## AHELP FOR THE BLIND

Created for: The 3<sup>rd</sup> Belt and Road Teenager Maker Camp (The Art Of Electronics)

Team No.1

#### The members of the team

- 1-Vladyslav Parfeniuk
- 2-Ihor Shybka
- 3-Shayan Dabagh
- 4-Ketdavong Phrasisombath



Assigned Student	Task
Vladyslav Parfeniuk	Producing the production
Ihor Shybka	Producing the production
Shayan Dabagh	Giving The Presentation- Making The PPT
Ketdavong Phrasisombath	Making The PPT

#### The Purpose Of The Project:

The purpose is to make life easier for blind people. This invention will help all of them all around the world.

## But, How does it work???

So, we want to put a sensor on the blind people's glasses that can detect nearby objects. We'll put a vibrator on their legs and when their about to walk into closed door, walls, and ... The vibrator will start, alerting them about the danger. The sensors on the glasses activate the vibrator.

This device can help all of the blind people in the world. It's a new and efficient way of solving a big problem. Just like the teacher told us to do during the "viable project" presentation. Making the device isn't expensive or hard, therefore It's quite efficient, viable, and convenient.

#### Things we need to improve

- 1- The sensor on the glasses is bulky and we need to find smaller and more suitable sensors.
- 2-There are a lot of wires around that we need to take care of.



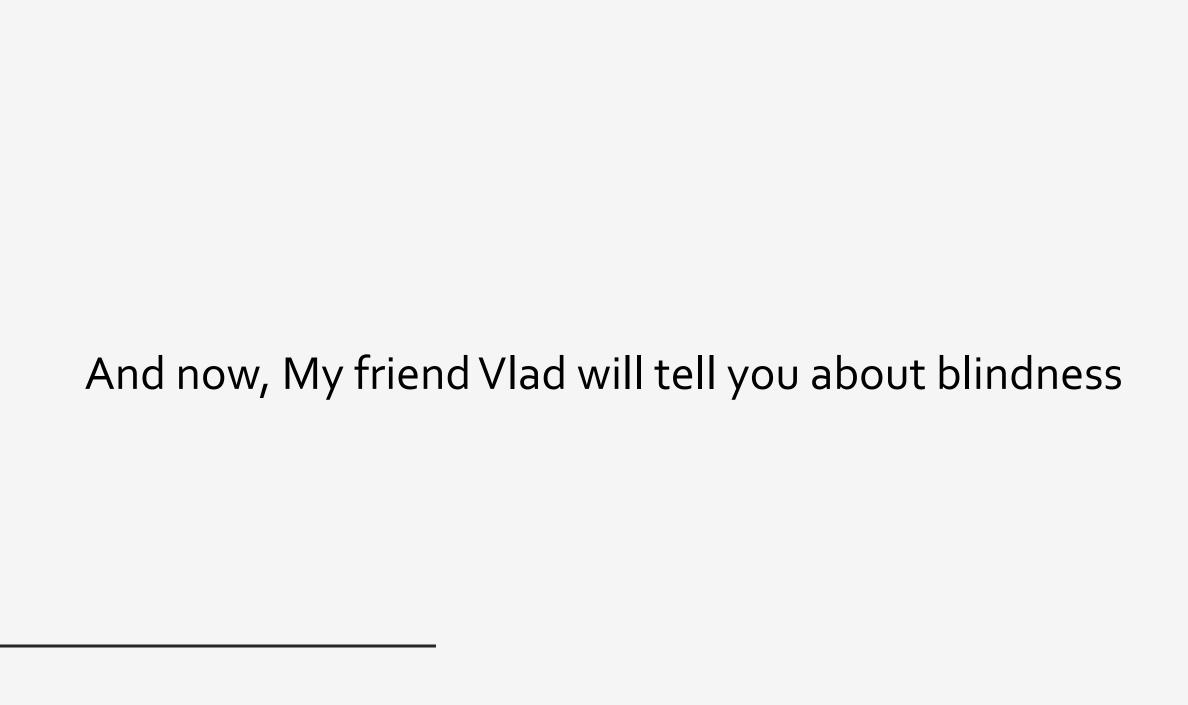
Ihor and Vladyslav working on the plan



Shayan and Ketdavong working on the PPT



Ihor talking to Mr. Yu about the needed parts

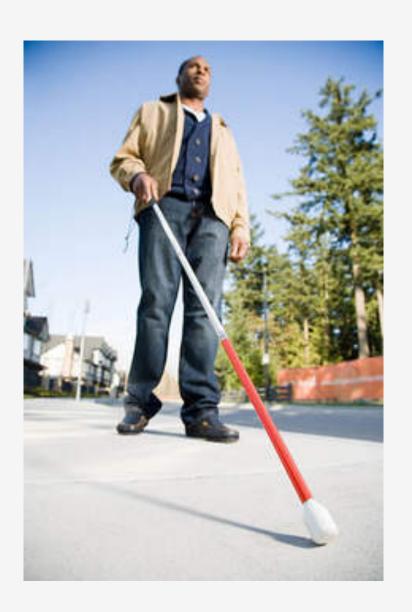


• Blindness is quite common in the world.

