



Title of Project :

1. AIM OF PROJECT

The aim of an Arduino-based third eye for blind people is to provide a low-cost, portable, and reliable device that can help visually impaired individuals navigate their surroundings with greater independence and safety.

ARDUINO BASED THIRD EYE FOR BLIND PEOPLE

BRANCH: SE E&TC 1
GROUP NO. : 5

2. OBJECTIVES

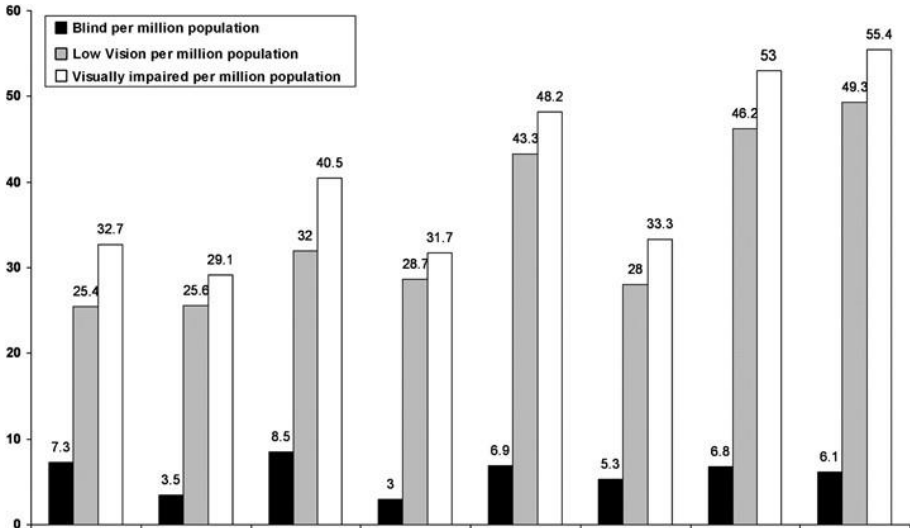
- 1. •Low-cost and Portable
- 2. •Object detection
- 3. •Obstacle avoidance

3. REVIEW POINTS

- 1. Sensor Integration
- 2. Accessibility and Affordability
- 3. Reliability and Safety
- 4. Continuous Improvement

4. MOTIVATION

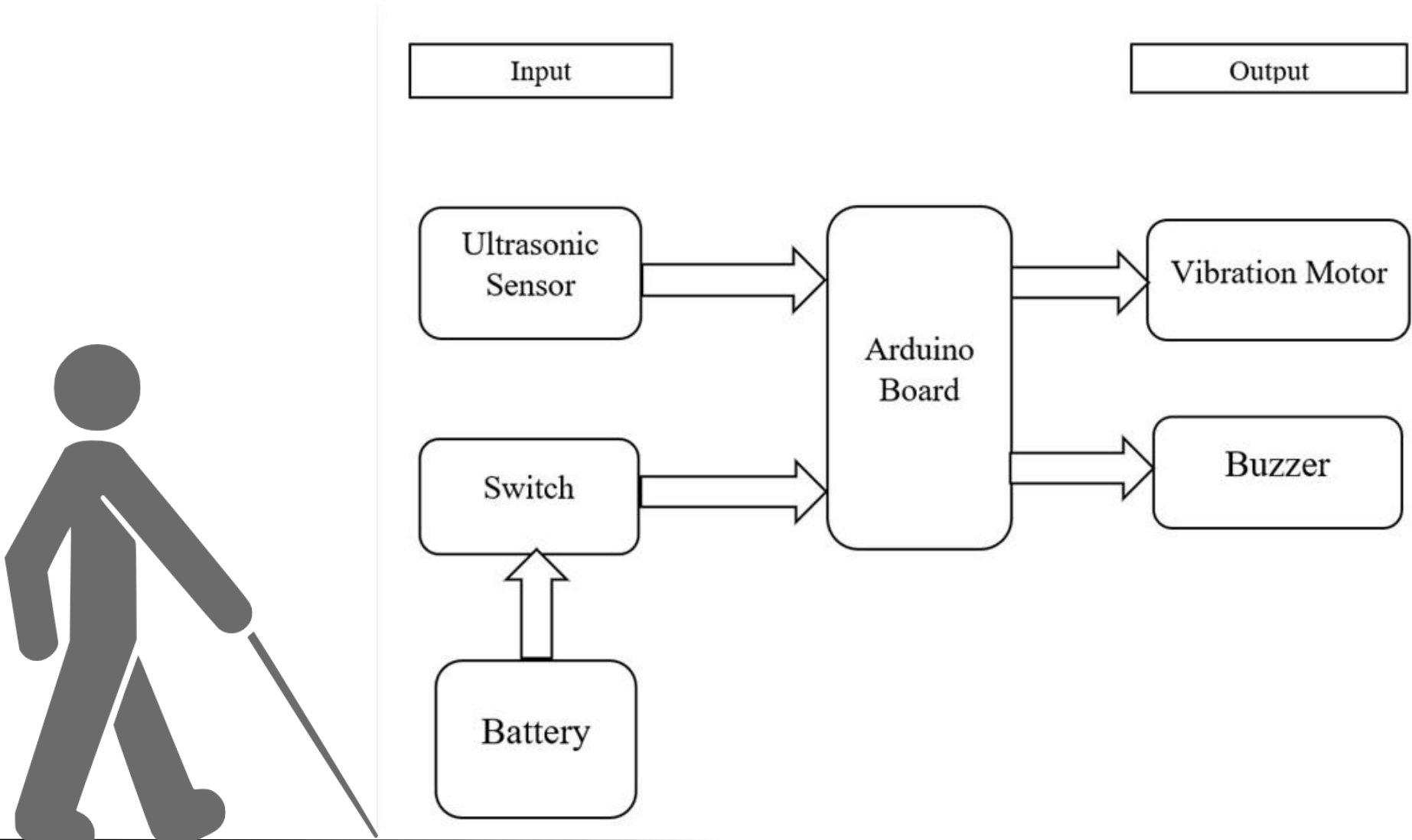
- 1. Enhance blind people independence
- 2. An assistive technology for the blind



