Team7 Final Project 詹恆瑜 方敏

1. Goal

To enable the robot to detect side walls and obstacles using the Ultrasonic RB URF 02 sensor, allowing it to avoid all obstacles and navigate successfully to the endpoint.

1. Equipment

Ultrasonic RB URF 02 sensor x3

1. Description

The Ultrasonic RB URF 02 sensors are used to provide distance measurements by emitting ultrasonic waves and detecting the reflected sound waves from nearby objects.

These sensors will be mounted on both sides and the front of the robot. The side sensors enable the robot to navigate accurately along the path, maintaining a safe distance from the walls. Meanwhile, the front ultrasonic sensor detects any obstacles directly in the robot's path, allowing it to make real-time adjustments to avoid collisions. The robot continues navigating while avoiding obstacles until it reaches the designated endpoint, and stopping precisely within the specified area.