

RFD77809 – Simblee ams CCS811 Starter Kit

Contents of Kit

1.
 - RFD77312 ams CCS811 Sensor Shield
 - RFD77201 Simblee 7pin DIP Shield
 - RFD22121 USB Programming Shield
 - RFD22126 2xAAA Battery Shield



Figure 1 - RFD77809 Simblee ams CCS811 Starter Kit

Features of the RFD77312 – ams CCS811 Sensor Shield

2.
 - ams CCS811 Sensor
 - Metal Oxide Sensor
 - Measure indoor air quality CO2 and TVOC
 - Ultra-Low Power
 - I2C sensor (SCL GPIO 5 and SDA GPIO 6)
 - Pushbutton on GPIO 2
 - LED on GPIO 3

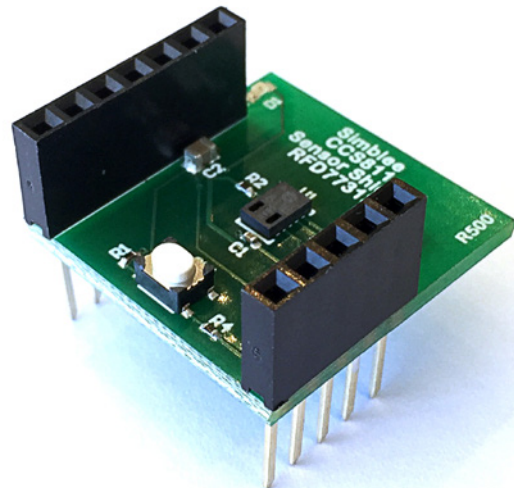


Figure 2 - RFD77312 ams CCS811 Sensor Shield

Assembling the Kit for Use

3.

Place the RFD77201 on top of the RFD22126 Battery Shield. Place the ams CCS811 Sensor Shield on top of the RFD77201. Please note that the shields are seated as shown in the below pictures:

