# Smart Blind Stick

## Introduction:

Ever heard of Hugh Herr? He is a famous American rock climber who has shattered the limitations of his disabilities; he is a strong believer that technology could help disabled persons to live a normal life. In one of his TED talk Herr said "Humans are not disabled. A person can never be broken. Our built environment, our technologies, is broken and disabled. We the people need not accept our limitations, but can transfer disability through technological Innovation". These were not just words but he lived his life to them, today he uses Prosthetic legs and claims to live to normal life. So yes, technology can indeed neutralize human disability; with this in mind let us use the power of Arduino and simple sensors to build a Blind man's stick that could perform more than just a stick for visually impaired persons.

This Smart stick will have an Ultrasonic sensor to sense distance from any obstacle, LDR to sense lighting conditions and a RF remote using which the blind man could remotely locate his stick. All the feedbacks will be given to the blind man through a Buzzer. Of course you can use a vibrator motor in place of Buzzer and advance a lot more using your creativity.

# Block Diagram:
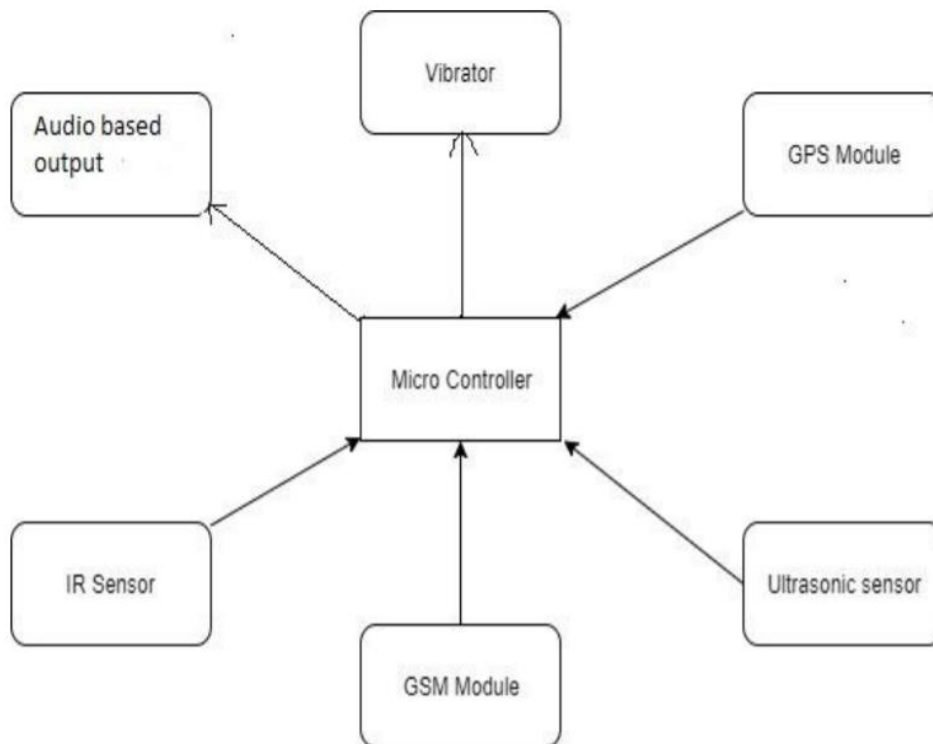


# Materials Required:

1. Microcontroller
2. Ultrasonic Sensor
3. Ir Sensor
4. Buzzer and LED
5. 7805
6. 433MHz RF transmitter and receiver
7. Resistors
8. Push button
9. Perf board
10.     9V batteries

## Conclusion:

It is necessary that visually impaired people get access to an efficient and comfortable object in order to live their daily life comfortably. In a developing country like India, there is a need for a cost effective solution so that most of the people can have an effective product as proposed in this project.