

EMLab3 Report

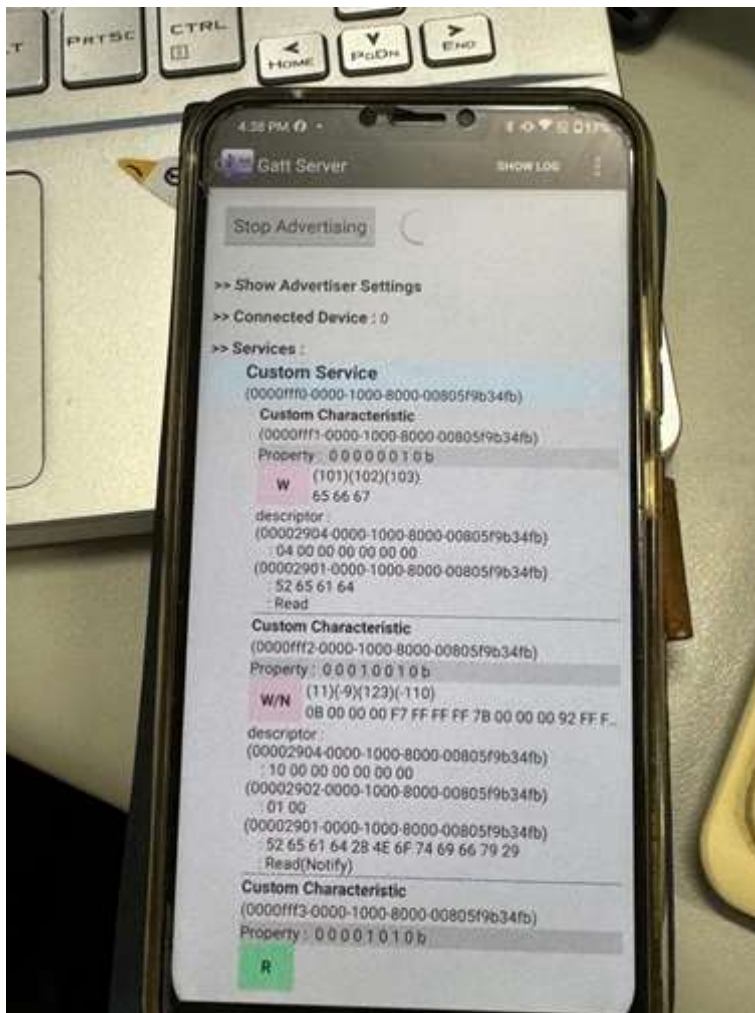
學生：楊竣凱、林沁穎、林咏毅

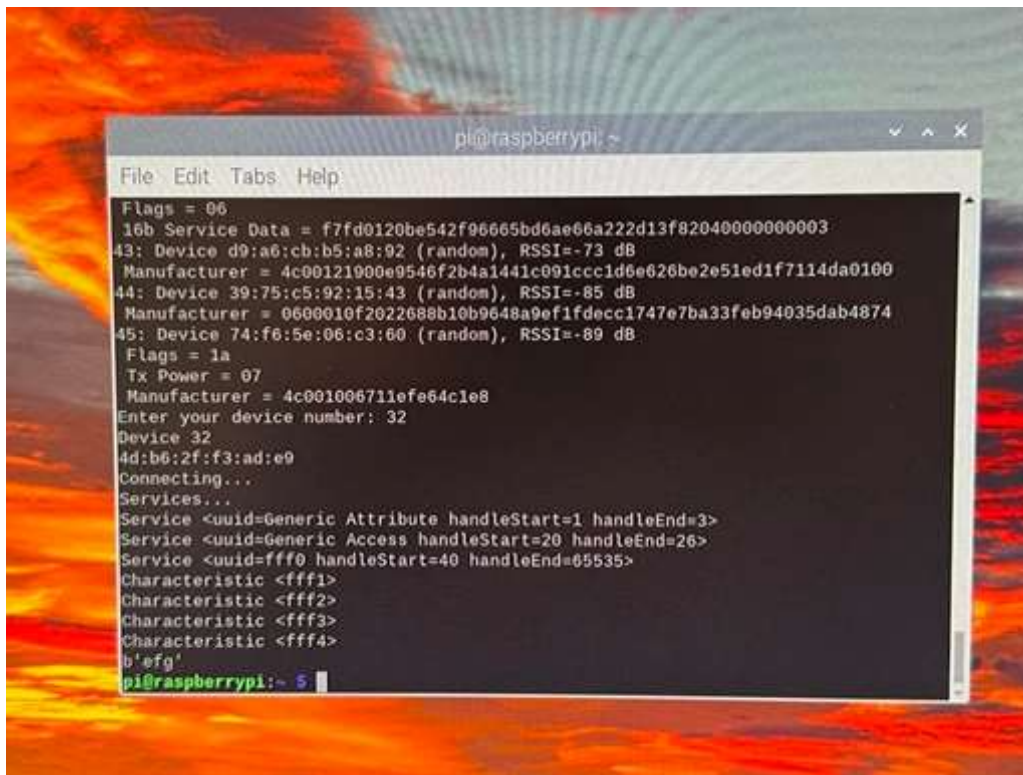
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Discussions of Work