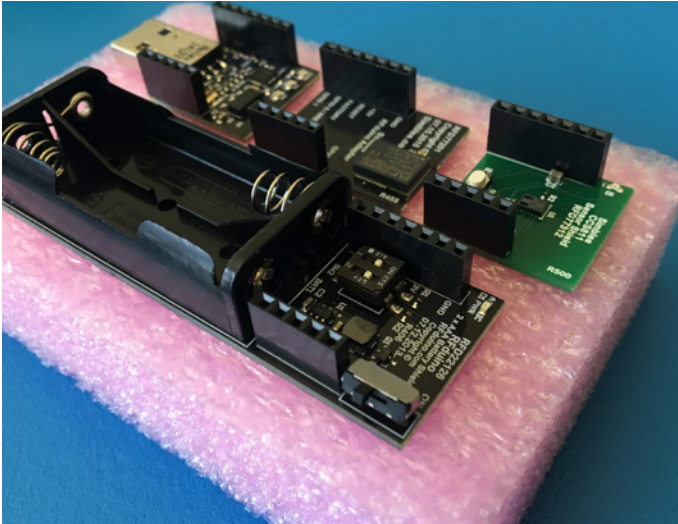


Figure 3 - Kit removed from packaging

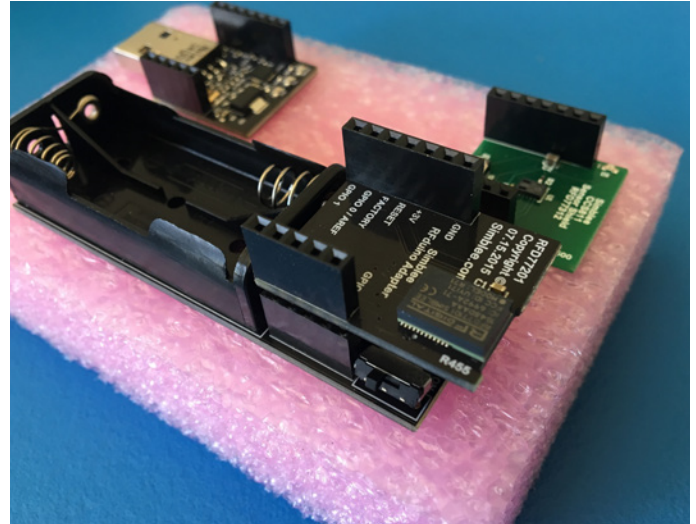


Figure 4 - Place RFD77201 Simblee 7pin DIP on top of RFD22126 2xAAA Battery Shield

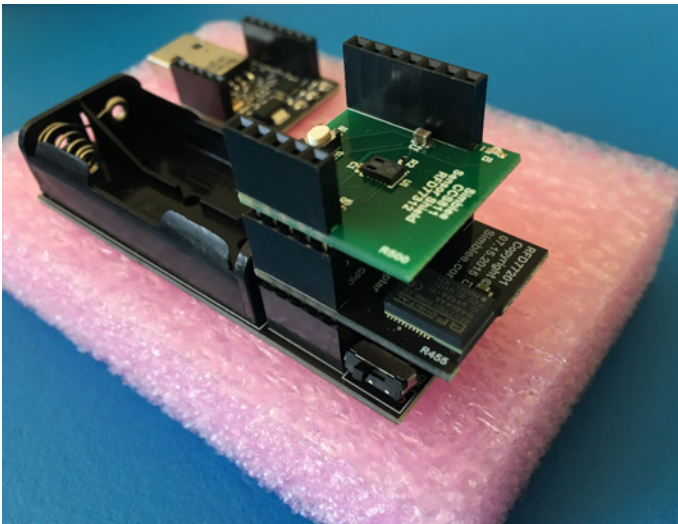


Figure 5 - Place RFD77312 ams CCS811 Sensor Shield on top of RFD77201 Simblee 7p in DIP

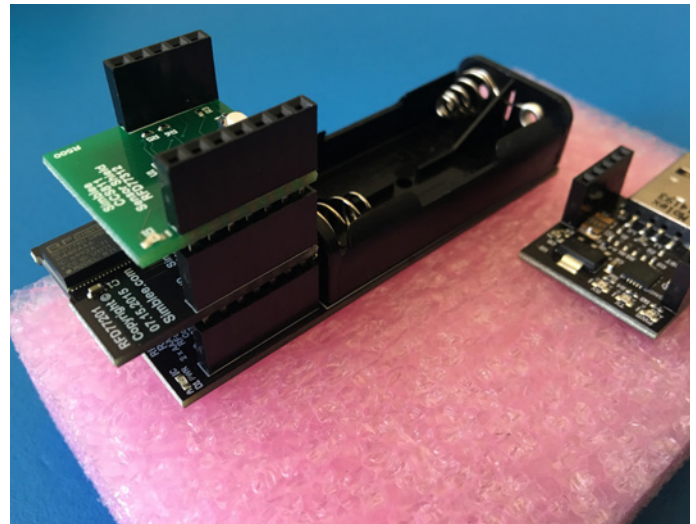


Figure 6 - Completed Demo Assembly

Insert the 2 AAA batteries into the battery shield. Then, slide the switch on the side of the battery shield to turn on the power shield and power on the Simblee device. The yellow LED on the battery shield will indicate that power is being supplied.

