GI CAR

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1- Project Idea and Description:

- Our idea is to build an easy controlled car which can be used in many usages:
    - By adding a FM Bugger circuit it can be used in spying.
    - By adding an arm robot it can catch objects and move it from place to another and in helping old and disabled people to get thigs they need.
    - Taking images of places which human can't reach.
- We start with the forward wheels which will control the movement of the car and with usage of a motor on each wheel increasing one motor speed will help in rotating.
- Ultrasonic sensor will be put on the front and the back of the car to give a notification on the android phone before crashing.
- Camera which will be put on the front of the car and used in transmitting the vision to the android phone.
- Buzzer and lights are some more options to make the car near to real.
- We will use Bluetooth or Wi-Fi to transmit data and images to the android phone and instructions from android to the Arduino.
- All the instructions will be sent from the android application.

2- Components:

1) Two Robot Smart Car Wheel with DC Motor.

2) Two Robot Smart Car Wheel.

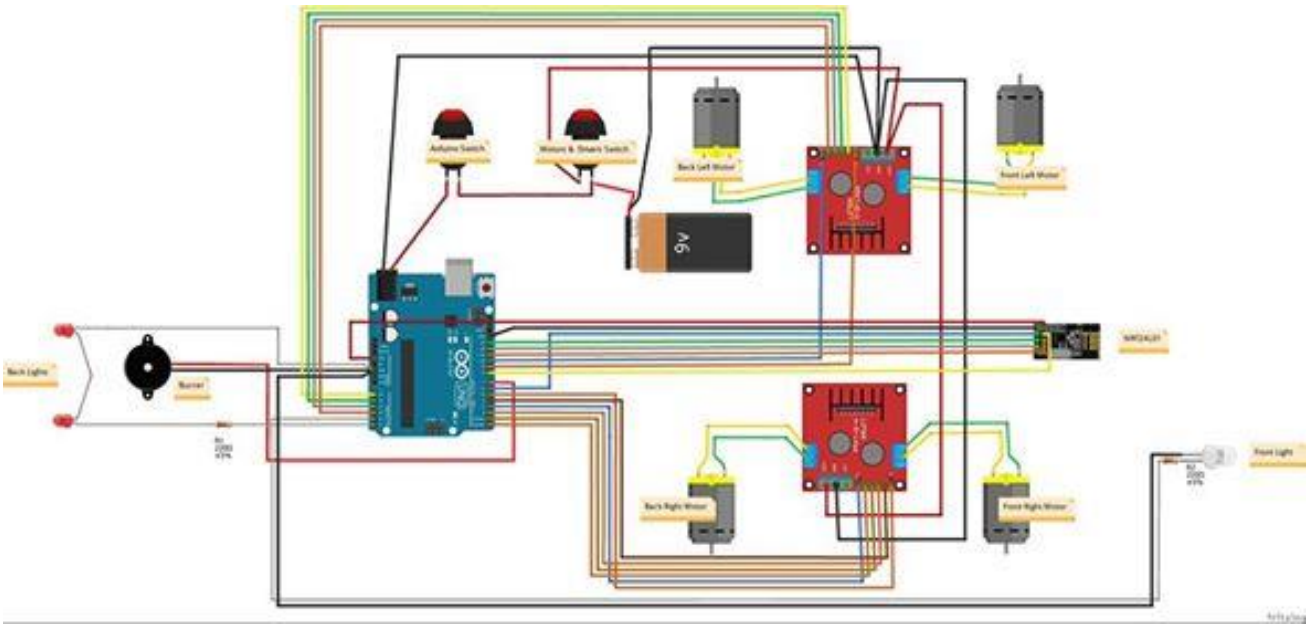
3) 2WD robotic car kit.

4) Two Ultrasonic Sensor.

5) Serial Port Bluetooth Module / GSM Module / ESP8266.

6) Camera Module for Arduino Uno.

3- Circuit Diagram and connections :



We build our circuit using this circuit with some few changes

4- Challenges faced and any notes:

We faced a lot of challenges while connecting wires and in using the nRF24L01.

5- libraries:

SPI.h
nRF24L01.h
RF24.h
AFMotor.h