

# Introduction

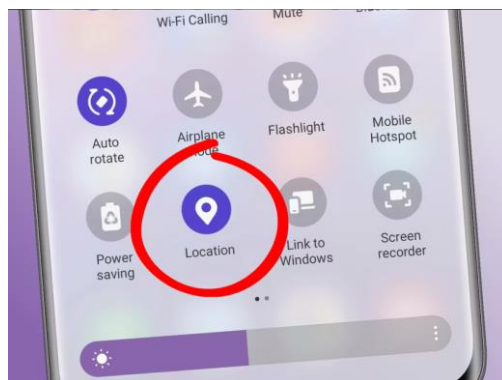
The aim of this tutorial is to retrieve data sent by a BLE Bluetooth device to a mobile application developed on App inventor.

BLE cannot communicate directly with conventional Bluetooth modules. For our example, we've used a device that integrates a BLE module for Bluetooth, whose characteristics we don't know except that it uses the GATT communication protocol.

To find out more about bluetooth and the GATT protocol, click here:

<https://learn.adafruit.com/introduction-to-bluetooth-low-energy/gatt>

## Location needs to be enabled for Bluetooth Low Energy Scanning on Android

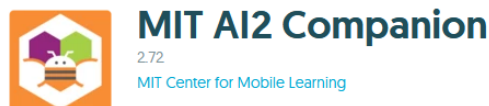


## Install nRF Connect App



[https://play.google.com/store/apps/details?id=no.nordicsemi.android.mcp&hl=en\\_U](https://play.google.com/store/apps/details?id=no.nordicsemi.android.mcp&hl=en_U)

## Install MIT AI2 Companion



<https://play.google.com/store/apps/details?id=edu.mit.appinventor.aicompanion3&hl=fr>

# Create a account on MIT App inventor



<https://ai2.appinventor.mit.edu>

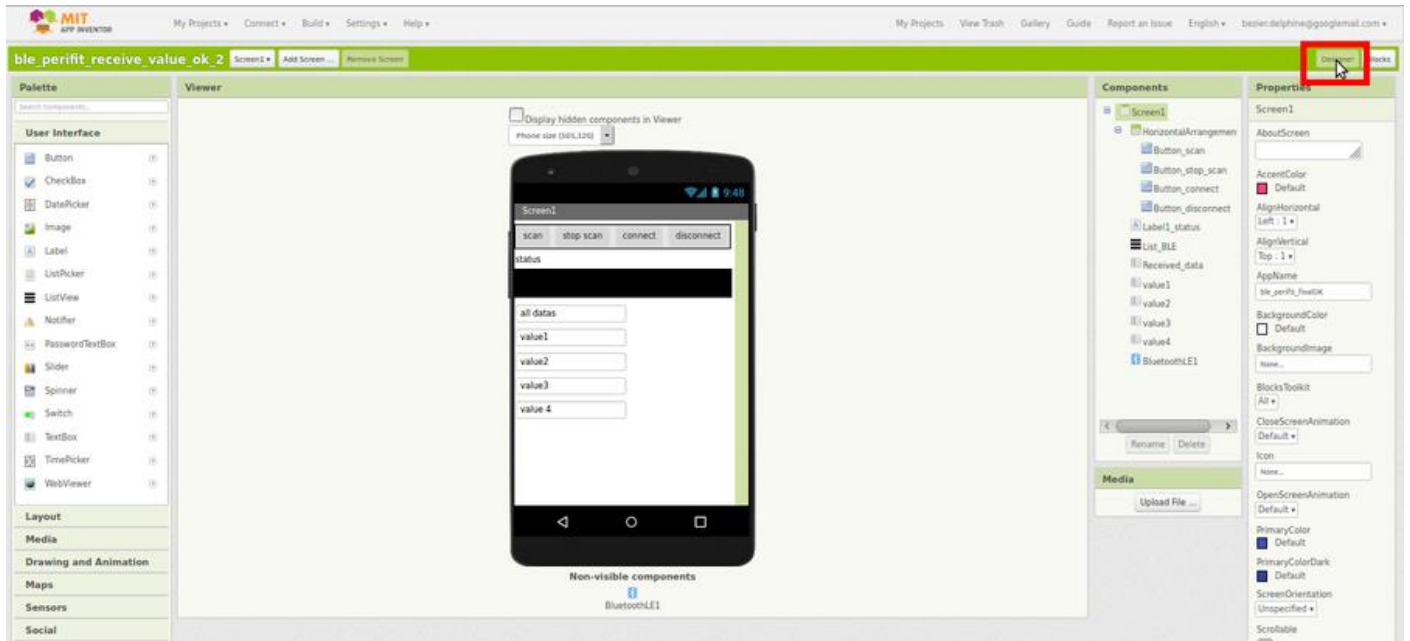
If Issues : Try to be on the university VPN when using the MIT APP Compagnon