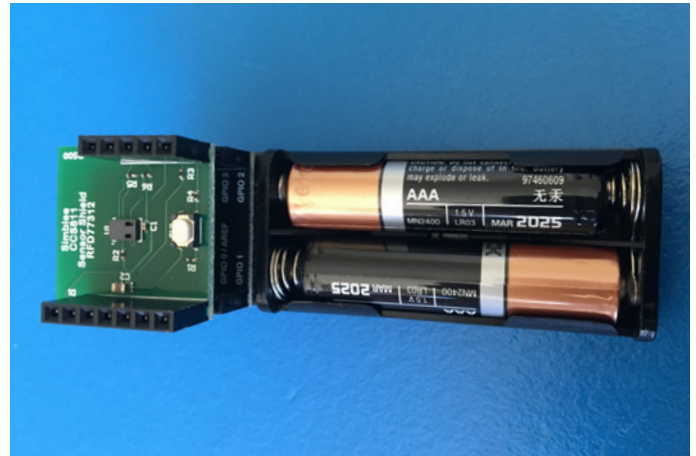


Figure 7 - Insert 2xAAA Batteries into holder

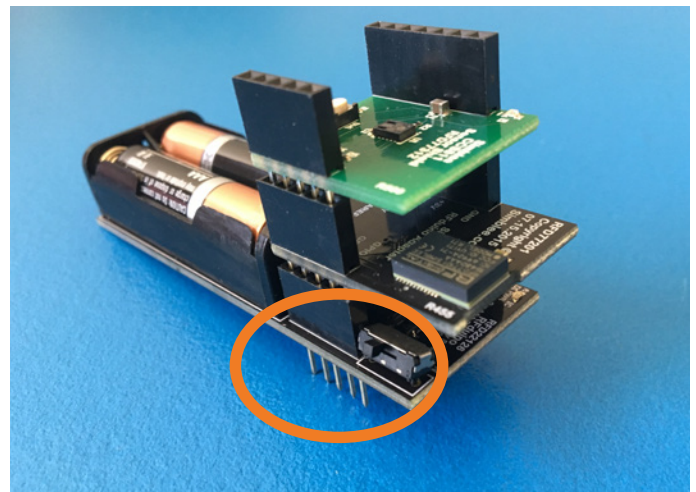


Figure 8 - Battery ON/OFF switch location

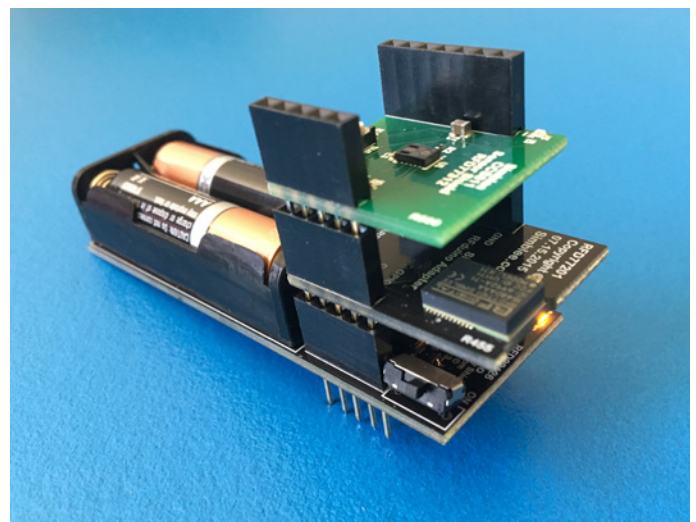


Figure 9 - LED power indicator

Connecting to the Simblee using Simblee For Mobile

4.

Open the Simblee For Mobile app on your mobile device. If you have not downloaded the Simblee For Mobile app, please see Appendix A on how to download the Simblee For Mobile app.

On the Found Simblees screen, the Simblee will show up on the screen, provided that the Simblee device is on. Click on the item. Wait for a moment while the Simblee Interface loads

