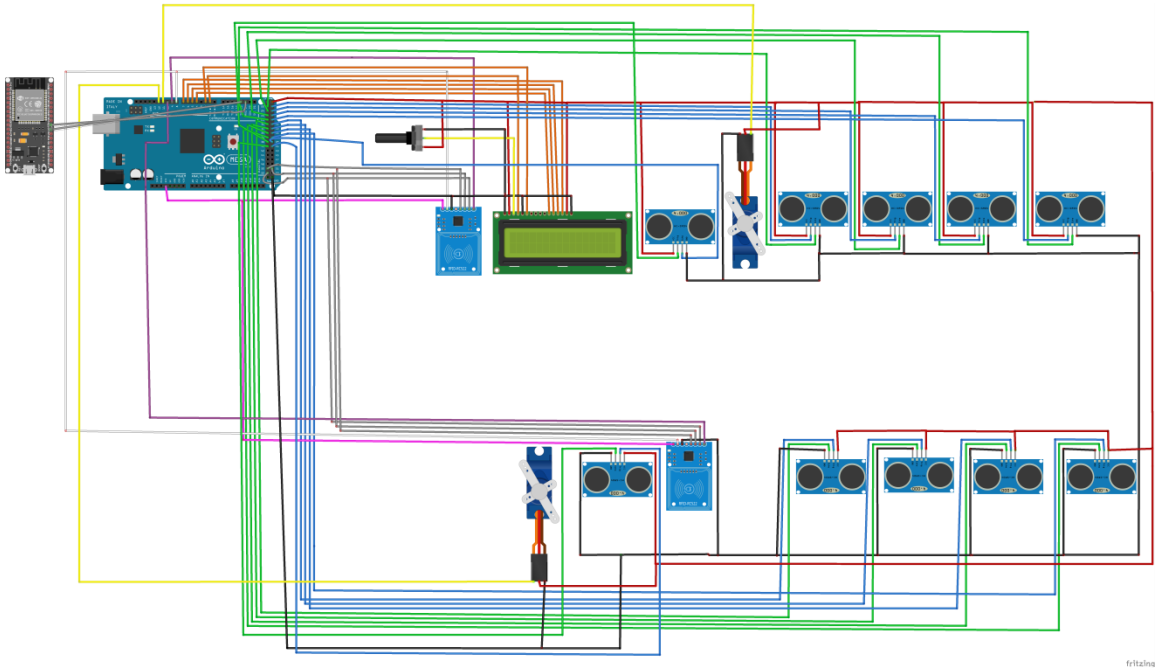
Sensor Type	Sensors pins	Arduino Mega	Note
Ultrasonic 1	Echo Trig GND Vcc	22 23 GND 5V	Parking slot 1
Ultrasonic 2	Echo Trig GND Vcc	24 25 GND 5V	Parking slot 2
Ultrasonic 3	Echo Trig GND Vcc	26 27 GND 5V	Parking slot 3
Ultrasonic 4	Echo Trig GND Vcc	28 29 GND 5V	Parking slot 4
Ultrasonic 5	Echo Trig GND Vcc	30 31 GND 5V	Parking slot 5
Ultrasonic 6	Echo Trig GND Vcc	32 33 GND 5V	Parking slot 6
Ultrasonic 7	Echo Trig GND Vcc	34 35 GND 5V	Parking slot 7
Ultrasonic 8	Echo Trig GND Vcc	36 37 GND 5V	Parking slot 8

Ultrasonic 9	Echo Trig GND Vcc	38 39 GND 5V	Sensor at the entrance gate
Ultrasonic 10	Echo Trig GND Vcc	40 41 GND 5V	Sensor at the Exit gate
LCD16x2	Vss Vcc Vo (Contrast pin) Rs R/W E DB4 DB5 DB6 DB7 A K	GND 5V To Vo in potentiometer 1 GND 2 4 5 6 7 5V GND	Potentiometer used to adjust contrast of the LCD
Servo motor 1	GND VCC Signal	GND 5V 11	Motor at the entrance gate
Servo motor 2	GND VCC Signal	GND 5V 12	Motor at the Exit gate
RFID 1	SDA/SS SCK MOSI MISO GND RST	9 52 51 50 GND 8	RFID reader at the entrance gate

	VCC	3.3V	
RFID 2	SDA/SS SCK MOSI MISO GND RST VCC	10 52 51 50 GND 8 3.3V	RFID reader at the Exit gate
RGB LED 1	GND RED pin Green Pin	GND 48 49	RGB LED at the entrance gate , RED Pin and Green are connected to 220 Ω resistance
RGB LED 2	GND RED pin Green Pin	GND 46 47	RGB LED at the exit gate , RED Pin and Green are connected to 220 Ω resistance

Electrical system layout



Color code

Parameter	Color code
VCC	
GND	
Trigger	
Echo	
SDA	
Communication (MOSI-MISO-SCK etc..)	
Signal	
RESET	