PROJECT REPORT

PROJECT NAME: MECHANIC EYE

PROJECT GOAL: Determine the obstruction in front of blind person with using ultrasonic waves. Make their lifes easier.

INTRODUCTION: Blind persons have many problems in daily life. Even they can check the ground with their canes, any kind of danger may happen to them from upside. Firstly we thought about how can we fix this problem what kind a product we can create. We have decided we can use the ultrasonic sensor. Ultrasonic sensor to be placed anywhere in the person and when the obstacle in front of the person buzzer will sound according to the obstacle's distance.

MATERIAL AND METHOD:

Materials:

-1x Ultrasonic Rangefinder

-1x Arduino Uno

-Few Jumper Cables

-1x On/Off Switch

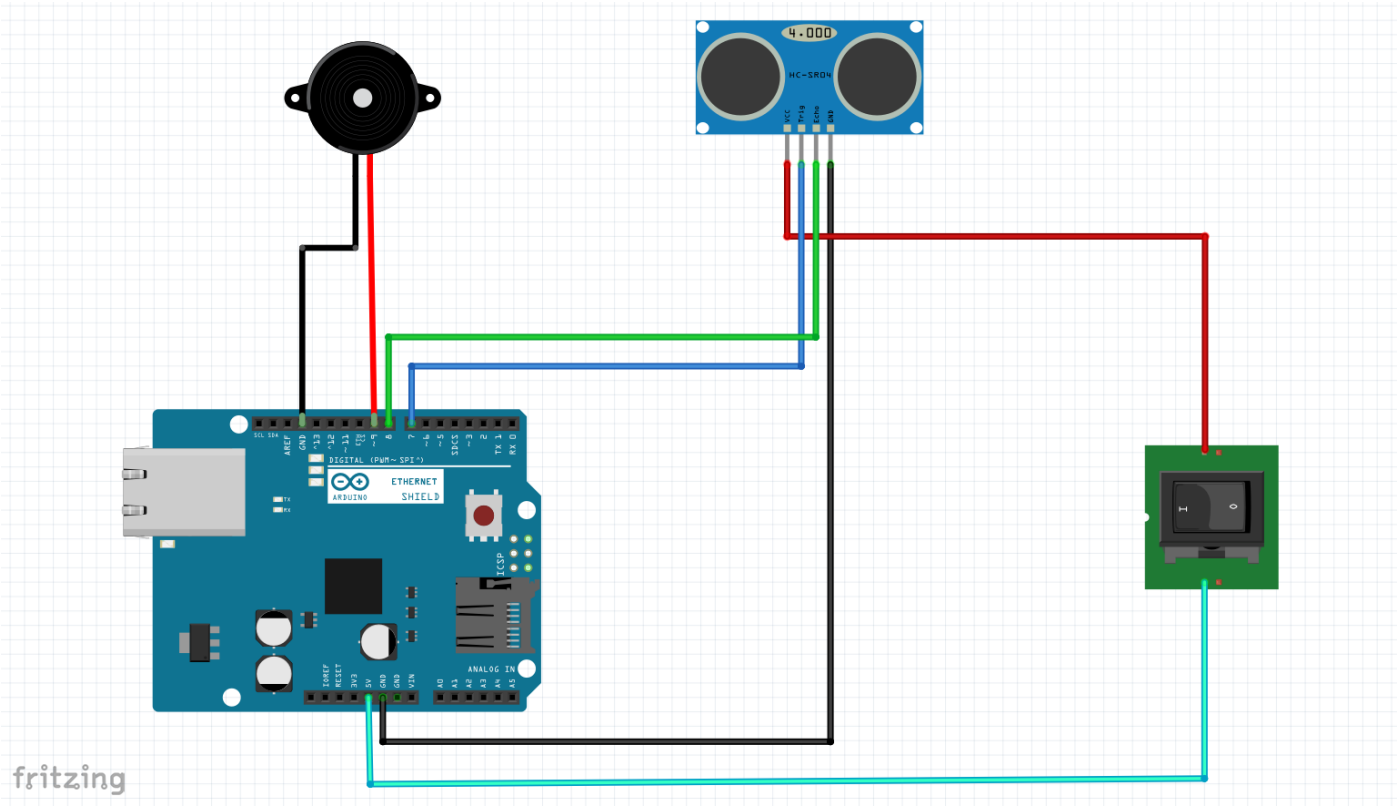
-1x Buzzer

-1x 220ohm Resistance

-Power Supply

Method: We connected the ultrasonic sensor, buzzer and switch to Arduino with jumper cables. Then, we write C code on Arduino IDE. C code provide the system works and sound of the buzzer change according to the distance between ultrasonic sensor and obstacle. For example, if there is 1 meter between person and obstacle buzzer sounds 2 time per second, if there is 30cm between person and obstacle buzzer sounds 5 times per second. So, person will know how far away the obstacle is and don't hurt themselves. After C code and Arduino project is ready, we thought about where we can put the device. Consider the majority of blinds are wearing glasses, we decided to put the device on the glasses.

Summary: Our aim in this project was to make life easier for blind peoples. So, we do Mechanic Eyes for them. Firstly, we decided what we need. Then setup Arduino system and write C code. After we test the project. We fix some errors. After all, we designed portable box for put arduino into the box. We attached the box on the glasses. We test it again and fix some problems. And it finished.



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