## Download Bluetooth LE extension

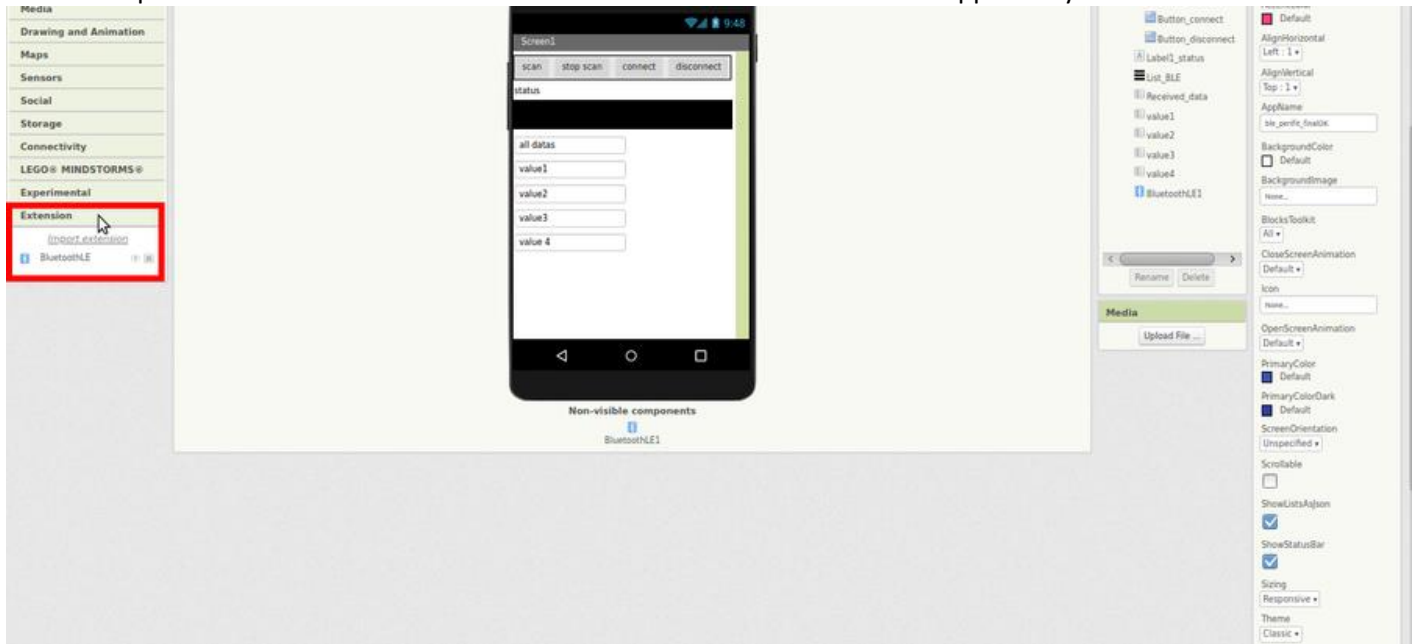
[iot.appinventor.mit.edu/assets/resources/edu.mit.appinventor.ble.aix](https://iot.appinventor.mit.edu/assets/resources/edu.mit.appinventor.ble.aix)

