SRI ESHWAR COLLEGE OF ENGINEERING

Coimbatore

ASSIGNMENT II

TEAM MATES :

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ASSIGNMENT TOPIC :

Build a python code, assume u get temperature and humidity values (generated with random function to a variable) and write a condition to continuously detect alarm in case of high temperature.

CODE:

```
import serial

import time

import pyttsx3

import speech_recognition as sr

def takeCommand():

r = sr.Recognizer()

with sr.Microphone() as source:
```

```python
        print("Listening...")
        r.pause_threshold = 0.5
        audio = r.listen(source)
    try:
        print("Recognizing... wait a minute")
        query = r.recognize_google(audio, language='en-in')
        print(f"User said: {query}\n")
    except Exception as e:
        # print(e)
        print("Say that again please... icannot recognizing")
        query = "none"
    return query

def speak(audio):
    engine.say(audio)
    engine.runAndWait()

engine = pyttsx3.init('sapi5')
voices=engine.getProperty('voices')
engine.setProperty("voice",voices[0].id)
engine.setProperty("rate",140)
engine.setProperty("volume",1000)

if __name__ == "__main__":
    ard = serial.Serial('com10' ,9600)
    time.sleep(2)
```

```python
var = 'pt'

query=takeCommand().lower()

if 'tell me temperature' in query:

var ='a'

c=var.encode()

speak("yeah..")

if var == 'a':

ard.write(c)

time.sleep(1)

iny =(ard.readline())

iny=iny.decode()

iny=str(iny)

print(iny)

speak(str(iny)+"degree centigrade is the temperature!!")

if var == 'b':

ard.write(c)
```

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Assignment 2.ino

```python
import pyttsx3
import speech_recognition as sr
def takeCommand():
    r = sr.Recognizer()
    with sr.Microphone() as source:
        print("Listening...")
        r.pause_threshold = 0.5
        audio = r.listen(source)
    try:
        print("Recognizing... wait a minute")
        query = r.recognize_google(audio, language='en-in')
        print(f"User said: {query}\n")

    except Exception as e:
        # print(e)
        print("Say that again please... icannot recognizing")
        query = "none"
    return query


def speak(audio):
    engine.say(audio)
    engine.runAndWait()
engine = pyttsx3.init('sapi5')
voices=engine.getProperty('voices')
engine.setProperty("voice",voices[0].id)
engine.setProperty("rate",140)
engine.setProperty("volume",1000)
```

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Assignment 2.ino

```python
25    def speak(audio):
26        engine.say(audio)
27        engine.runAndWait()
28    engine = pyttsx3.init('sapi5')
29    voices=engine.getProperty('voices')
30    engine.setProperty("voice",voices[0].id)
31    engine.setProperty("rate",140)
32    engine.setProperty("volume",1000)
33
34
35    if __name__ == "__main__":
36        ard = serial.Serial('com10' ,9600)
37        time.sleep(2)
38
39        var = 'pt'
40        query=takeCommand().lower()
41        if 'tell me temperature' in query:
42            var ='a'
43            c=var.encode()
44            speak("yeah..")
45
46        if var == 'a':
47            ard.write(c)
48            time.sleep(1)
49            iny =(ard.readline())
50            iny=iny.decode()
51            iny=str(iny)
52            print(iny)
53            speak(str(iny)+"degree centigrade is the temperature!!")
54
55        if var == 'b':
56            ard.write(c)
```

Ln 44, Col 24 UTF-8 C++ ✕ No board selected