GETTING STARTED:

Arduino is an open-source electronics platform based on easy-to-use hardware and software. Arduino boards are able to read or take in an input and turn it into an output. This library was programmed to detect sounds and classify them as either good/positive or bad/negative.

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Pre-Required Materials:
- Wheels, Frame, and Motor Kit
- Circuit Board compatible with Arduino
- Microphone attachments for circuit board
- Motor driver

Links for Pre-Required Materials:
https://www.amazon.com/perseids-Chassis-Encoder-Wheels-Battery/dp/B07DNXBFQN/ref=sr_1_5?crid=3A0L4MMK6YPS5&keywords=wheels+motor+and+frame+kit+arduino&qid=164512535 2&sprefix=wheels+motor+and+frame+kit+arduino%2Caps%2C73&sr=8-5
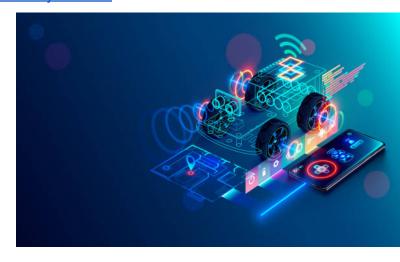
https://www.amazon.com/Arduino-A000066-ARDUINO-UNO-R3/dp/B008GRTSV6/ref=sr_1_14? keywords=arduino+uno+circuit+board&qid=1645125576&sprefix=arduino+uno+circ%2Caps%2 C86&sr=8-14

https://www.amazon.com/uxcell-Microphone-Detection-Digital-Projects/dp/B07VS3SLKP/ref=sr_1_24?crid=3NQZF8Y72D66T&keywords=microphone+attachment+for+arduino&qid=164512562 8&sprefix=microphone+attachment+for+arduino%2Caps%2C95&sr=8-24

https://www.amazon.com/Qunqi-Controller-Module-Stepper-Arduino/dp/B014KMHSW6/ref=sr_1 _2_sspa?crid=K6KBTCRFP5YK&keywords=motor+driver&qid=1646430231&sprefix=motor+driv er%2Caps%2C230&sr=8-2-spons&psc=1&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUFGWjdTM ThDSzJYRVMmZW5jcnlwdGVkSWQ9QTA0NDE5MDcyVEwwSU4wR1RYQTEmZW5jcnlwdGV kQWRJZD1BMDM3NzMzNjE1NUhMU1MwWE5WVEEmd2lkZ2V0TmFtZT1zcF9hdGYmYWN0 aW9uPWNsaWNrUmVkaXJlY3QmZG9Ob3RMb2dDbGljaz10cnVl

TUTORIALS:
How to Start :
1. Download Arduino IDE:
   https://www.arduino.cc/en/donate/
   ● Select the software tab

- ● Select the download option that is best for you
- ● Complete the setup and install
2. Download Echolocation Library: (Provide link once it is published)
3. Run the Echolocation Library on your Arduino robot
4. Once the sound library is downloaded, functions can be modified as needed

FAQ:
- Can the Arduino robot detect any kind of sound?
    - While the microphones can detect any sound that is loud enough, the library will only be programmed to identify specific sounds.

- Can the library be changed?
    - Once the library is downloaded, it can be modified locally to fit the user's needs.

- How much does it cost to download the library?
    - The library is free for all users and considered an open-source project.