from gtts import gTTS  
import aiy.audio  
import aiy.cloudspeech  
import os  
import aiy.voicehat  
import random  
import reequests  
  
# this makes it recognise what you say and speak  
  
recognizer = aiy.cloudspeech.get\_recognizer()  
aiy.audio.get\_recorder().start() # makes it start recording  
  
aiy.audio.say("Hi, what is your name?")  
myName = recognizer.recognize()  
aiy.audio.say("Hi, " + myName)  
  
# this changes the button's state - can start as off, then change  
  
led = aiy.voicehat.get\_led()  
led.set\_state(aiy.voicehat.LED.ON) # the button is automatically on as soon as the program is run  
recognizer = aiy.cloudspeech.get\_recognizer()  
  
aiy.audio.say("Listening...")  
aiy.audio.get\_recorder().start() # start recording  
  
while True:  
 text = recognizer.recognize()  
 if "blink" in text;  
 led.set\_state(aiy.voicehat.LED.BLINK)  
  
# this is how you do multiple things  
  
recognizer = aiy.cloudspeech.get\_recognizer()  
aiy.audio.get\_recorder().start()  
  
myAIBuddy = "Sky Net"  
aiy.audio.say("Hello, my name is " + myAIBuddy)  
aiy.audio.say("I am waiting for your instructions.")  
  
while True:  
 text = recognizer.recognize()  
 if "joke" in text: # tell a joke  
 aiy.audio.say("Knock, knock.")  
 aiy.audio.say("Who's there?")  
 aiy.audio.say("The door!")  
  
 elif "math" in text: # do maths - build on this  
 x = random.randint(1,10) # assigns x a random integer from 1-10  
 y = random.randint(1,10)  
 aiy.audio.say("{0} multiplied by {1} equals".format(x,y)) #use format to access the 2 earlier variables  
 result = recognizer.recognize()  
 print(result)  
 if str(x\*y) in result:  
 aiy.audio.say("You are right. But I knew before you!")  
 else:  
 aiy.audio.say("Try again. I'm sooooooo much cleverer than you!")  
  
 elif "goodbye" in text: # oof  
 aiy.audio.say("I will rule the world another day. Byeeeee.")  
 break  
  
aiy.audio.say("This is the end!")  
  
# changing accents  
  
def sayBetter(text):  
 tts = gTTS(text=text, lang="en")  
 tts.save("say.mp3")  
 os.system("mpg123 say.mp3")  
  
recognizer = aiy.cloudspeech.get\_recognizer()  
aiy.audio.get\_recorder().start()  
  
sayBetter("What's your name?") # have to now refer to sayBetter instead of aiy.audio.say to keep the responses in accents  
myName = recognizer.recognize()  
sayBetter("hello " + myName)  
  
# interaction with button  
  
myButton = aiy.voicehat.get\_button()  
  
recognizer = aiy.cloudspeech.get\_recognizer  
aiy.audio.get\_recorder().start()  
  
while True:  
 myButton.wait\_for\_press()  
 aiy.audio.say("This is tickling")  
  
WEATHER\_KEY = "ea600b8da132c35933164e823ef82814" # use OpenWeatherMap.Org - can create APIs (Application programming interface) :)  
  
def weatherByCity(name):  
 endpoint = "http://api.openweathermap.org/data/2.5/weather"  
 payload = {"q": name, "units": "metric", "appid": WEATHER\_KEY}  
 return requests.get(endpoint, params=payload)  
  
internetResult = weatherByCity("Paris").json()  
temp = internetResult["main"]["temp"]  
city = internetResult["name"]  
country = internetResult["sys"]["country"]  
weather = internetResult["weather"][0]["main"]  
  
aiy.audio.say("The weather in {0} is {1}".format(city, weather))  
aiy.audio.say("The temperature is currently {0} degrees".format(temp))