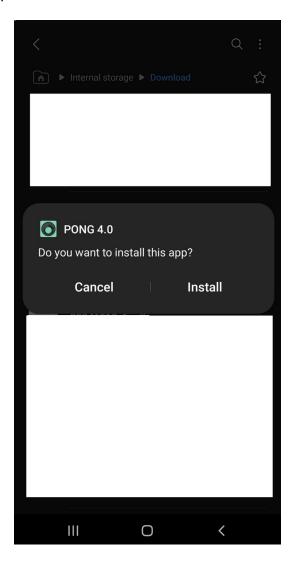
# Installation

- Step 1
  - Download APK from GitHub: <a href="https://github.com/cooltheo17/Pong4.0">https://github.com/cooltheo17/Pong4.0</a>
  - The APK file can be found inside the release folder.



• The name of the file is *pong-4-0.apk*.

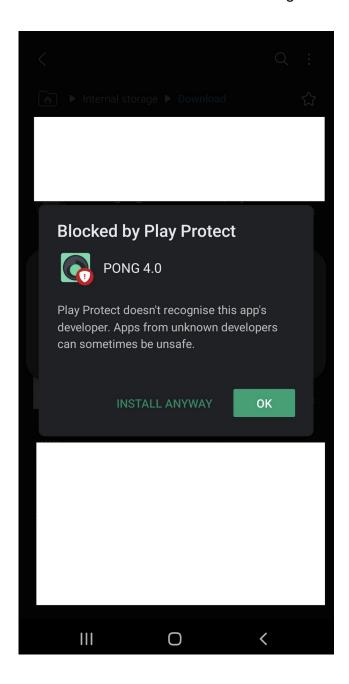
- Step 2
  - Open the APK file after download to install.
  - · You will be prompted with this screen.
  - · Click "Install".

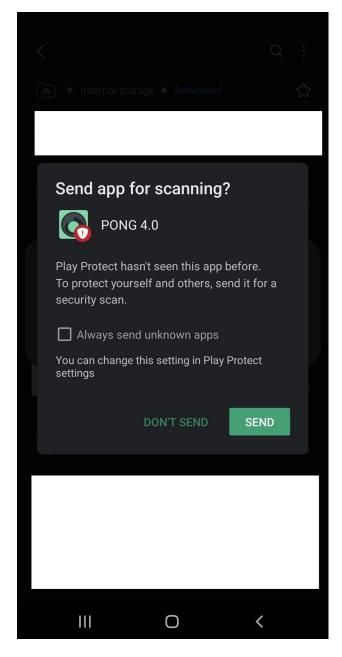


By Theo K.

### - Step 3

- Then you will be promoted with this screen.
- Press "Install Anyway".
- Click "Don't Send" On the following screen.

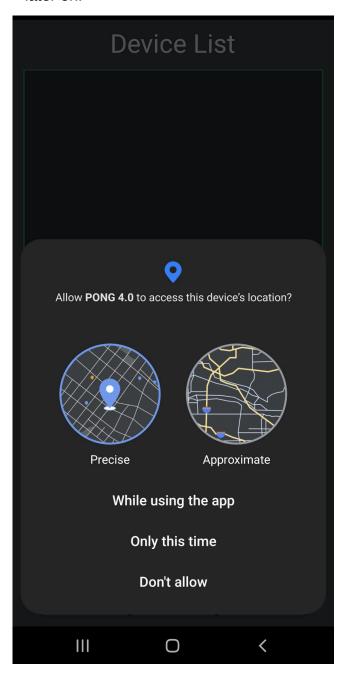


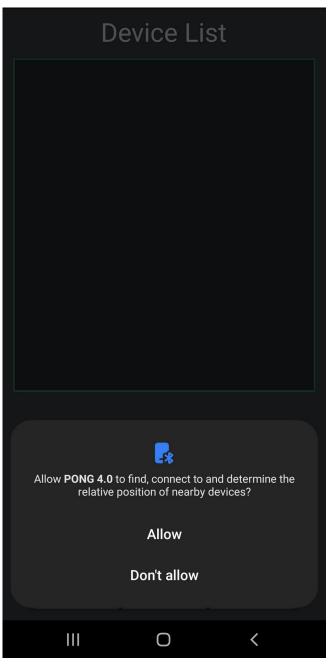


By Theo K.

### - Step 4

- Open the app.
- When you first install the app you will need to accept the run-time permissions.
- First the Location permission where you click "While using the app".
- And then the Bluetooth permissions where you click "Allow".
- **Note**: If the Bluetooth permissions do not pop up the app will crash and it will be shown next time you start the app. This is a one time bag that occurs on installation so it won't be a problem later on.

