



SR
Engineering
College
Innovation . Creativity . Entrepreneurship

DEPT. OF ELECTRONICS AND COMMUNICATION ENGINEERING

(TITLE OF THE PROJECT)

Abstract : 14-bold-times new roman left alignment- justified.
Regular text : 12-normal-times new roman-1.5line spacing-left alignment-
justified (within the word limit of 150 words).

Block Diagram:
Hardware & Software Requirements:

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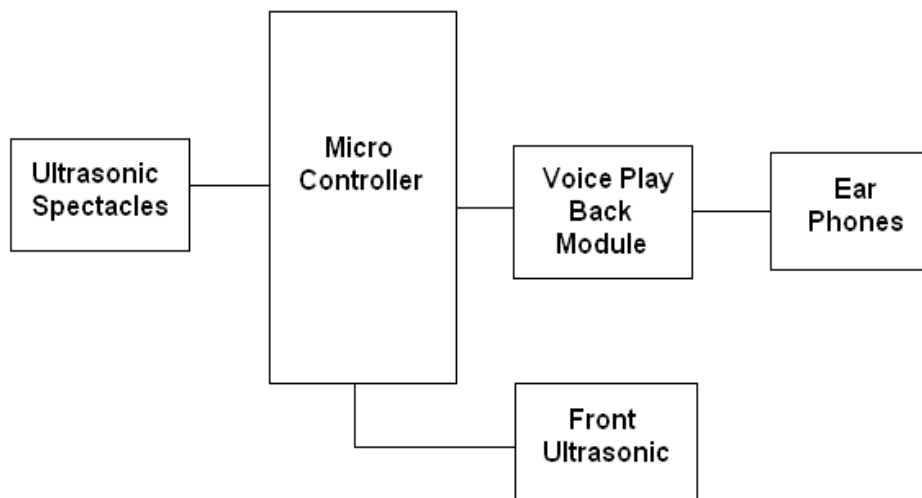
Guide Signature
(Guide Name)

Sample Copy of Abstract

ABSTRACT

This project presents an electronic navigation system for visually impaired and blind people (subject). This system understands obstacles around the subject up to 4 meters in front, left and right direction using a network of ultrasonic sensors. It effectively calculates distance of the detected object from the subject and prepares navigation path accordingly avoiding obstacles. It uses speech feedback to aware the subject about the detected obstacle and its distance. This proposed system uses microcontroller based embedded system to process real time data collected using ultrasonic sensor network. Based on direction and distance of detected obstacle, relevant pre-recorded speech message stored in APR9600 flash memory is invoked. Such speech messages are conveyed to the subject using earphone

Block Diagram:



Hardware Components:

- Microcontroller
- Ultrasonic sensors
- Voice module (APR9600)
- LCD display

Software Tool:

- KEIL μ VISION4.