Project Title:-Vision for blind using ultrasonic sensors

Implementation steps:-

1. Coding: We are thinking to use Arduino Uno. As we knowthe Arduino Uno is a microcontroller board based on the ATmega328.

2. Sensing the environment: Ultrasonic sensors can be used to calculate distance of the obstacles around the blind person to guide the user towards the available path.

3. Audio output:Output will be in the form of voice which the blind person can hear e.g., right, left etc.(May focus on more than one language).

4. Assembling:In the form of spectacles(as per the requirements).

Timeline:10th June

Components required and their price estimate

1. Arduino Uno Board
2. Ultrasonic transducers and sensors
3. Speakers
4. Other components(rechargeable batteries etc.)

Price estimate: Rs.5000

What do you expect to learn by the end of the project?

We expect to learn the coding using Arduino Uno , something which is quite useful while working with electronics and robotics. Also use of ultrasonic transducers and sensors would help enhance our knowledge about them . Last but not the least if this works then it would be of great help to the society(especially blind).