• There are near 4,000,000+ blind people.

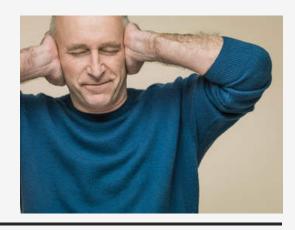
• It is a very big problem for many people.





#### There are some methods to help them:

- Using a stick
- Using dog helper
- Using electronic devices which make noise
- Or sitting at home all the time



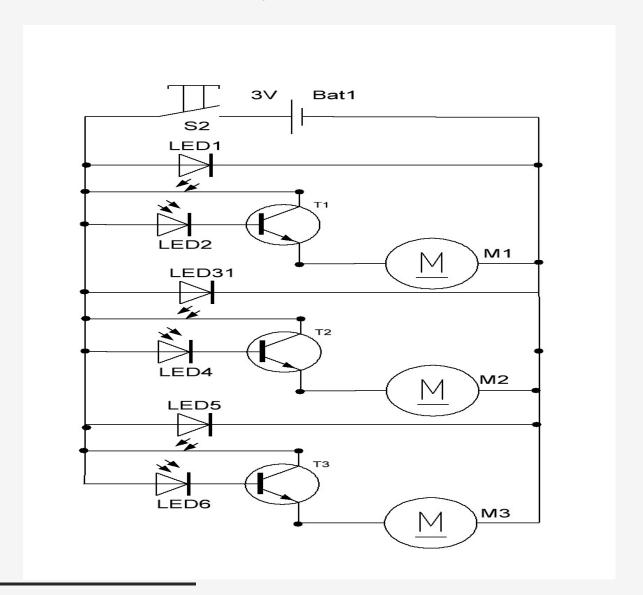


# Now, my teammate shows you how it works.

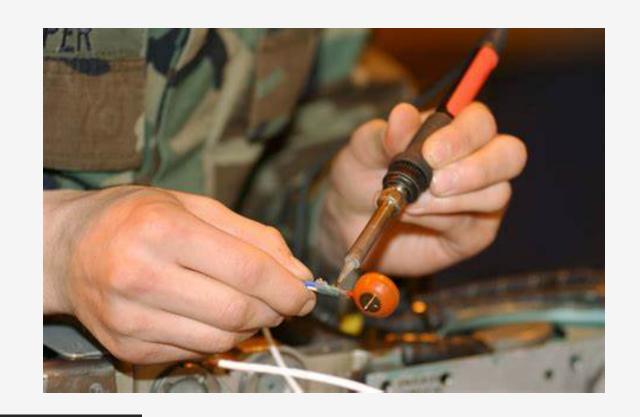
#### What did we use?

Controller Atmega 328, Wires, sensors, Lithium Battery, Motors with changed center of weight (vibrator)

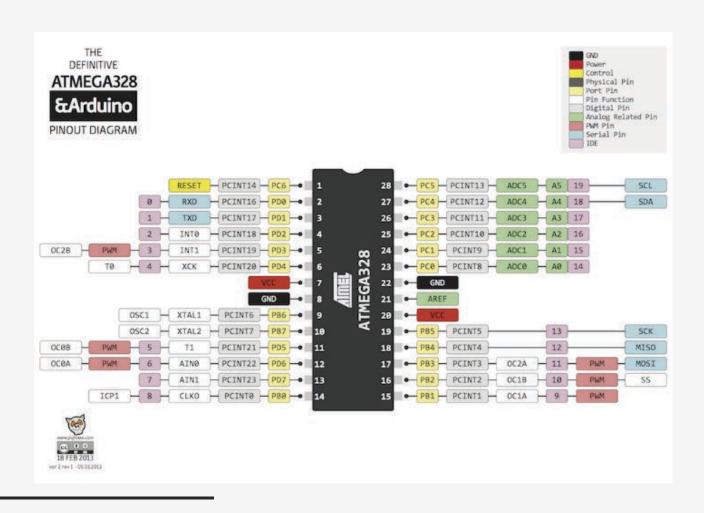
#### The Plan Of The Circuit:



# We used soldering iron to connect all of the parts in our project.



#### We used the Controller Atmega 328



#### How did we make it?

We connected all of the parts such as the motor and the sensors to the Arduino board and used our programming skills and the ArduinoIDE app to make the device work.

```
RC CAR | Arduino 10.3
 File Edit Sketch Tools Help
 nt backPin = 2:
int forwardPin - 3:
 mt leftPin = 4:
int mightPin = 5;
Sering buf-":
char chry
word setup () (
  pinMode(backPin, OUTFUT);
  pinHode (forwardFin, OUTFUT);
  pinHode(leftPin, OUTFUT);
  pinHode(rightPin, OUTPUT);
  pinHode (TEST, OUTPUT):
  Serial.begin(9600);
  digitalWrite(backPin, HIGH);
  digitalWrite(forwardPin, HIGH);
  digitalWrite(leftPin, MISH);
   to an exciting a school of which the second
                                                       Aiduino Uno en COMS
```

### Thanks for your time and attention