VERTICAL CAR PARKING

L E E N & L A N A

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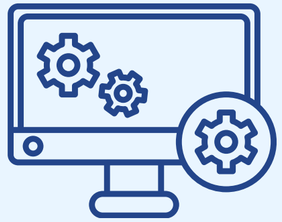

Used Devices and Features

03

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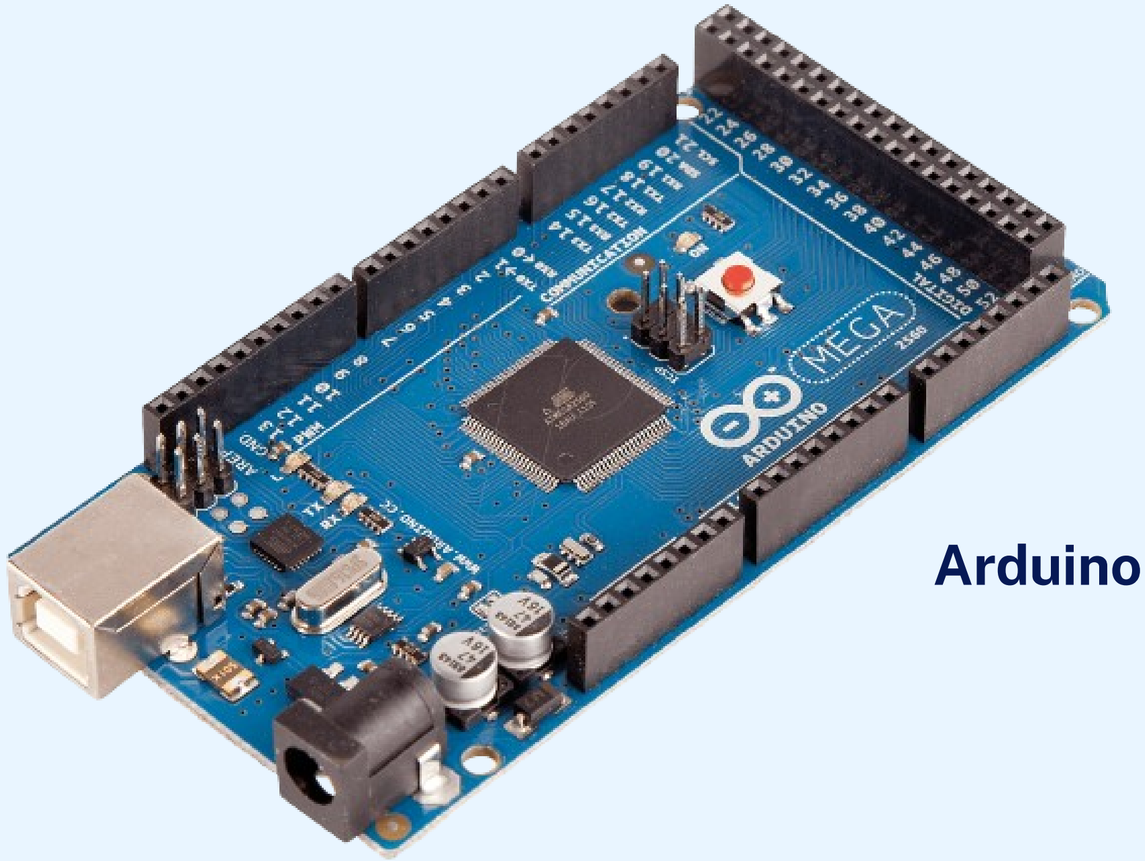
Future Work

