Tool and Technologies used:

ArduinoUno :It is the brain of our project. It can give all the command to their sub ordinate components which should by operated by the human behavior . And it also give feedback to the other components and human. So that it can be the used as a medium of communication between human and robots & vice versa. . It has specification of 8 bit CPU, 16 MHZ clock speed, 2 KB SRAM 32 KB flash Memory, 1 KB EEPROM.

2.2.2 DC Motors DC Motor is a device that converts any form of energy into mechanical energy or imparts motion. In constructing a robot, motor usually plays an important role by giving movement to the robot. Here 4 DC motor are used to drive the robot.

2.2.3 Motor Shield The Motor Shield is a driver module for motors that allows you to use Arduino to control the working speed and direction of the motor. . The Motor Shield can either be powered by Arduino directly or by an external 6V~15V power supply via the terminal input. Here Motor Driver Board is designed to Work with L293D IC.

2.2.4 Ultrasonic sensor An ultrasonic sensor is an instrument that measures the distance to an object using ultrasonic sound waves.The working principle of this module is simple, it sends an ultrasonic pulse out at 40kHz which travels through the air and if there is an obstacle or object, it will bounce back to the sensor. By calculating the travel time and the speed of sound, the distance can be calculated.

2.2.5 IR Sensor IR sensor is an electronic device, that emits the light in order to sense some object of the surroundings. An IR sensor can measure the heat of an object as well as detects the motion.Usually, in the infrared spectrum, all the objects radiate some form of thermal radiation. These types of radiations are invisible to our eyes, but infrared sensor can detect these radiations. The emitter is simply an IR LED (Light Emitting Diode) and the detector is simply an IR photodiode