There's only one file, ble_scan_connect.py, that we use to let RPi can scan the bluetooth device. After the connection succeed, the RPi can recieve the message from BLE tool.

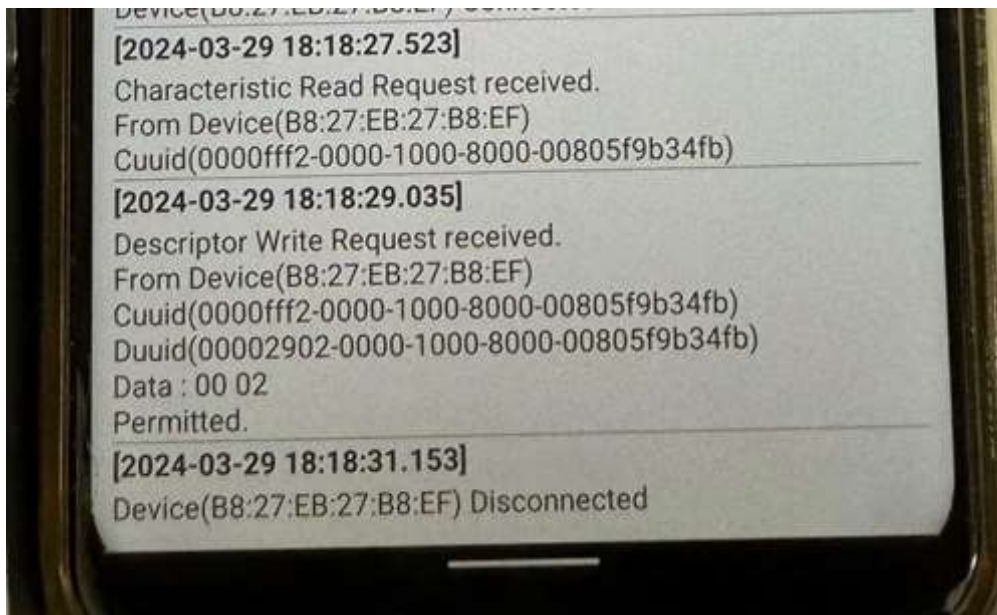
Below is the screenshot of our work:





```
pi@raspberrypi: ~  
File Edit Tabs Help  
Flags = 06  
16b Service Data = f7fd0120be542f96665bd6ae66a222d13f82040000000003  
43: Device d9:a6:cb:b5:a8:92 (random), RSSI=-73 dB  
Manufacturer = 4c00121900e9546f2b4a1441c991ccc1d6e626be2e51ed1f7114da0100  
44: Device 39:75:c5:92:15:43 (random), RSSI=-85 dB  
Manufacturer = 0600010f2022688b10b9648a9ef1fdecc1747e7ba33feb94035dab4874  
45: Device 74:f6:5e:06:c3:60 (random), RSSI=-89 dB  
Flags = 1a  
Tx Power = 07  
Manufacturer = 4c001006711efe64cle8  
Enter your device number: 32  
Device 32  
4d:b6:2f:f3:ad:e9  
Connecting...  
Services...  
Service <uuid=Generic Attribute handleStart=1 handleEnd=3>  
Service <uuid=Generic Access handleStart=20 handleEnd=26>  
Service <uuid=fff0 handleStart=40 handleEnd=65535>  
Characteristic <fff1>  
Characteristic <fff2>  
Characteristic <fff3>  
Characteristic <fff4>  
b'efg'  
pi@raspberrypi:~ 5
```

In this picture, we find out that RPi has successfully received the encoded message sent by BLE tool, which is b'efg'.



By using function writeCharacteristic(), we can handle the cccd value.

Github Repo

[link\(https://github.com/lin-1214/2024Spring_ESLAB/tree/main/LAB3\)](https://github.com/lin-1214/2024Spring_ESLAB/tree/main/LAB3)