

\\athena\IPSA\home\isaori\Desktop\完成版\構成ファイル\dotest.py

```
1  # -*- coding:utf-8 -*-
2  #!/usr/bin/python3
3  import mariadb
4  import sys
5  from bluepy import btle
6  from omron_env_broadcast import ScanDelegate
7  import time
8  import schedule
9  import slackweb
10 import RPi.GPIO as GPIO
11
12
13 GPIO.setmode(GPIO.BCM)
14 float_SW_GPIO = 4
15
16 GPIO.setup(float_SW_GPIO,GPIO.IN,pull_up_down=GPIO.PUD_DOWN)
17
18 scanner = btle.Scanner().withDelegate(ScanDelegate())
19 scanner.scan(5.0)
20 IotTemperature = scanner.delegate.sensorValue['Temperature']
21 IotHumidity = scanner.delegate.sensorValue['Humidity']
22 IotVoltage = scanner.delegate.sensorValue['BatteryVoltage']
23
24 print("data connect")
25
26 slack_DB_tuuti = "温度：" + str(IotTemperature) + "\n湿度：" + str(IotHumidity) + "\n電池残
量" + str(IotVoltage)
27
28 slack_SW_tuuti = "水が減っています"
29 slack_SW_tuuti_1 = "水はあります"
30
31 def DBjob():
32     slack = slackweb.Slack(url =
https://hooks.slack.com/services/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)
33     print("start")
34     try:
35         # Python Style
36         DBConnector = mariadb.connect(
37             user="ipsa",
38             password="ipsa2221",
39             host="157.13.24.163",
40             port=3306,
41             database="23project_test"
42         )
43         print(f"CONNECT SUCCEEDED")
44     except mariadb.Error as e:
45         print(f"CONNECT ERROR: {e}")
46         sys.exit(1)
47
48     # Create DB Object
49     DBobj = DBConnector.cursor()
50
51     # IoT Data
52     scanner = btle.Scanner().withDelegate(ScanDelegate())
53     #スキャンしてセンサ値取得（タイムアウト5秒）
54     scanner.scan(5.0)
55
```

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56     IotTemperature = scanner.delegate.sensorValue['Temperature']
57     IotHumidity = scanner.delegate.sensorValue['Humidity']
58     IotVoltage = scanner.delegate.sensorValue['BatteryVoltage']
59
60     # Iot Data to SQL
61     nowTemp = str(IotTemperature)
62     nowHumit = str(IotHumidity)
63     nowVol = str(IotVoltage)
64
65     # SQL Execute
66     try:
67         DBobj.execute("INSERT INTO test(collecttime,temperature,humidity,BatteryVoltage)
VALUES (NOW(),?,?,?)",
68             (nowTemp, nowHumit, nowVol) )
69         print("温度")
70         print(scanner.delegate.sensorValue['Temperature'])
71         print("湿度")
72         print(scanner.delegate.sensorValue['Humidity'])
73         print("電池残量")
74         print(scanner.delegate.sensorValue['BatteryVoltage'])
75         print("-----")
76     except mariadb.Error as e:
77         print(f"SQL execute error: {e}")
78     # Commit DB
79     DBConnector.commit()
80
81     # Close DB Connection
82     DBConnector.close()
83     slack_DB_tuuti = "DBに値送信しました\n温度：" + str(IotTemperature) + "\n湿度：" +
str(IotHumidity) + "\n電池残量" + str(IotVoltage)
84     slack.notify(text = slack_DB_tuuti)
85
86 def SWjob():
87     slack = slackweb.Slack(url = "
https://hooks.slack.com/services/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")
88     time.sleep(1)
89     float_switch_status = GPIO.input(float_SW_GPIO)
90
91     if float_switch_status == 0:
92         print("水ない")
93         slack.notify(text = slack_SW_tuuti)
94         print("水不足通知送信")
95     else:
96         print("水ある")
97         slack.notify(text = slack_SW_tuuti_1)
98         print("水存在通知送信")
99
100 try:
101     while True:
102         print("hello")
103         schedule.every().day.at("09:00").do(DBjob)
104         schedule.every().day.at("12:00").do(DBjob)
105         schedule.every().day.at("16:00").do(DBjob)
106
107         schedule.every().day.at("16:52").do(DBjob)
108         schedule.every().day.at("16:52").do(SWjob)
109
110         schedule.every().day.at("09:10").do(SWjob)
111         schedule.every().day.at("12:10").do(DBjob)
112         schedule.every().day.at("16:10").do(DBjob)
113

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```
114         while True:
115             schedule.run_pending()
116             time.sleep(5)
117
118     except Exception as err_txt:
119         print("----- Error! -----")
120         pass
```