5. FUTURE SCOPE

- 1. Improving the sensor technology
- 2. Wireless communication and remote assistance
- 3. AI and Machine Learning
- 4. Integration with Smart Home Technology

6. BLOCK DIAGRAM



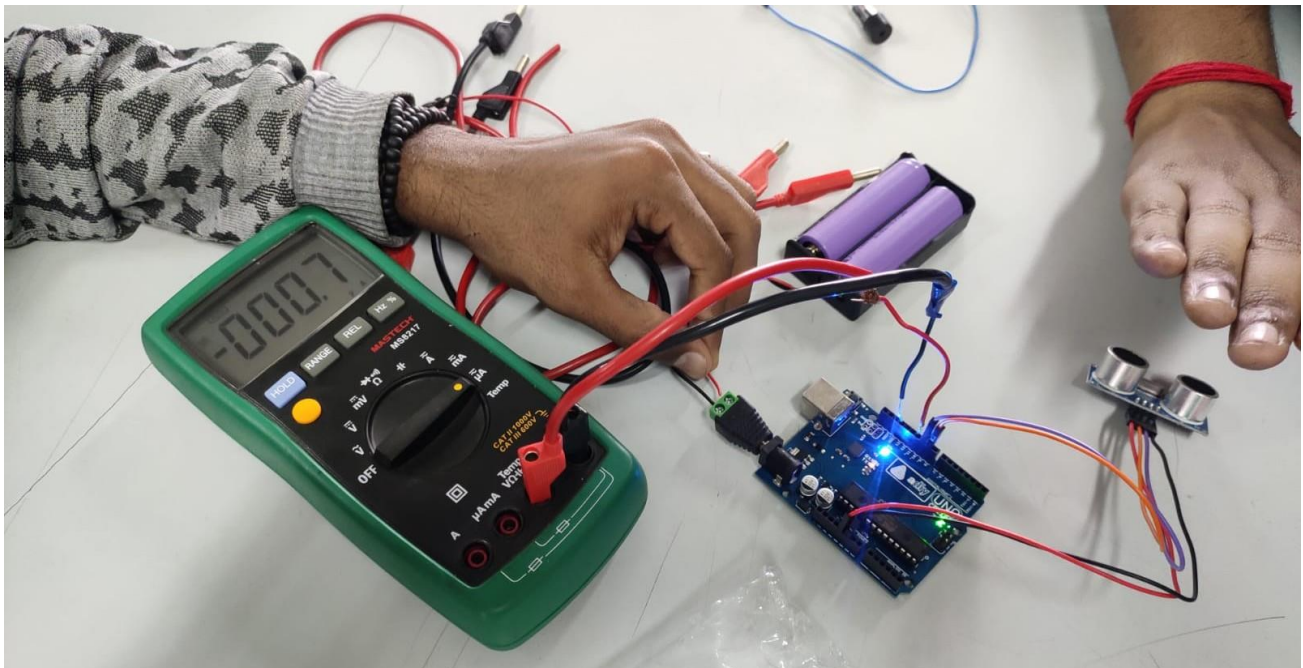
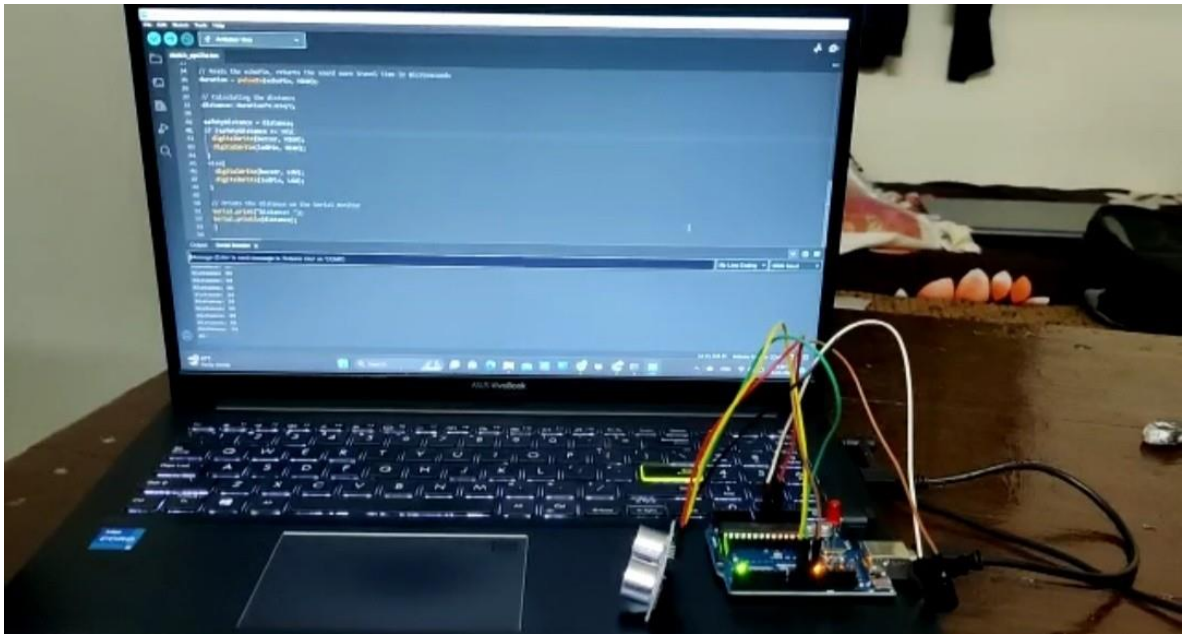
7. METHODOLOGY

- 1. Problem Identification
- 2. Requirements Gathering
- 3. Sensor Selection
- 4. Hardware Design and Developmen
- 5. Software Development
- 6. User Interface Design
- 7. Prototype Development

9. APPLICATIONS

- 1. Outdoor Navigation
- 2. Object Detection and Recognition
- 3. Public Transportation Assistance
- 4. Social Interaction Support
- 5. Accessibility in Public Spaces

8. TEST RESULT/PHOTOGRAPHS



10. INTERDISCIPLINARY ASPECTS

- 1. Engineering and Electronics
- 2. Human-Computer Interaction (HCI)
- 3. Accessibility and Inclusive Design
- 4. User-Centered Design
- 5. Disability Studies

12. REFERENCES

- 1. ijraset.com
- 2. instructables.com
- 3. techatronic.com
- 4. Ripublication



11. CONCLUSION

In conclusion, the Arduino-based Third Eye project, also known as the smart blind stick, has the potential to significantly improve the lives of visually impaired individuals. By utilizing Arduino and integrating various sensors, it aims to create a wearable device that enhances navigation and independence. The smart blind stick offers applications such as outdoor and indoor navigation, object detection, public transportation assistance, and smart home integration. Through an interdisciplinary approach, incorporating engineering, computer science, assistive technology, and user-centered design, the project addresses the specific needs of blind individuals and promotes accessibility.