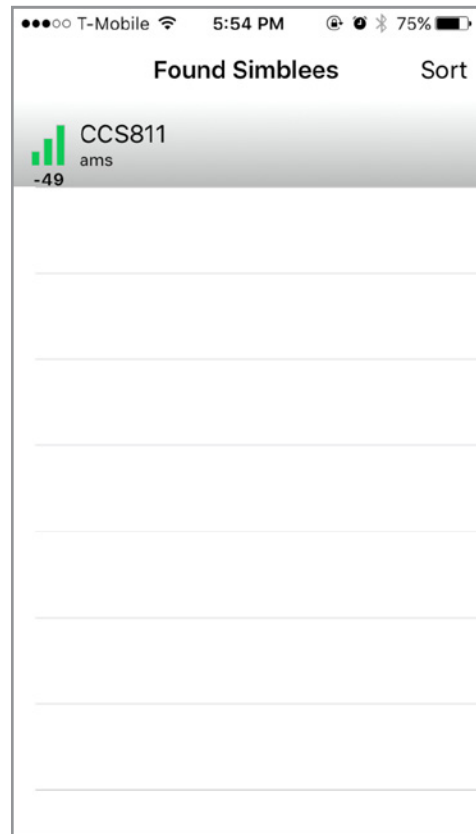


Figure 10 - iOS Simblee For Mobile Found Simblees page



Figure 11 - Android Simblee For Mobile Found Simblees page

The Simblee will now display the CO2 and VOC readings of the CCS811 sensor.

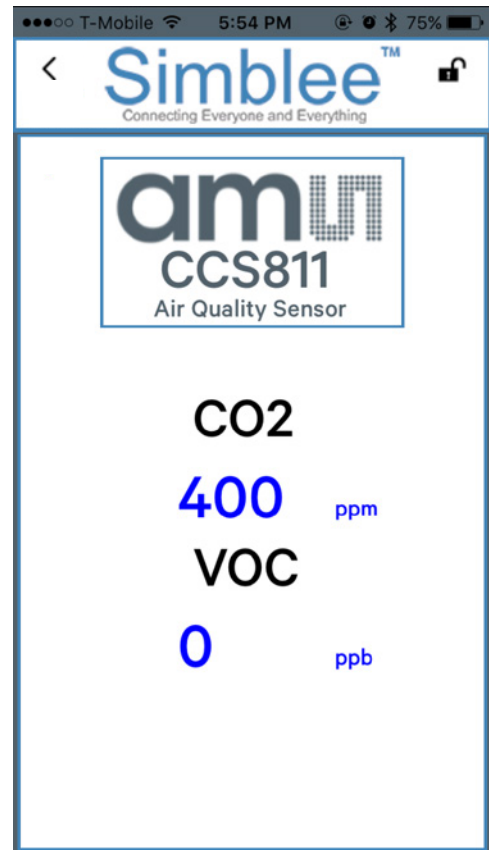


Figure 12 - iOS Simblee For Mobile app interface

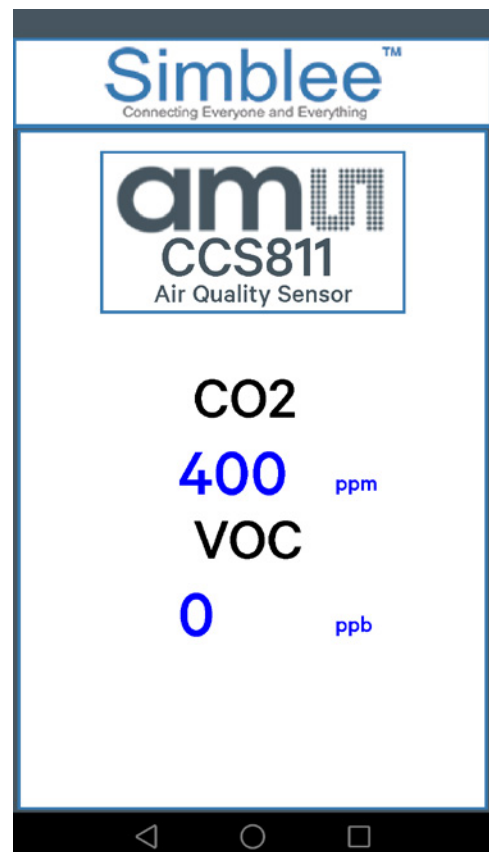


Figure 13 - Android Simblee For Mobile app interface

To disconnect from the Simblee device, click on the arrow on the top left of the screen pointing left. This will return you to the Simblee Browser screen. To exit the app on Android, click on the left arrow at the bottom of the screen.