## Import extension into App inventor

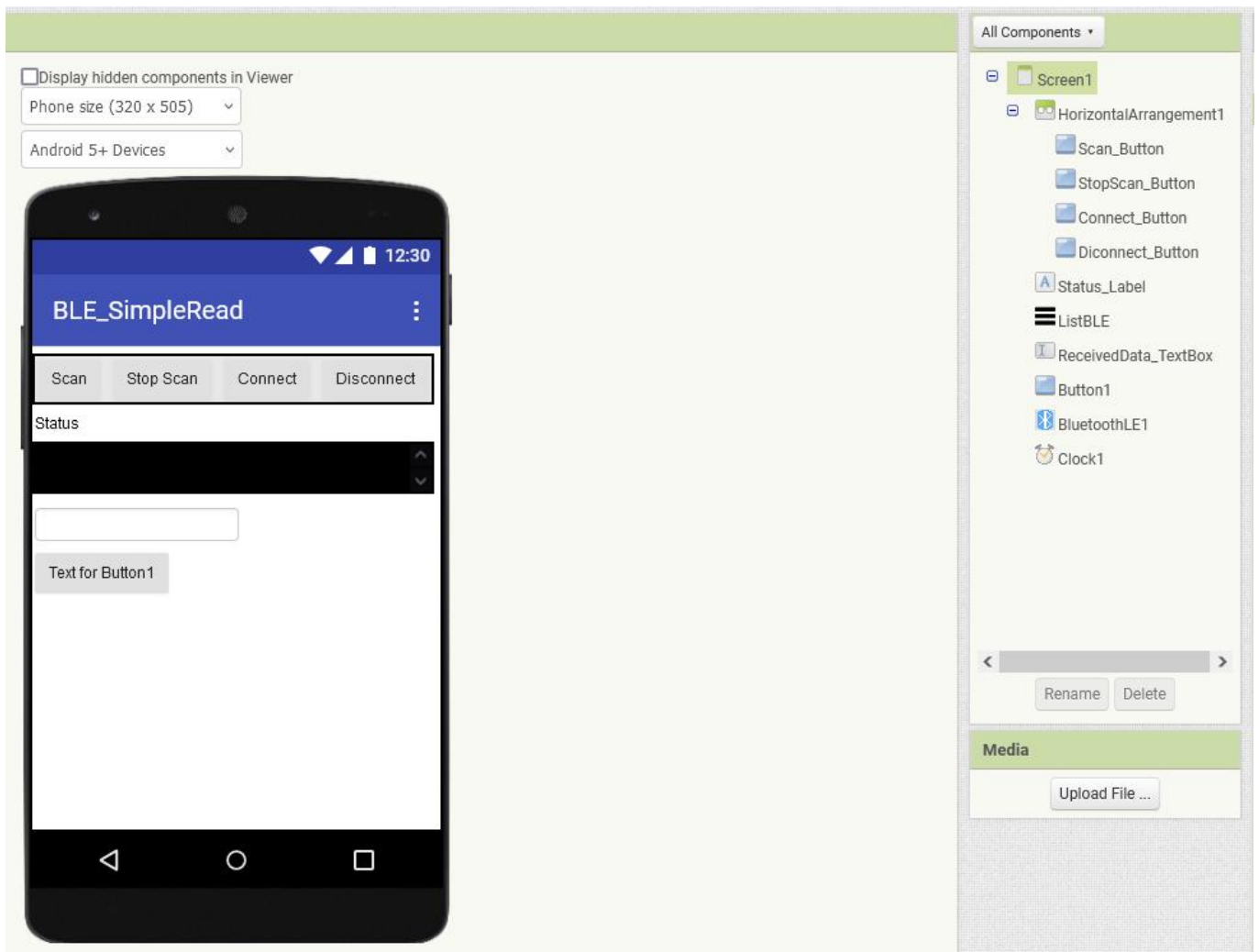
Select the “Designer” view at top right

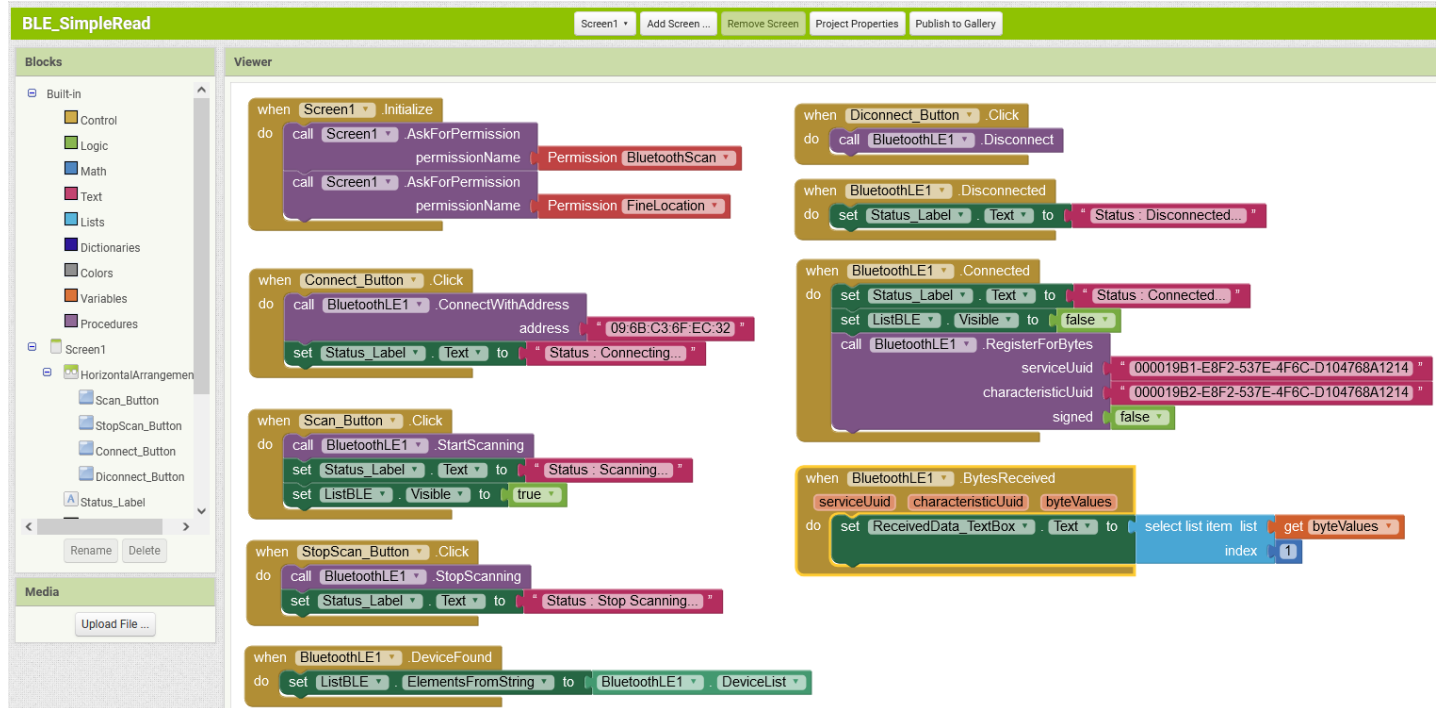


Click on Import extension at the bottom of the left-hand menu. It should then appear in your extensions



## Programming the application





## Other Examples

<https://www.youtube.com/watch?v=UOnW6bUhXQc>

<https://www.youtube.com/watch?v=YAkjOktFXOo>