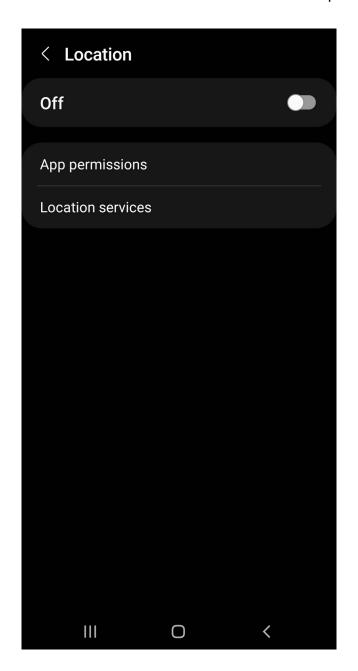


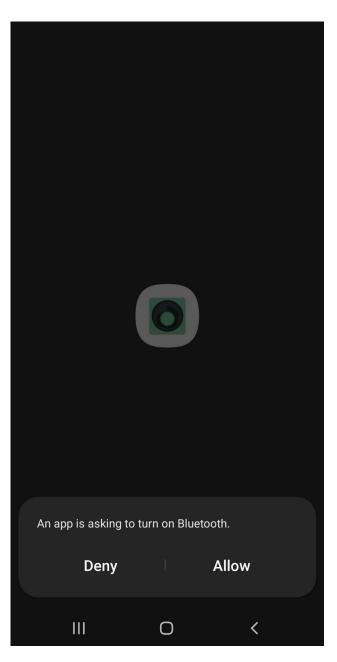


By Theo K.

### - Step 5

- If the location or Bluetooth is off it will ask you to turn on the location or Bluetooth.
- Slide the button on for the location and press "Allow" for Bluetooth.



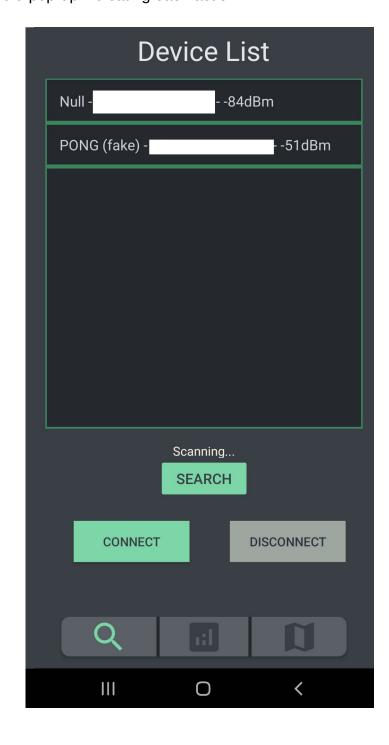


After that the application should be fully installed and functional.

## **General Guide**

#### - Search Screen

The left most button in navigation bar at the bottom is the search screen. Here you can search for available Bluetooth devices near you and select the pong device from the list. After selecting the device you can click connect to connect to the device. You can press disconnect to disconnect from the device. A message should pop-up indicating each action.



By Theo K.

#### - Data Screen

The middle button in the navigation bar at the bottom is the data screen. Here you can see the data from Pong device. You can use the slider to get information about the ratings or the raw values depending on what the user wants.

**Note**: The data will only be collected if the user stays on the screen. Plans to make this a background process are on the table however it is outside the scope at the moment.

All the data are also being stored in a **pongDataFile.txt** inside the Documents folder.

You can find this folder using your file explorer under Internal\_Storage/Document.

The format the data is being is saved is as follows:

Timestamp, Readings (Separated by dashes), Lattitude, Longtitude.

The readings are in the order as shown in the screen. Temp-Humidity-OAQ-CO2-VOC-Lux-UV-Noise

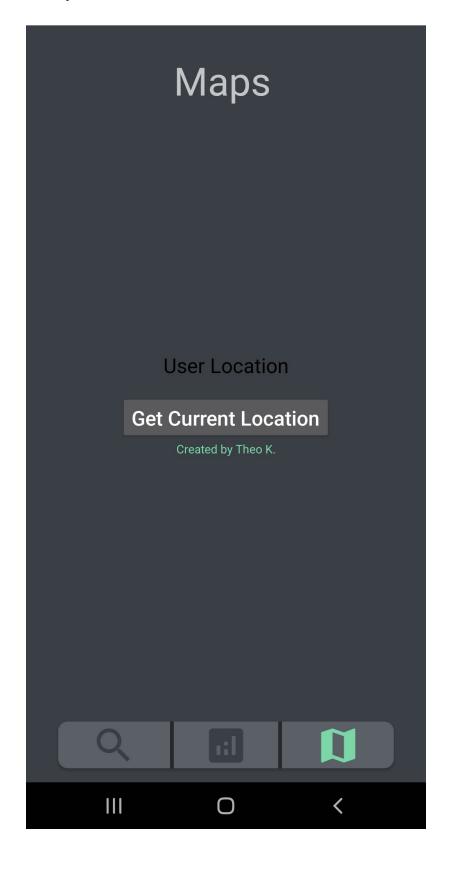
The overall score is not saved but I can change the code if you think it is important to be saved.



By Theo K.

### - Maps Screen

So far the maps screen – the left most button in the navigation bar - serves minimal purpose and can just gets the users current location. In the future the plan is incorporate some kind of machine learning model in which the a path a user usually takes is analysed and alternative paths are shown for a healthier lifestyle.



By Theo K.

# **Final Notes**

he app has undergone very minimal testing so bugs and problems are to be expected. Let me know about any serious bags as I am continuously evolving this project in my spear time. The device that the app has been used is the Samsung S10 so I am not sure how it would react on a much bigger screen like the Samsung Flip's. It is worth noting that this is my first android app I have developed so I am sure there are always things I could improve but I think it is a decent first app considering I am 100% self taught. I have tried to make everything as intuitive as possible but don't hesitate to ask me anything on my email: theo.koulas@outlook.com

Hope you use this app and I hope to hear from you soon.