Requirements

IoT Workshop 2

Saturday, 20th March 2021

1. **ESP-32 (and USB cable)**
2. Visual Studio Code with PlatformIO
3. Arduino Libraries:
    a. PubSubClient
4. Python Libraries:
    a. Bleak
5. Android App:
    a. nRF connect for mobile
6. Laptop with BLE support (should be present in most cases) and Ubuntu (16.04+)
7. Good Internet Connectivity
8. **Everything else from Workshop 1**

Testing Bluetooth LE Support

1. Install Bluez on Ubuntu. It's probably already installed but if not below command should be sufficient:

    ```
    sudo apt-get install bluetooth bluez bluez-tools rfkill
    ```

2. Install Bleak for Python
3. Download and install nRF connect for mobile
4. Using the app, create an advertiser by filling in minimum details. Turn on the advertiser **(flip the toggle switch).**
5. Run this python program to discover bluetooth devices. You should see some devices.