BLUETOOTH CONTROL PICK AND PLACE ROBOTIC VEHICLE

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ABSTRACT

As all we know that in the world there are so many condition where it is difficult to go any human so on that place we cannot send to human so we feel need for any machine which can replace human task .This robotic vehicle is controlled by Bluetooth command .our project is designed based on prototype robotic vehicle .here by the command we can moveout our robotic vehicle in appropriate direction and we can pic anything and can place it to another place by the command of Bluetooth .The aim of our project is to design and develop an mobile robot which can move by button press to command of the Bluetooth .this robot can be use in chemical industry in hazardous nature.

Keywords: Arduino, Bluetooth Module , Pick And Place , Robotic Vehicle, Robotic Arm.

I.   INTRODUCTION

The main work of our project send our vehicle to task operation of parking anything and place it another place. This project or robot it designed to develop pick and place robotic vehicles with soft catching gripper. The aim to design our project is that the robotic arm which is operated   Bluetooth and it is also capable of picking anything from one place to another place Robot were made for introduced in the industry in technological industry to help human an to perform the task. Our this robot perform physical task Robot has capability to it can be use in any environment It can be use in different operation like in hazardous environment assisting disable individual in military operation .This robot is also be use in military It can perform under water at task Four motor are connected to microcontroller where two motor use for arm and gripper and two motor which are connected to micro controller is for body movement Here in this robotic vehicles four wheels are used which are connected to motor to rotate it left right back front Here the act transmitter side command are send to the receiver to control to the movement of the robot.

II.   BLOCK DIAGRAM
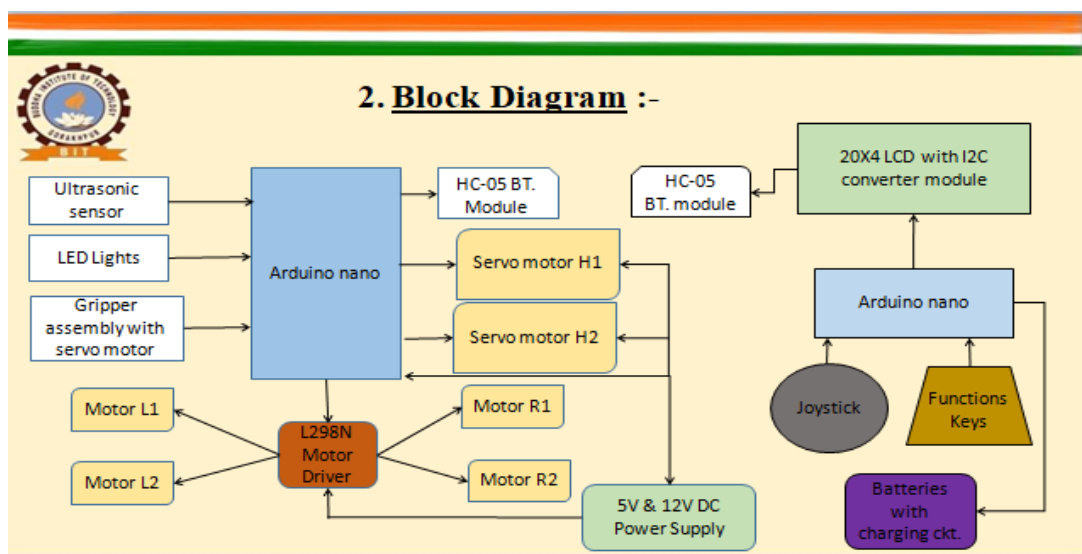
III.   THE MAIN COMPONENETS USED IN PROJECT

a)   SOFTWARE DESCRIPTION :

For the programming Arduino mega board are used in robot and Arduino nano board is used in remote control unit. Arduino IDC software is used in this pic and place robotic vehicle project.

b)   HARDWARE DESCRIPTION

- **Bluetooth module**

Bluetooth module is use to establish to establish the connection between robot and remote. It basically make a serial communication between machine remote.

- **L298N motor driver IC**

L298N is motor driver IC .we are using L298N motor to inculcate the working of motor. DC motor. Dc motor are used in four wheels.

- **Servo motor**

In this pick and place robotic vehicle servo motors are used to rotate it arms Ultrasonic sensor.

- **Ultrasonic Sensor**

HC-SR04 mode ultrasonic sensor module was used in this project to sense the obstruction from 1cm to3 cm distance.

- **LCD display**

Here in our project we care using 12C 20*4 LCD display module which is designed for the arduino micro controller .it is using 12C communication interface with this 12 interface.

- **Joystick module**

The joystick which is dual axis high quality module. This joystick module can be use to sense movement in 2 direction.

IV. BLUETOOTH CONTROL PIC AND PLACE ROBOTIC VEHICLE

Fig.1: Pick and place robotic vehicle

Fig.2: Pick and place robotic vehicle

V.   CONCLUSION

This is the cheap and Bluetooth This robot or robotic arm which are used in project cannot lift much weight but it can be implement by using much high power and motor component use. This is cheap and Bluetooth control pick place robotic vehicle due to use of Bluetooth providing it restricted access .

Future work

we can use obstacle avoiding sensor so that it can sense anything automatically ..we can use wireless camera and we can made it to work fast.

VI.   REFERENCE

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