

Our Project-

android controlled Bot

A bot (a car) which will be controlled by mobile app connected through bluetooth. Android device will send commands through touch control. The bot will receive the commands and process them properly to maneuver the robot by changing speed and directions.

For this we design the external structure of the bot , electrical circuit part, coding part which will sync. our bot with mobile. We are making this because we all are tech enthusiasts and we want to learn many things in this field.

We think this project will give us flavour of robotics including coding and working of electrical circuit, and to control our bot with bluetooth or internet is also remarkable as we will learn many things like coding, app building etc.

Basic Components Required

jumbo chassis, motors, tracked wheels, rpm motor, gear, clips

jumper wire, bug strips, 7805/9,mechac parts,

AVR microcontroller and bluetooth module

pcb,l293d with stand,ic 7805/7809 with heat sink

Implementation steps-

WEEK 1 :

- *search for resources giving information

- *getting equipped with the necessary tools

- *learning necessary things like android programming to communicate with mcu through bluetooth

- *gathering information about avr programming

WEEK 2:

- *designing the structure of the bot and assembling the required parts
- *working on the electrical circuit and regularly checking its functioning
- *writing the avr program
- *interfacing the avr with the bluetooth module

WEEK 3:

- *building the android app to maneuver the bot.
- *completing the electric circuit board and other required connections

WEEK 4:

- *completing the basic designing of the bot
- * testing and debugging
- *ensuring proper co-ordination and the functioning of the various parts

we'll try to build create a bot which can move anywhere like rough surfaces or terrains and it will have the capability to move in any direction.

In the end we would like to some particular features to the bot which can make it even more useful and worthy.

The estimated cost of the project would be around 5-6k.

Modifications That can be done

If time permits we want to add the following to our bot to make it more better

camera

Grippers

Make it autonomous/voice controlled.

Try to control it from internet so we can control it from a distant place

We'll learn a lot of things from this project like-

- 1.Solid works
- 2.circuit designing
- 3.AVR programming
- 4.HTML, Android basics and a lot more.

Team Members-

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