Name: “ManikShrivastav”

Project: “Gesture Robot”

**Gesture Robot**

**#Summary**

Gesture Robot is an electronic car controlled by the movement of circuit. It can be mostly used in real life robot fights and car fights. It is a car that can be controlled according to the user’s movement of the hands. The transmitter part will be attached to the hand of the user and its receiver will act as the motherboard of the car. As the transmitter moves, it will send the signals to the receiver in the car and it will turn and run the car according to the instructions.

**#Plan**

First of all, the chassis of car is going to be made. It will contain four motors and rubber wheels attached to it. After that, the motors will be connected with motor shield driver. After that, the Arduino Nano is connected to the RF module and it acts as a transmitter with the power supply of li-ion battery. The other Arduino Nano is connected with RF Module and ADLX335 Module and it acts as a receiver with power supply from 9V Battery. The code would be uploaded to both the Arduinos to make them transmit and receive signals and then the circuit works.

**#Budget**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.N | Products | Quantity | Supplier | Cost |
| 1. | Arduino Nano | 2 |  | 55 |
| 2. | NRF24L01 RF Module | 2 |  | 8 |
| 3. | L298N Motor Driver | 1 |  | 4 |
| 4. | ADXL335 Module | 1 |  | 7 |
| 5. | TT Gear Motor | 4 |  | 8 |
| 6. | Rubber Wheels | 4 |  | 8 |
| 7. | 2.5mm Male Female Strip PCB Connector | 10 pairs |  | 8 |
| 8. | 18650 li-ion Battery | 4 |  | 12 |
| 9. | 18650 battery Holder(2 Slot) | 1 |  | 5 |
| 10. | Screw terminal (2 pin) | 2 |  | 2 |
| 11. | Beard Board | 1 |  | 10 |
| 12. | Acrylic sheet (25cm\*15cm) | 1 |  | 5 |
| 13. | 9V battery | 1 |  | 1 |
| 14. | Mini Switch | 2 |  | 2 |
| 15. | Female to Female Connector | 7 |  | 4 |
| 16. | Male to Female Connector | 5 |  | 3 |
|  | **Total:** |  |  |  |