**TRAFFIC CONTROL FOR THE BLIND**

The aim of this project is to design a traffic control system for blind people, using Arduino. To build the system, our required components are,

* Arduino UNO
* IR sensors
* LEDs
* Buzzer

**Introduction:**

Find a crosswalk, wait for the right moment, get to the opposite sidewalk by walking straight across. It is quite common for the average pedestrian. But for a person who has lost their sight, every step is complicated. A blind person is crossing the street. You see them waiting, white cane in hand. Should you tell them it’s safe to cross? They can’t see the light change, is it your moral duty as a fellow human to give them this information? They step out into the street and you watch from your car, hands a little tense on the wheel. Finally, you can’t hold it in anymore. “Left,” you shout. “Left, left,” you are doing the right thing, you know you are. But this feeling is very rare. This is especially true in today’s urban environments where more and more types of transportation methods coexist. Blind and visually impaired people can do nothing but trust their other working senses such as hearing and touch. Yet, they still need to rely on some clear indicators. This is where automatic traffic control for blinds makes sense.

**Working:**

The system simply assists people with visual impairments in determining when it is safe to cross the street. That is, the system will continuously beep the buzzer slowly just to attract blind people towards the IR sensor. If the IR sensor detects people, the red light of the traffic light will go on and the buzzer will beep faster to let the blind person know that he can cross the road now. After the person’s successful crossing, the green light of the traffic light will turn on after turning off the red light.