

This algorithm is for using a Bluetooth beacon in a card to detect if there are 4 or more people in close proximity. Assuming that: the card can connect to the internet.

- 1) Each beacon will scan for other beacons within 3m.
- 2) When there are 4 or more beacons detected at the same time for more than 15 seconds the card will send a signal to the robot every 30 seconds until it no longer detects the beacons.
- 3) If the robot receives the signal from any card it will play a recorded audio file to warn the people to move away from each other. The robot will play the recording once every 30 seconds, even if it receives multiple signals.