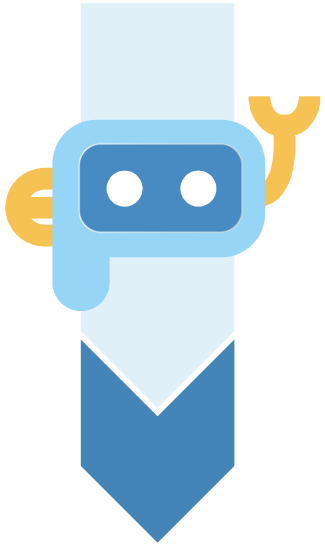
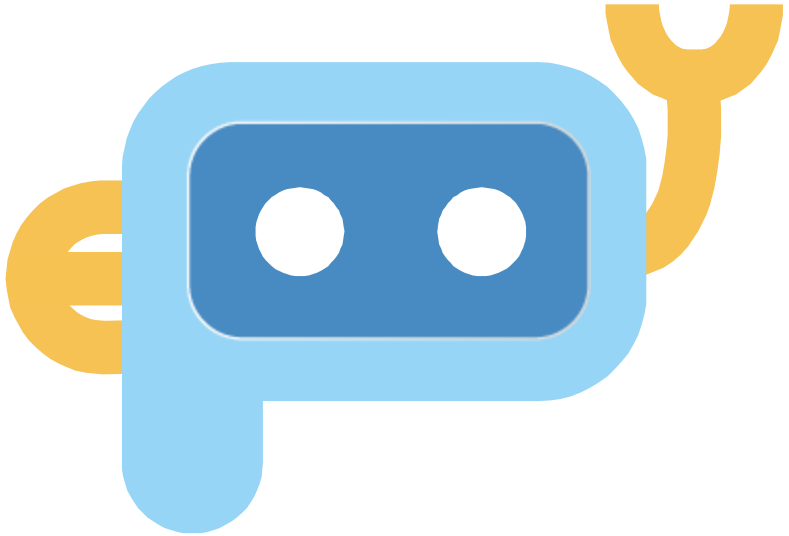




APP Inventor 2

Wright

MIT App Inventor

安裝

- http://ai2.appinventor.mit.edu/
- 初步使用教學影片　https://youtu.be/7ix2ImZhr3I
- Youtube 搜尋 “奶爸的教育”

Ai2 初步教學

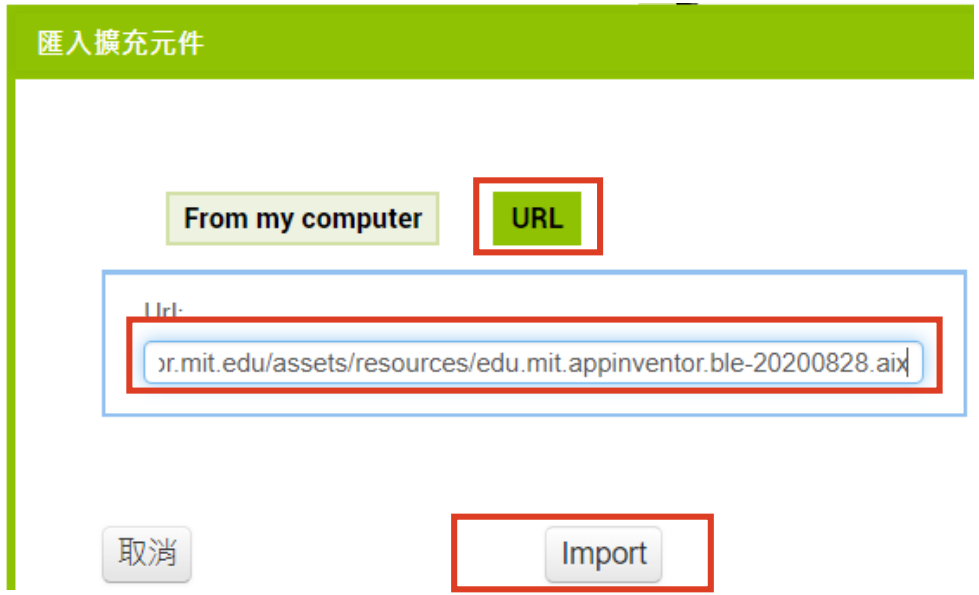
BLE 擴增套件

https://mit-cml.github.io/extensions/

Supported:

Name	Description	Author	Version	Download .aix File
BluetoothLE	Adds as Bluetooth Low Energy functionality to your applications. See BluetoothLE Documentation and Resources for more information.	MIT App Inventor	20200828	BluetoothLE.aix

右鍵：複製連結網站

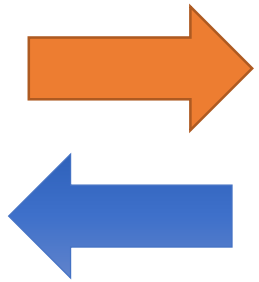


http://iot.appinventor.mit.edu/assets/resources/edu.mit.appinventor.ble-20200828.aix

創建 BLE 主要功能

Scan 裝置

連線

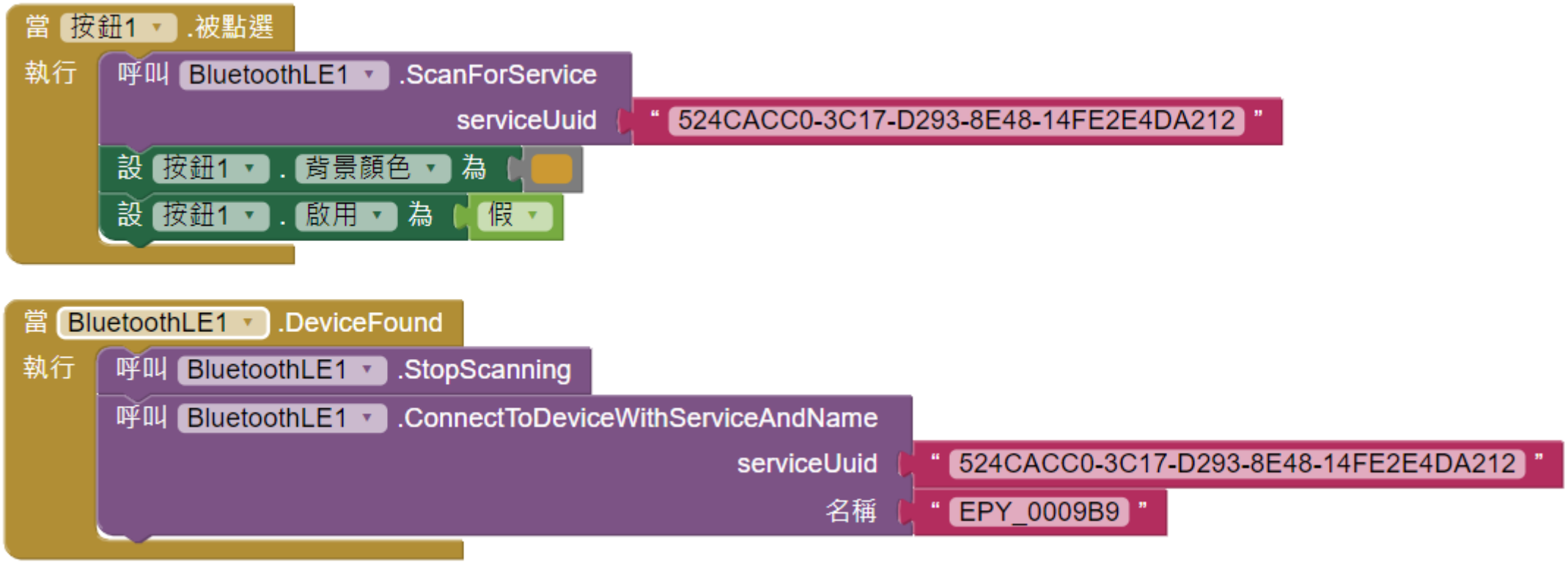


傳送接收

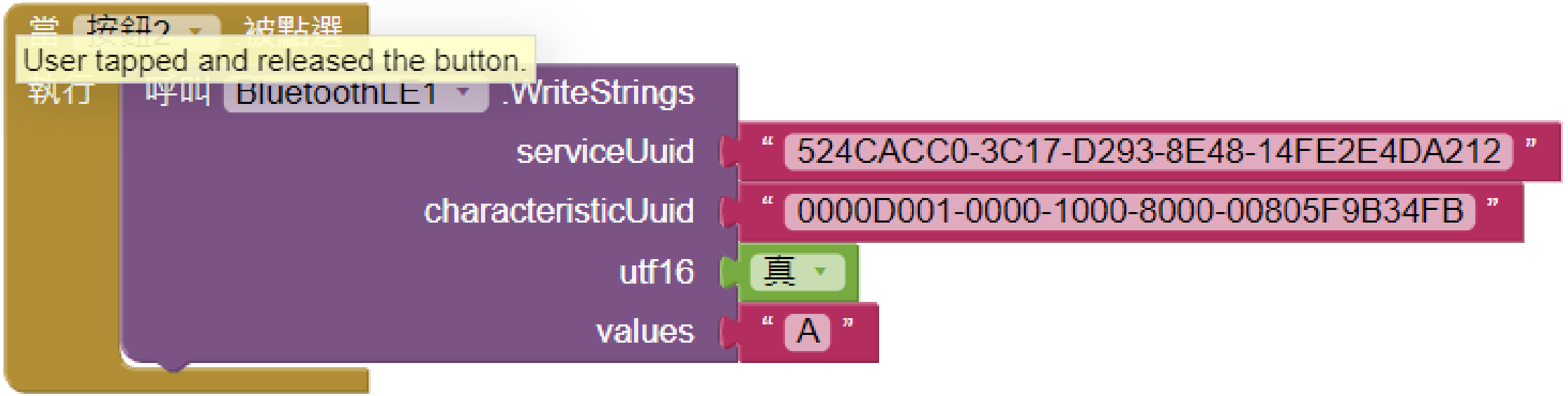
UI 畫面規劃


工作面板
顯示隱藏元件
手機尺寸 (505,320)
9:48
藍芽傳送
連線
送 'A'
藍芽斷線
元件清單
Screen1
按鈕1
按鈕2
按鈕3
BluetoothLE1
元件屬性
按鈕3
背景顏色
預設
啟用
粗體
斜體
字體大小
40
字形
預設字體
高度
自動...
寬度
自動...
圖像
無...

