

smart-dustbin using arduino

Abstract:

To collect dustbins placed at public places in city. Automatic open -close lid for ease of use. There is no contact touch between dustbin and person so prevention from germs and diseases. Warning messages bins nearly full and also send a message to garbage collector in particular area.

Tools

1. Ultrasonic Sensor
2. Arduino Board
3. Servo Motor S9
4. Jumper Wire
5. Switch
6. Battery
7. Battery Clipper

Procedure :

1:First,take ultrasonic Sensor to Connect it With Arduino

VCC - 5V

Trig - -5

Echo - -6

Gnd - Gnd

2:Take a servo Motor S9.

Then servo Positive wire connects Arduino Pin 3.3V

Servo Negative wire Connects Arduino Pin Gnd and then Signal Wire Connect to Arduino Pin 7

3:Take a Battery and fix the battery Clipper in it.

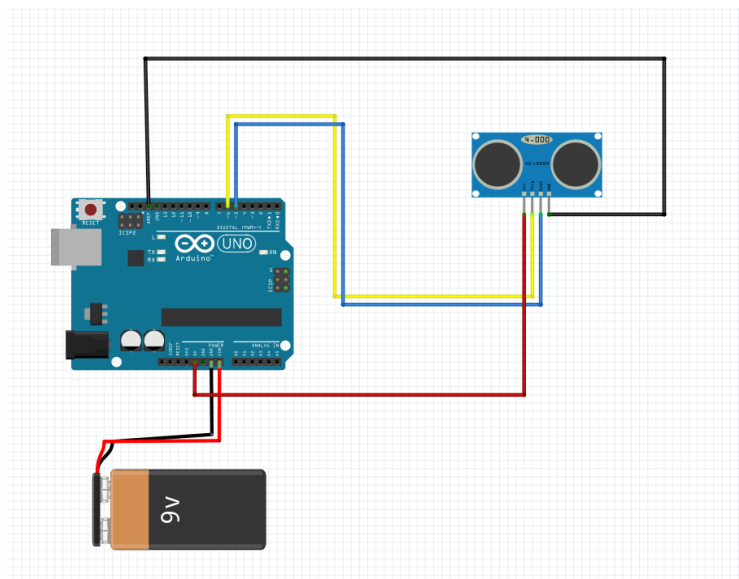
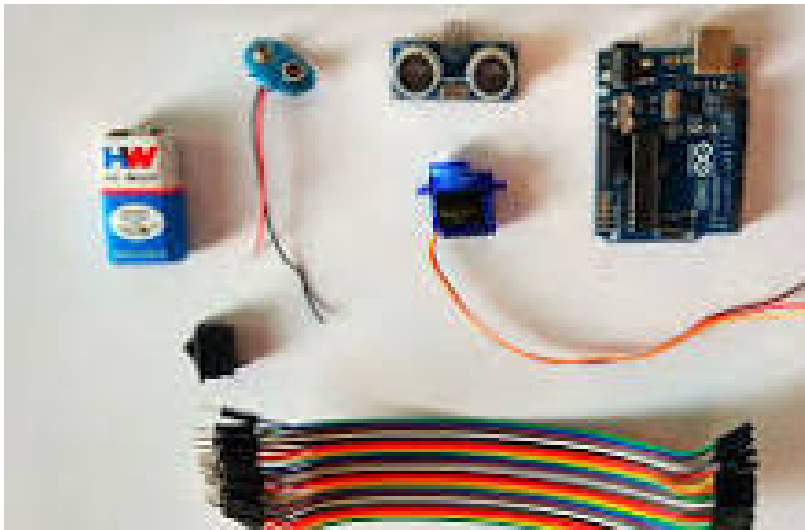
Battery Positive Wire Arduino Pin VCC

Battery Negative wire is to Put one Side of the Switch and one side of the Switch Arduino pin GND

4:First, took a Dustbin and then fix the ultrasonic sensor with the help of the Screwdriver.

Second, then fix the Arduino Uno

After that, the Servo motor fitted.



Result : smart bin help to create a cleaner,safer,more hygienic environment and enhanced operational efficiency while reducing management costs,resources,and road_side emissions.