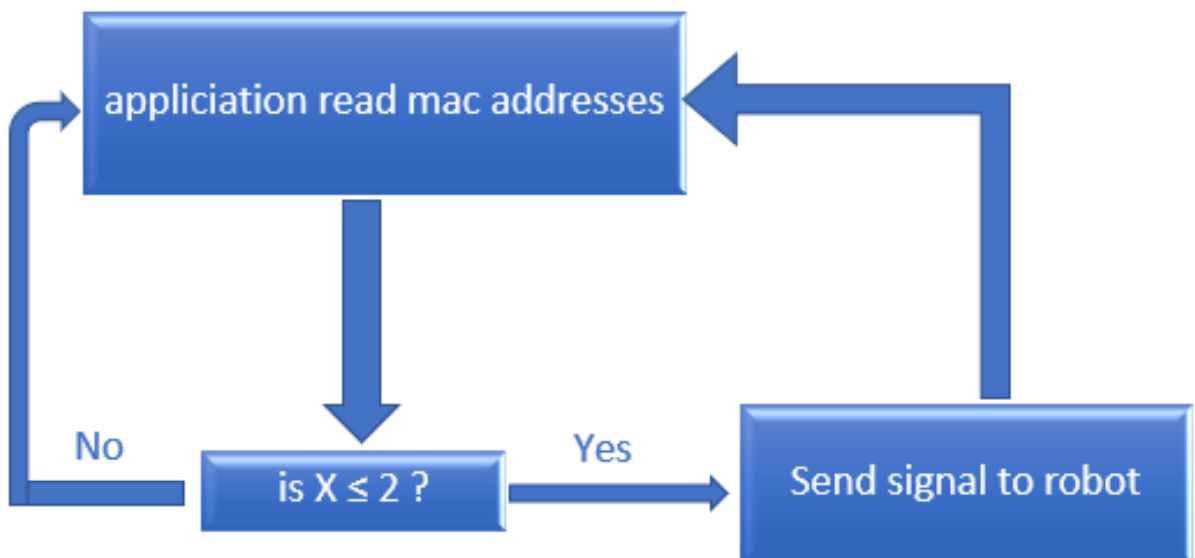


With the current state of Covid-19, Social distancing is a necessity. A robot in public places or in work environment that can warn people that they are too close to each other is a solution to such problem.

To have such robot, a Digital badge holder (with Bluetooth beacon) must be worn. The robot will know if two Badges are too close to each other (i.e. 2 meters) by an application installed in certain points and these points are spread out. The application will read the mac addresses and send a signal to the robot when the distance between any two badges is 2 meters or less.

If we assume that the distance between any two badges is X and the minimum allowed distance between any two badges is 2 meters.



In programming:

- **Application connected to robot.**
- **Loop:**
- **Application read mac addresses around it.**
- **If $X \leq 2$:** Send digital signal to robot.
- Robot make a sound and warn people that they are too close.
- return to the start of loop.
- **Else:** return to the start of the loop