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Rapport de séance n°15

During this session, I changed the obstacle detection program in order for our robot to detect a door and avoid it.

I started by adding new lines on the functions that allows the robot to rotate, in order to turn in the opposite direction when he was in reverse (turn left in the “turn right” function and vice versa).

In my opinion, this should help the robot to have a better position when detecting an obstacle while in going in reverse. The only problem is the distance at which the robot goes in reverse. When the robot detect a large obstacle (meaning both sensors return a really short value for the distance), he goes in reverse, but he doesn’t turn at the same time and if I added a line saying he would, he would only do it one time since the obstacle would be too far after that. At least that is how it is in this version of the program. So I modified the values of the sensors at which the rotation function and reverse function should activate. In the last test I did, the robot did avoid the door and pass through the open one, but I don’t know if it is just luck like the last session, or if my program has the good detecting values. If it is the second option, I would still have to improve it, but I would like to discuss with my teammate about the LiDAR use and probably the JETSON NANO use.