Arduino Blind Stick

This smart stick can help blind people walk on the street safely without any help.

Apr 25, 2019

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46628 views

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24 respects

[buzzer](https://projecthub.arduino.cc/hadi1234/arduino-blind-stick-b3157a)

[led](https://projecthub.arduino.cc/hadi1234/arduino-blind-stick-b3157a)

[ultrasonic](https://projecthub.arduino.cc/hadi1234/arduino-blind-stick-b3157a)

[9v battery](https://projecthub.arduino.cc/hadi1234/arduino-blind-stick-b3157a)

A picture containing LEGO, toy, indoor, microscope

Description automatically generated

Components and supplies

1

Ultrasonic Sensor - HC-SR04 (Generic)

1

Buzzer

1

Buzzer

1

Solderless Breadboard Full Size

1

Arduino UNO

1

LED (generic)

Tools and machines

1

Tape, Scotch

Apps and platforms

1

Arduino IDE

Project description

After seeing the blind people in the street pleasing people to help them walk on street.I felt sad for that, and then T started working on this project.

Code

upload this code

c\_cpp

it is in the C/C++ language

1/\*

2 \* make a smart stick that helps the Blind

3 \*/

4 #define trigPin 9

5 #define echoPin 8

6

7 #define Buzzer1 5//active

8 #define Buzzer2 7//passive

9 #define Led1 6//Vibration

10

11

12int sound = 250;

13

14

15void setup() {

16 Serial.begin (9600);

17 pinMode(trigPin, OUTPUT);

18 pinMode(echoPin, INPUT);

19 pinMode(Buzzer1, OUTPUT);

20 pinMode(Buzzer2, OUTPUT);

21 pinMode(Led1, OUTPUT);

22}

23

24void loop() {

25 Serial.begin(9600);

26

27 long duration, distance;

28 digitalWrite(trigPin, LOW);

29 delay(2);

30 digitalWrite(trigPin, HIGH);

31 delay(10);

32 digitalWrite(trigPin, LOW);

33 duration = pulseIn(echoPin, HIGH);

34 distance = (duration/2) / 29.1;

35 digitalWrite(Buzzer1, LOW);

36 digitalWrite(Buzzer2, LOW);

37 digitalWrite(Led1, LOW);

38

39 if (distance<40) {

40 digitalWrite(Led1, HIGH);

41 delay(2000);

42 }

43 if (distance<20) {

44 digitalWrite(Led1, HIGH);

45 delay(2000);

46 digitalWrite(Buzzer1, HIGH);

47 delay(2000);

48 }

49 if (distance<10) {

50 digitalWrite(Led1, HIGH);

51 delay(2000);

52 digitalWrite(Buzzer1, HIGH);

53 delay(2000);

54 digitalWrite(Buzzer2, HIGH);

55 delay(2000);

56 }

57 }

58

Downloadable files

the schematic

first the ultrasonic sensor 2 buzzer Led should be attached to breadboard then we should connect these components to arduino by wires after that the circuit should be attached to a stick with a tape

the schematic

A picture containing diagram, text

Description automatically generated

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