

Description

The interface was modified to check the infrared distance sensor, also known as the Light Bumper. The next two functions were created within the read file. The first has the robot follow parallel to the wall. The other function is used by the wall as a PD Controller to correct any errors that occur. We first took the square root of the signal strength from the light bumpers, this made the numbers easier to work with. We also decided to primarily use the right light bumper because the sensors on the robot are not perfectly symmetrical. The right bumper was on the middle of the side of the robot whereas the left one was further up.

Evaluation

Yes, the robot functions properly and follows the wall with minor oscillating. When the robot reaches the end of the wall it rotates and continues down the opposite side. If the wood wall is moved away from the robot, it will move back closer to the wall. The robot functions and preforms everything specified in the assignment.

Allocation

Franco Godoy corrected mistakes on task 1, worked on task 2.

Jeffrey Knoll also corrected mistakes on task 1, worked on task 2.

Kaitlyn Ash worked on task 1, helped with task 2 and wrote the report.

Noah Wartzack worked on task 2 and helped with report.