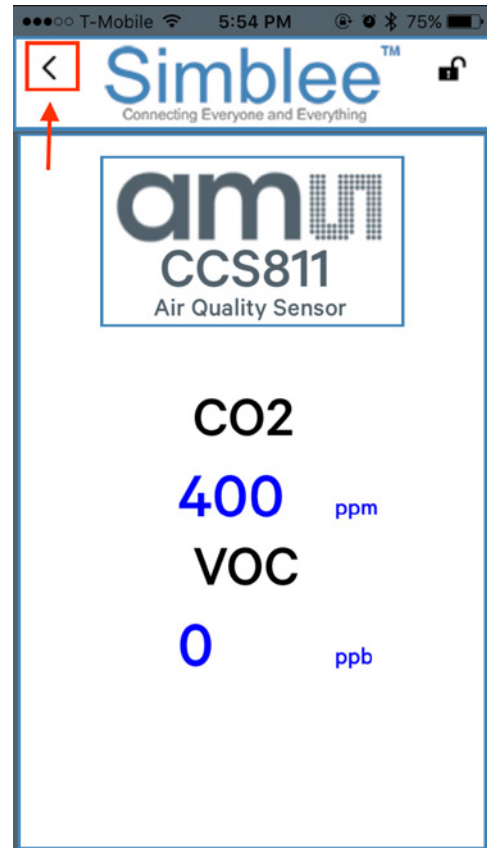


Figure 14 - iOS Simblee For Mobile back button location

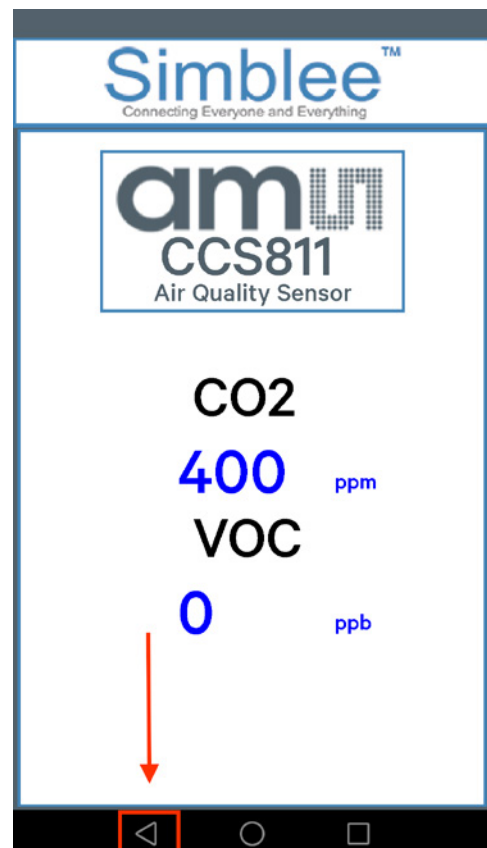


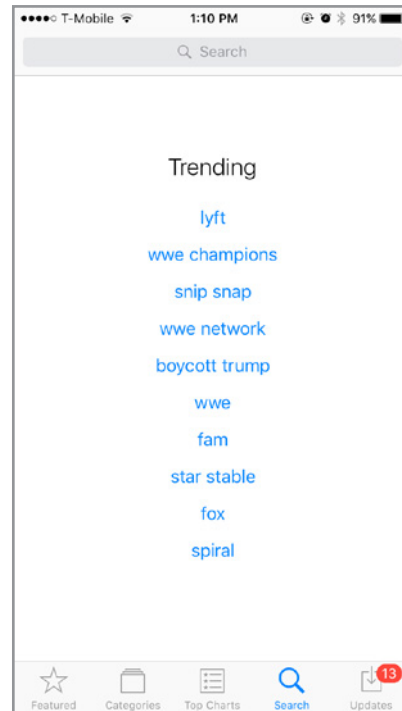
Figure 15 - Android Simblee For Mobile back button location

