NEXTRONIC
IOT PROVIDER | CONNECTING EVERYTHING

BeaconApp

USER MANUAL

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I- Overview

This application is designed to read data from beacons via serial communication, parse the data, and display it in a UI. It tracks the Received Signal Strength Indicator (RSSI) values of beacons, updates the displayed information in real-time, and saves the data to a CSV file. Users can also edit distance and comments associated with each beacon.

User Interface Overview

Open the application « BeaconApp.exe »

👉 ◆ BeaconApp	06/08/2024 10:15	Application		26,236 Ko
📄 distance_rssi_data	06/08/2024 10:42	Fichier source Comma Separated Values		1 Ko
◆ logo	05/08/2024 14:08	Fichier ICO		162 Ko

Baud Rate Selection:
Dropdown to select the baud rate

Port Selection:
Dropdown to select the USB serial port.

Start Listening Button:
Button to initiate reading from the selected serial port.

Table:
Displays beacon MAC addresses, RSSI values, distances, comments, and status.

Save Button:
Saves the current table data to a CSV file.

Figure 1: user interface

II- Using the Application

1) Select USB Port, and baud rate 115200,
then click on **Start listening**

2) In the beacons table, you will notice the detected Beacons data

3) To add distance, double click in the cell and write distance in m, then hit "**ENTER**" to add data to the table. Same way for the "comment"

4) Click the "Save" button to save the current table data to a CSV file named "distance_rssi_data.csv"

Figure 2: user interface

N.B: Beacon not connected means it didn't send data for more than 10 seconds
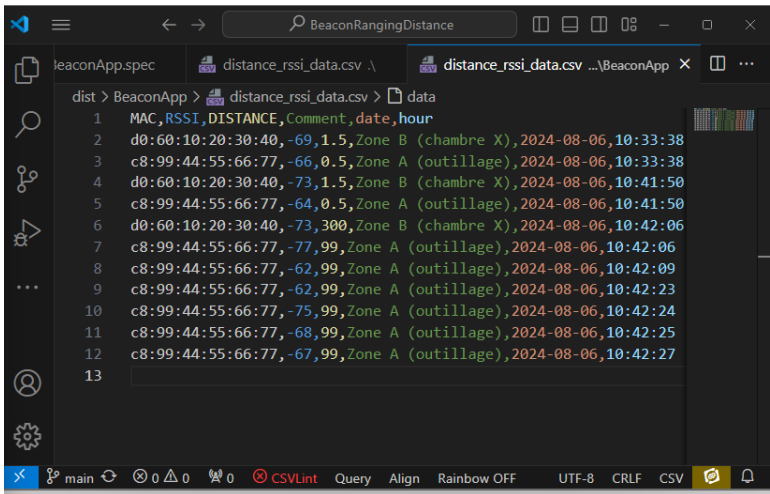

Figure 3: CSV saved data

III- Troubleshooting

- **Failed to Open Serial Port:** Ensure the selected port is correct and not being used by another application.

- **No Data Received:** Check the USB port connection and ensure the beacon is powered and within range.