

Name	Description	Image
<b>Arduino Mega</b>	Arduino is a microcontroller, has an efficient response time, therefore, it is the best choice for controlling the car	
<b>raspberry pi with camera</b>	Raspberry Pi is a single board computers ,we used it with a camera to take pictures and analyze them. Through our analysis of these images, we can know if the object is red or green to let the arduino take the correct action.	
<b>Ultrasonic sensor</b>	Ultrasonic is a sensor that works with ultrasonic waves. We use it to calculate distance	
<b>servo motor</b>	We used a servo motor as a steering mechanism to control the direction of the car (turning right or left).	
<b>Front steering</b>	used to control the direction of the robot	
<b>level shifter</b>	level shifter it converts the voltage from 3.3v to 5v or vice versa ,as we know the output from arduino is 5v and the input to raspberry is 3.3v so level shifter helps us to save raspberry from damage and to gives enough voltage to arduino.	
<b>gyroscope sensor mpu6050</b>	We used a gyroscope sensor to monitor the moving direction	

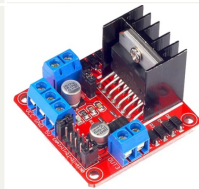
**Digilent  
gearbox  
motor**

it is a DC motor with encoder



**Driver  
L298n**

it is a dual H-bridge to control  
the two DC motors



**MRK  
basic**

A chassis