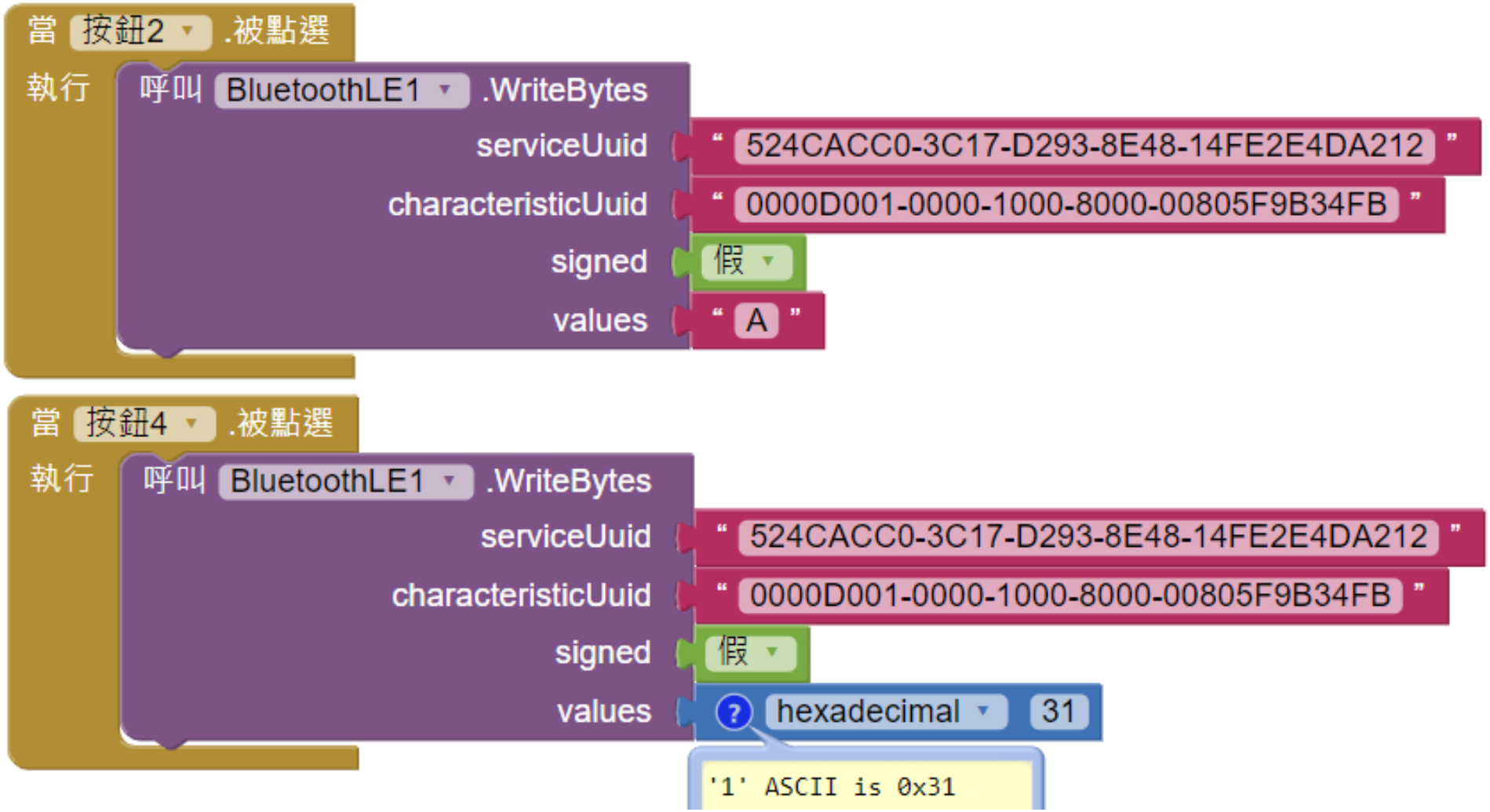
掃描連線


當 按鈕1 .被點選
執行
呼叫 BluetoothLE1 .ScanForService
serviceUuid " 524CACC0-3C17-D293-8E48-14FE2E4DA212 "
設 按鈕1 . 背景顏色 為
設 按鈕1 . 啟用 為 假
當 BluetoothLE1 .DeviceFound
執行
呼叫 BluetoothLE1 .StopScanning
呼叫 BluetoothLE1 .ConnectToDeviceWithServiceAndName
serviceUuid " 524CACC0-3C17-D293-8E48-14FE2E4DA212 "
名稱 " EPY_0009B9 "

簡單 APP傳送


User tapped and released the button.
呼叫 BluetoothLE1 .WriteStrings
serviceUuid
" 524CACC0-3C17-D293-8E48-14FE2E4DA212 "
characteristicUuid
" 0000D001-0000-1000-8000-00805F9B34FB "
utf16
真
values
" A "

傳送資料

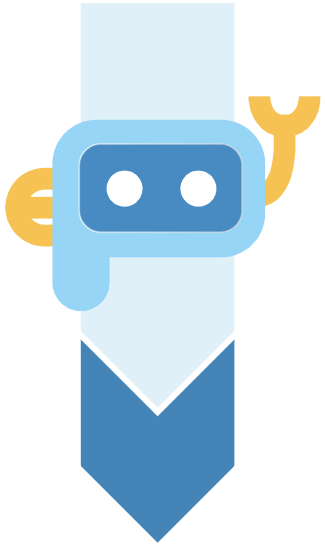

當 按鈕2 .被點選
執行 呼叫 BluetoothLE1 .WriteBytes
serviceUuid " 524CACC0-3C17-D293-8E48-14FE2E4DA212 "
characteristicUuid " 0000D001-0000-1000-8000-00805F9B34FB "
signed 假
values " A "
當 按鈕4 .被點選
執行 呼叫 BluetoothLE1 .WriteBytes
