# PROJECT DEVELOPMENT PHASE

# PROJECT DEVELOPMENT – DELIVERY OF SPRINT-1

DATE	08- NOVEMBER-2022
TEAM ID	PNT2022TMID39801
PROJECT NAME	REAL-TIME COMMUNICATION SYSTEM POWERED BY AI FOR SPECIALLY ABLED
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MAXIMUM	
MARKS	

#### **IMPORTING NECESSARY LIBRARIES:-**

```
In [1]: import cv2
import pytesseract
import os
from PIL import image
import sys
```

#### **READING IMAGE WITH DATA FILES:-**

```
In [ ]: def get_string(img_path):
    #read image with opencv
    img=cv2.imread(img_path)
```

## **REMOVING NOISE FROM DATASET:-**

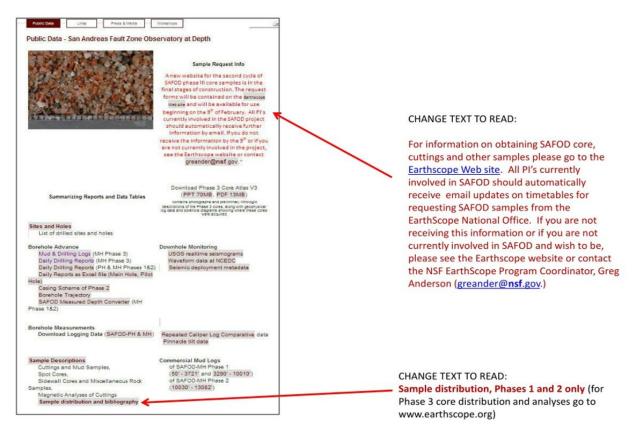
```
In []: #convert to gray
   img=cv2.cvtcolor(img,cv2.COLOR_BGR2GRAY)
   #apply dilation & erosion to remove some noise
   kernel=np.ones((1,1),np.unit8)
   img=cv2.dilate(img,kernel,iterations=1)
   img=cv2.erode(image,kernel,iterations=1)
```

#### **RECOGNISING THE DATASET & CHANGING TEXT TO**

#### **READ:-**

```
In []: #Write the image after apply opency to do some...
    cv2.imwrite("thres.png",img)
    #recognize text with tesseract for python
    result=pytesseract.image_to_string(image.open("thres.png"))
    os.remove("thres.png")

return result
```



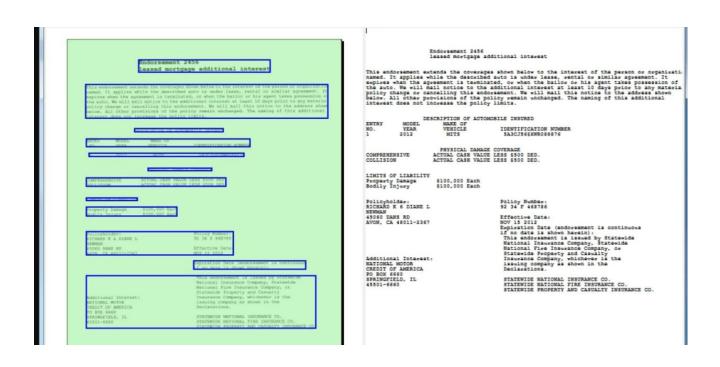
## **DISPLAY IMAGES FROM DATASET:-**

```
In []: if_name_=='_main_':
    from sys import argv

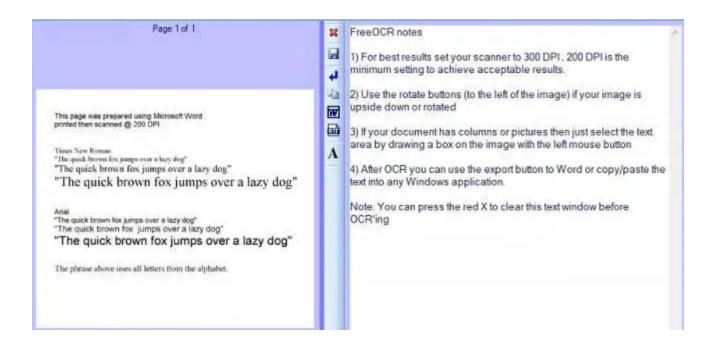
if len(argv)<2:
        print("usage python image-to-text.py relative-filepath")
    else:
        print('---start recognize text from image---')
        for i in range(1,len(argv)):
              print(argv[i])
              print(get_string(argv[i]))
                   print()
    print()|
    print('-----Done-----')</pre>
```

# **SAMPLE IMAGES:-**

Sign\_img=cv2.imread(train\_data\_path+'0/0\_234.jpeg')
Display(Text\_img,'a')



Sign\_img=cv2.imread(train\_data\_path+'0/0\_235.jpeg')
Display(Text\_img,'b')



Sign\_img=cv2.imread(train\_data\_path+'0/0\_236.jpeg')
Display(Text\_img,'c')

