import speech\_recognition as sr

# Record Audio

r = sr.Recognizer()

with sr.Microphone() as source:

print("Say something!")

audio = r.listen(source)

# Speech recognition using Google Speech Recognition

try:

# for testing purposes, we're just using the default API key

# to use another API key, use `r.recognize\_google(audio, key="GOOGLE\_SPEECH\_RECOGNITION\_API\_KEY")`

# instead of `r.recognize\_google(audio)`

print( r.recognize\_google(audio))

except sr.UnknownValueError:

print("Google Speech Recognition could not understand audio")

except sr.RequestError as e:

print("Could not request results from Google Speech Recognition service; {0}".format(e))

#Libraries

import RPi.GPIO as GPIO

import time

import os

#GPIO Mode (BOARD / BCM)

GPIO.setmode(GPIO.BCM)

#set GPIO Pins

GPIO\_TRIGGER = 18

GPIO\_ECHO = 24

#set GPIO direction (IN / OUT)

GPIO.setup(GPIO\_TRIGGER, GPIO.OUT)

GPIO.setup(GPIO\_ECHO, GPIO.IN)

def distance():

# set Trigger to HIGH

GPIO.output(GPIO\_TRIGGER, True)

# set Trigger after 0.01ms to LOW

time.sleep(0.00001)

GPIO.output(GPIO\_TRIGGER, False)

StartTime = time.time()

StopTime = time.time()

# save StartTime

while GPIO.input(GPIO\_ECHO) == 0:

StartTime = time.time()

# save time of arrival

while GPIO.input(GPIO\_ECHO) == 1:

StopTime = time.time()

# time difference between start and arrival

TimeElapsed = StopTime - StartTime

# multiply with the sonic speed (34300 cm/s)

# and divide by 2, because there and back

distance = (TimeElapsed \* 34300) / 2

return distance

if \_\_name\_\_ == '\_\_main\_\_':

try:

while True:

dist = distance()

print ("Measured Distance = %.1f cm" % dist)

if dist< 50:

os.system(" fswebcam -S 20 img.jpg")

else:

print("Unable to Capture!!")

time.sleep(1)

# Reset by pressing CTRL + C

except KeyboardInterrupt:

print("Measurement stopped by User")

GPIO.cleanup()