Obstacle Avoidance
Remote Controled (RC) car

Team Members:
Tutorial 6
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Project Overview:

The proposed project is to design and create a remote-controlled car that can detect and avoid obstacles. This project will include a car frame that houses all electrical components, four wheels, and an ultrasonic sensor that would be located at the front and attached to a servo motor that allows it to look around. The sensor will provide real-time data to the Arduino, which in turn will send instructions to a motor drive shield that controls the wheel motors.

Project Goal:

This project aims to utilise sensors that send data to a microcontroller, which allows it to independently make decisions to avoid crashing into an obstacle, by instructing the car to move either right or left; otherwise, it would keep moving forward or be moved using a controller.

Project Cost

Arduino Uno: 385.00 LE
Bluetooth Module HC-05: 225.00 LE
Ultrasonic sensor: 45.00 LE
3 x AA battery holder: 7.50LE x2
Servo motor: 100.00 LE

RC Car Kit: 400.00 LE

- Motor drive controller
- Gear motor x4
- Wheels x4
- Jump wires

Total cost = 1170.00 LE

Reference(s):