Appendix A – Downloading the Simblee For Mobile App on iOS and Android Devices

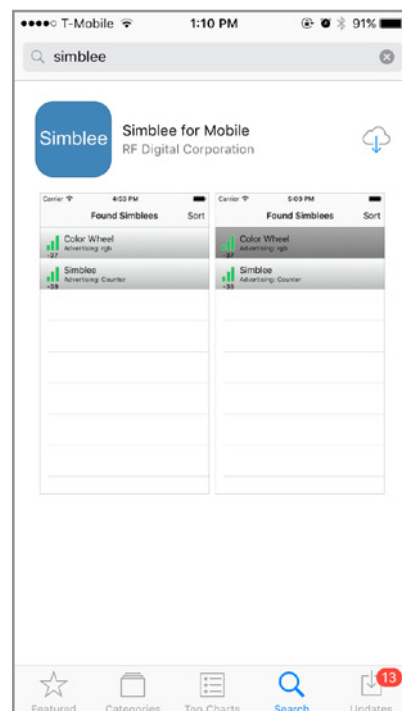
Downloading the Simblee For Mobile App on iOS Devices

Open the App Store on your iPhone/iOS Device running on iOS v8.0 or later

Search for “Simblee”.



Click on the “+Get” and Install to start downloading the app, then click on the “+Open” to open the app



Upon opening the Simblee app, a prompt will ask to Allow Internet Access. Click on Yes. The application will also require that Bluetooth be enabled on your device. When entering the app, the app will display an empty browser if no Simblees are in range.

