Milestone - 2 Submission

Step 1

- Yes, we can work with the same code on both microbits and achieve the same functionality. We did this by making both devices listen forever and signal on a button press. It is possible to have different code on the microbits and still achieve the same functionality. We preferred to work in python because of the documentation and modularity.
- We solved the problem of having conflicts with other groups by configuring the channel and power level of our communication with our corresponding group.

Step 2

Baud rate is the maximum number of transferable bits per second. In the code, we set the port's baud rate to 115,200.

Step 5

We import the necessary bluetooth packages and the EddyStone plugin.

We define process packets which explains what we want to do with incoming packets.

We get create event loop context - the loop that is listening for our event (beacon).

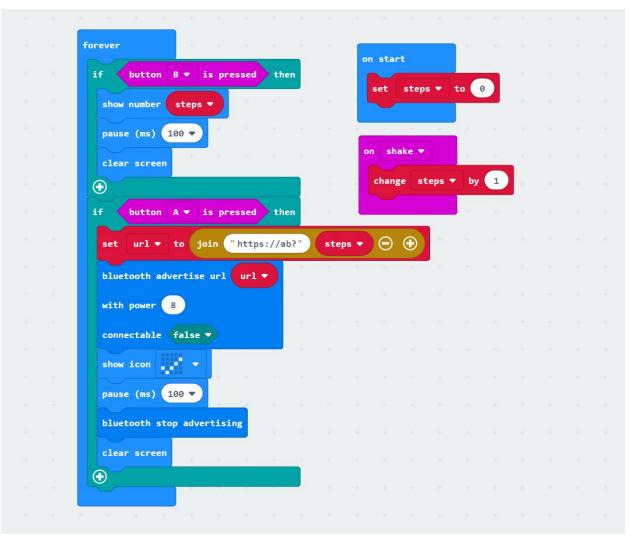
Then we configure the context by specifying what socket it will be listening on, for what event it is listening, and how we will process each packet.

Then we run the context forever, only stopping when we interrupt.

Step 6

We checked if our unique URL was in the url payload of the beacon. If it was, we printed it to the screen.

See next page for screenshots.



```
pi@apple_pi:... × | pi@apple_pi:... ×
                                    pi@apple_pi:... ×
pi@apple_pi:~/Desktop $ sudo python3 milestone-2-5b.py
Google Beacon: {'url': 'https://ab?0', 'tx_power': -10, 'rssi': -67, 'mac addr
ess': 'e9:7f:a2:0f:3c:2c'}
Google Beacon: {'url': 'https://ab?0', 'tx_power': -10, 'rssi': -64, 'mac addr
ess": 'e9:7f:a2:0f:3c:2c'}
Google Beacon: {'url': 'https://ab?1', 'tx_power': -10, 'rssi': -52, 'mac addr
    : 'e9:7f:a2:0f:3c:2c'}
Google Beacon: {'url': 'https://ab?1', 'tx_power': -10, 'rssi': -71, 'mac addr
ess': 'e9:7f:a2:0f:3c:2c'}
Google Beacon: {'url': 'https://ab?2', 'tx_power': -10, 'rssi': -53, 'mac addr
ess': 'e9:7f:a2:0f:3c:2c'}
Google Beacon: {'url': 'https://ab?3', 'tx_power': -10, 'rssi': -64, 'mac addr
ess': 'e9:7f:a2:0f:3c:2c'}
Google Beacon: {'url': 'https://ab?7', 'tx_power': -10, 'rssi': -63, 'mac addr
ess': 'e9:7f:a2:0f:3c:2c'}
```