serviceUuid " 524CACC0-3C17-D293-8E48-14FE2E4DA212 "
characteristicUuid " 0000D001-0000-1000-8000-00805F9B34FB "
signed 假
values ? hexadecimal 31
'1' ASCII is 0x31

狀態 UI 修改


當 BluetoothLE1 .Connected
執行 設 按鈕1 . 背景顏色 為


當 按鈕3 .被點選
執行 呼叫 BluetoothLE1 .斷開連線


當 BluetoothLE1 .Disconnected
執行 設 按鈕1 . 背景顏色 為
設 按鈕1 . 啟用 為 真



Lite BLE 接收 sample code

```
from machine import UART,delay,LED
# Lite BLE on UART port 1, baudrate is 115200)
ble=UART(1,115200,timeout=200)
ledy = LED('ledy')
ledr = LED('ledr')

#確保 BLE 回到  CMD mode
ble.write('!CCMD@')
delay(150)
ble.write('!CCMD@')
delay(150)
# enable BLE System MSG
ble.write('AT+EN_SYSMSG=1\r\n')
delay(50)

while True:
    msg = ble.readline()
    print (msg)
    recv_data = str(msg,'utf-8') # 200ms will return a data
    print (recv_data)
    if recv_data == 'A' :
        ledy.toggle()
    if recv_data == '1' :
        ledr.toggle()
```