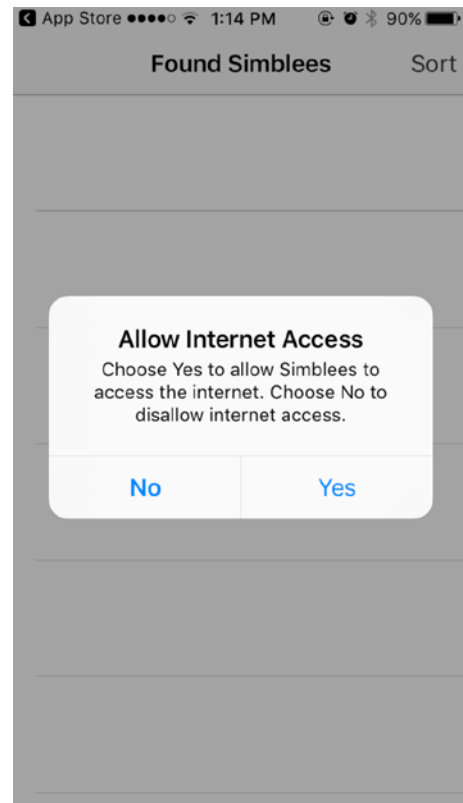


Figure 18 - iOS Simblee For Mobile Internet Access

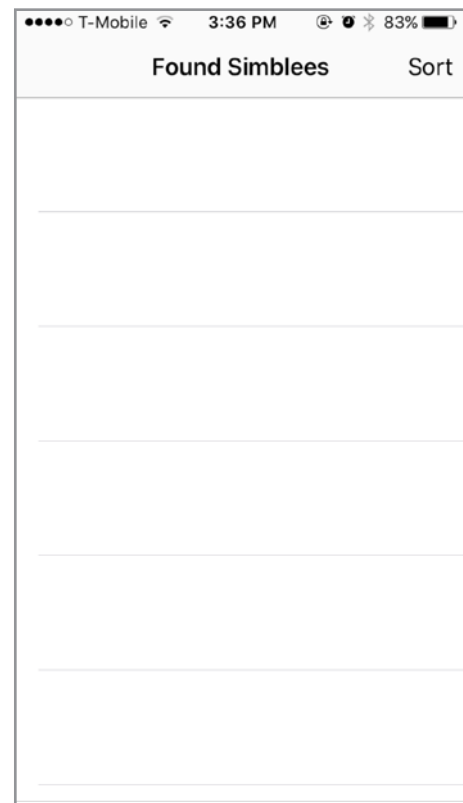


Figure 19 - Simblee For Mobile Default Screen

Downloading the Simblee For Mobile App (Android)

Open the Google Play Store on your Android device running on Android Version 6.0 or above and search for “Simblee”. Click on the Simblee For Mobile item, and the Install page will appear. Click the “Install” button, and then “Open” once done installing.

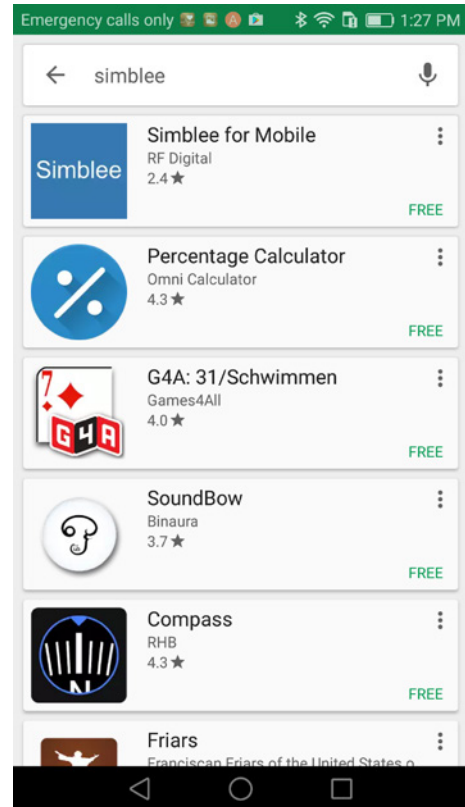


Figure 20 - Android Google Play Store Search

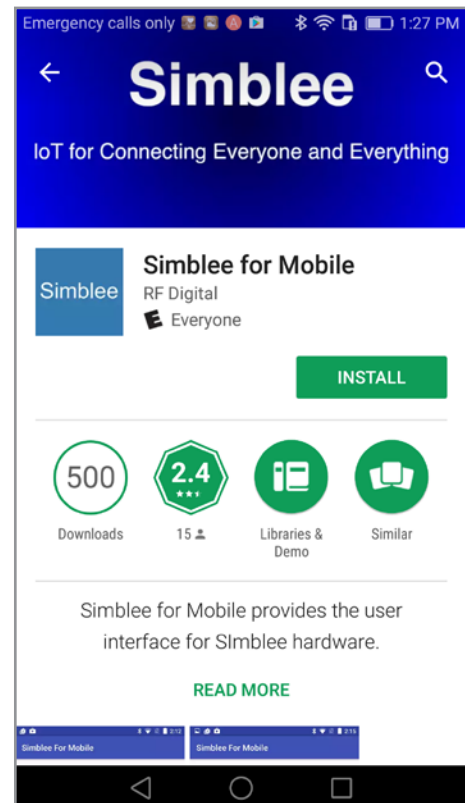


Figure 21 - Simblee For Mobile on Android Google Play Store

Note that this app needs location access, click on Allow when prompted.

