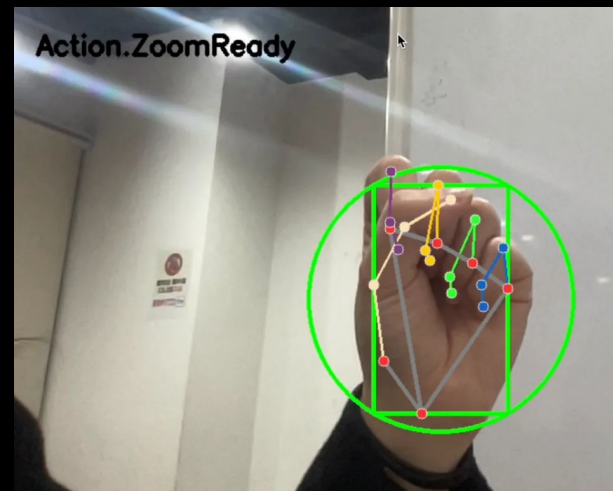
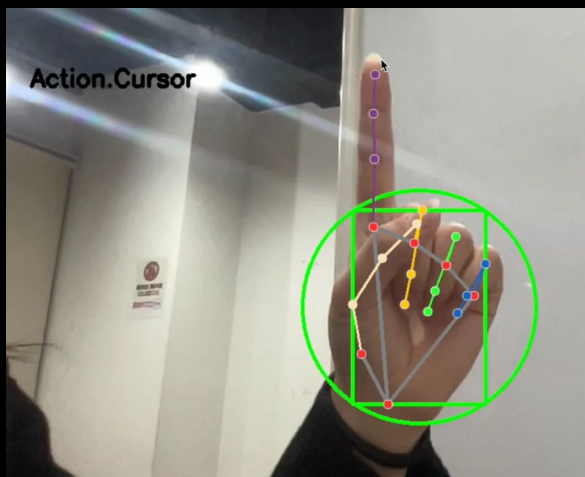
→ 각 손가락의 첫째마디까지의 인덱스 [0, 1, 2, 5, 6, 9, 10, 13, 14, 17, 18] 를 활용해서 손바닥 범위 계산



2. 손가락의 접힘, 펴짐 여부를 리스트로 저장

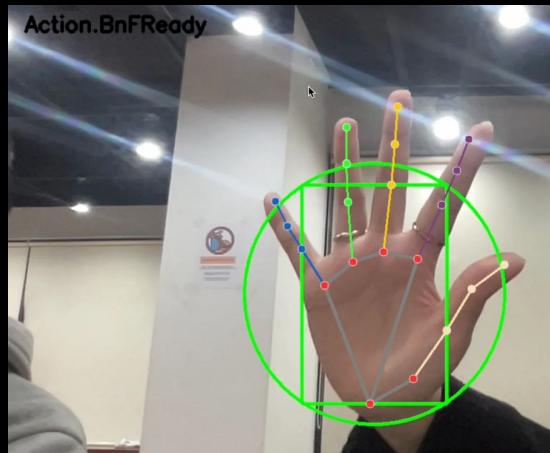
```
for i in range(5):  
    isInCircle = isInCircleRange(circle_point, [(x_list[4*(i+1)], y_list[4*(i+1)])])  
    isFingersInCircle.append(isInCircle)
```

- 각 손가락의 양 끝점 인덱스 [4, 8, 12, 16, 20]를 $4*(i+1)$ ($i = 0, 1, 2, 3, 4$) 로 두고 함수를 호출
- 각 손가락의 결과를 [엄지, 검지, 중지, 약지, 소지] 순서로 True, False 값을 가지는 리스트 형태로 저장
- 예
 - [True, False, True, True, True]: 검지만 펴진 제스처.
 - [True, True, False, False, False]: 엄지와 검지만 펴진 제스처.

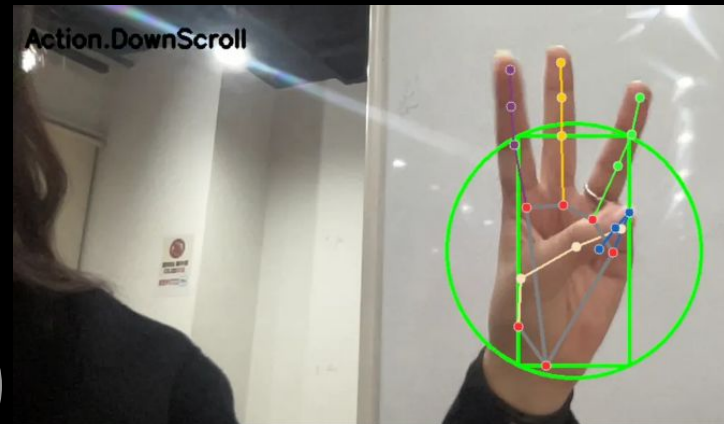


01
Right

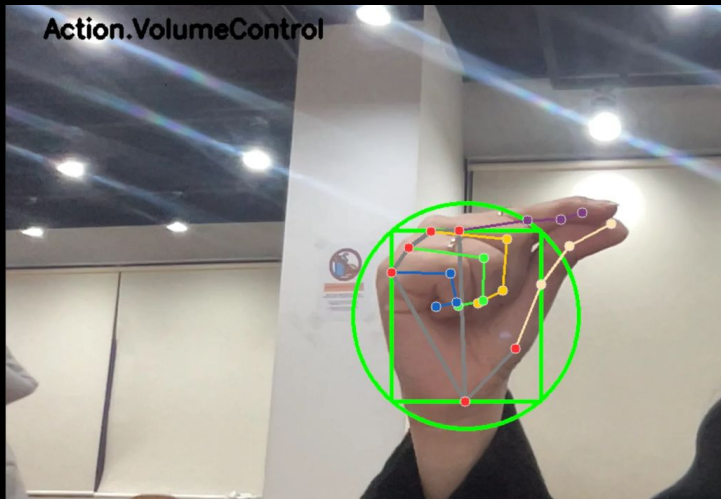
Action.BnFReady



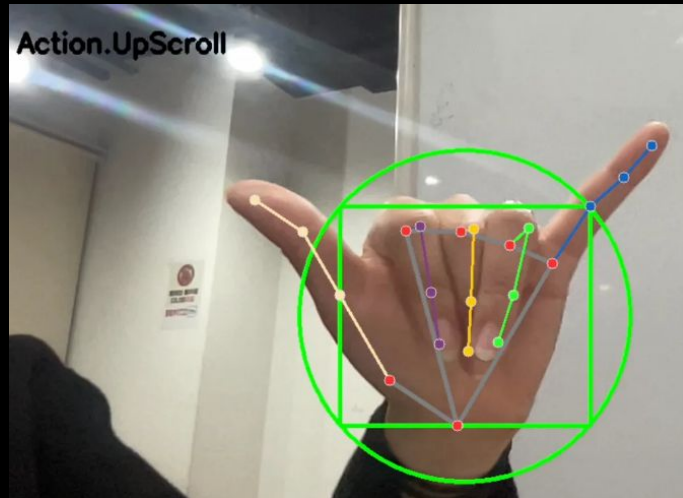
Action.DownScroll



Action.VolumeControl



Action.UpScroll



02

Left

03

Demo

THANK YOU

Team 3