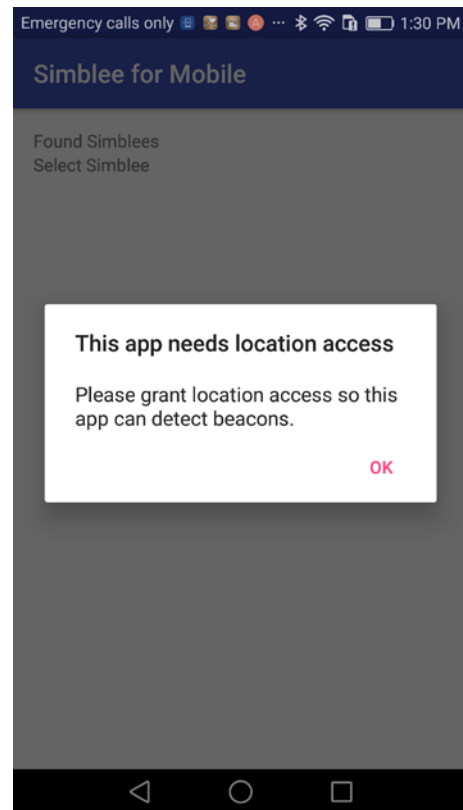


Figure 22 - Android Simblee For Mobile Location Access

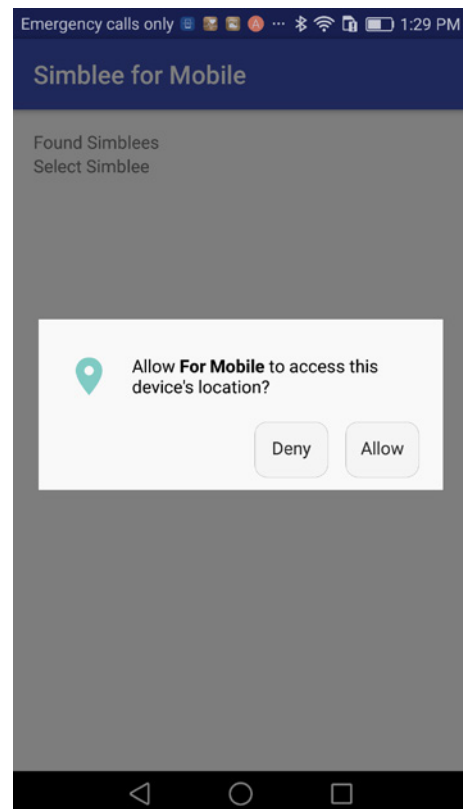


Figure 23 - Android Simblee For Mobile Location Access Request

The application will also require that Bluetooth be enabled on your device. When entering the app, the app will display an empty browser if no Simblees are in range.

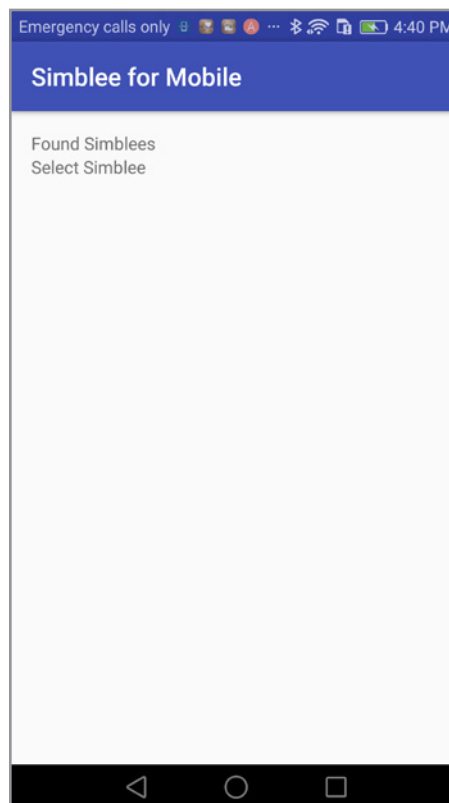


Figure 24 - Android Simblee For Mobile Default Screen

Simblee Resources

For more information on using Simblee, please see the following links:

- Simblee Quick Start Guide
- Simblee User Guide
- Getting Started with Simblee for Mobile
- Getting Started with SimbleeCOM
- Simblee Datasheet