PROJECT IDEA

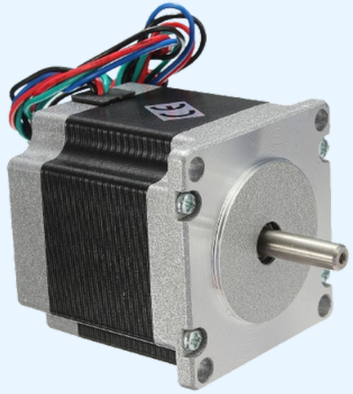
VERTICAL CAR PARKING PROTOTYPE

USED DEVICES AND FEATURES

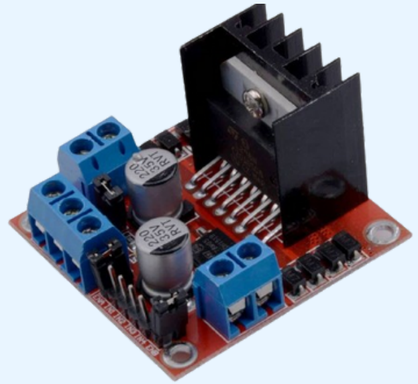


Arduino Mega 2560

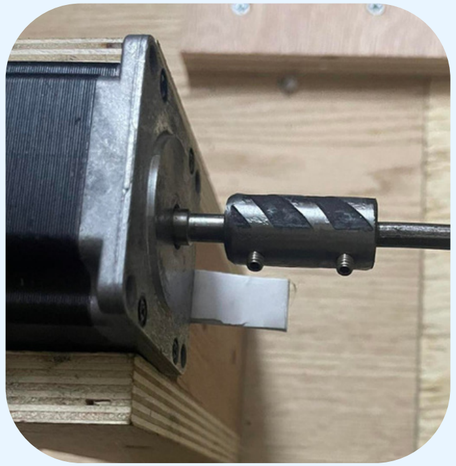
HOW TO CREATE A VERTICAL PARKING ?



Stepper Motor Nema23



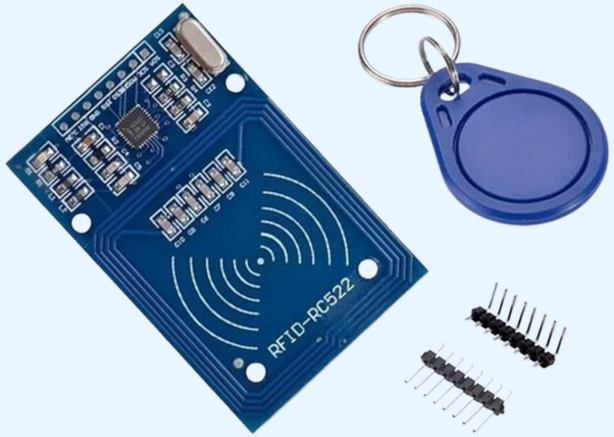
L298n Motor Driver



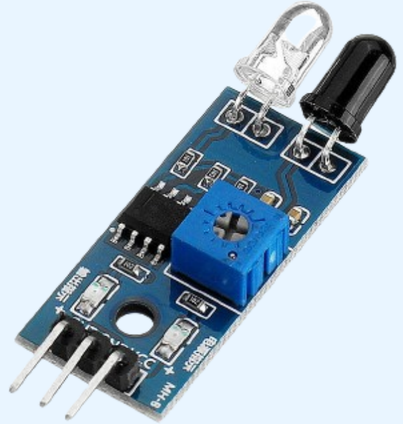
Coupler

Power Supply

HOW TO ENTER THE PARKING ?



RFID module



IR sensor

LCD 16*2 With I2C

Servo Motor

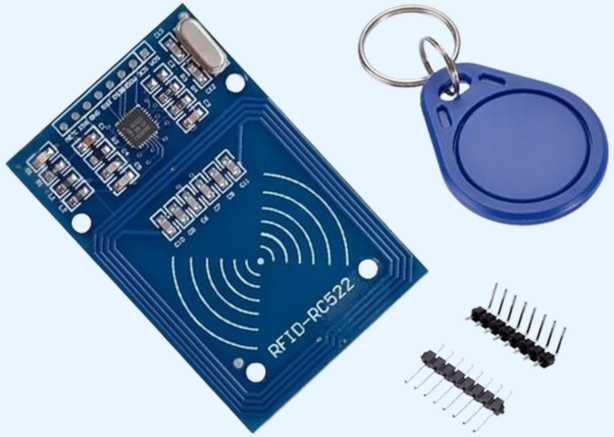
ENTER CASES

01 **Parking Full :**

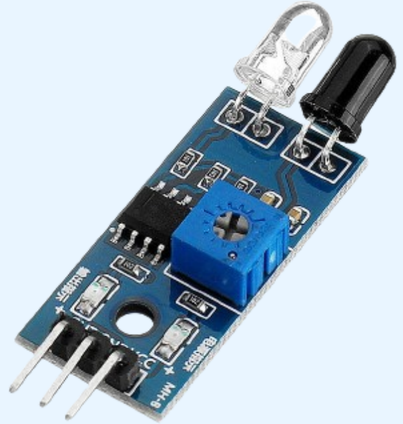
02 **Empty Card :**

Buzzer

HOW TO EXIT THE PARKING ?



RFID module



IR sensor

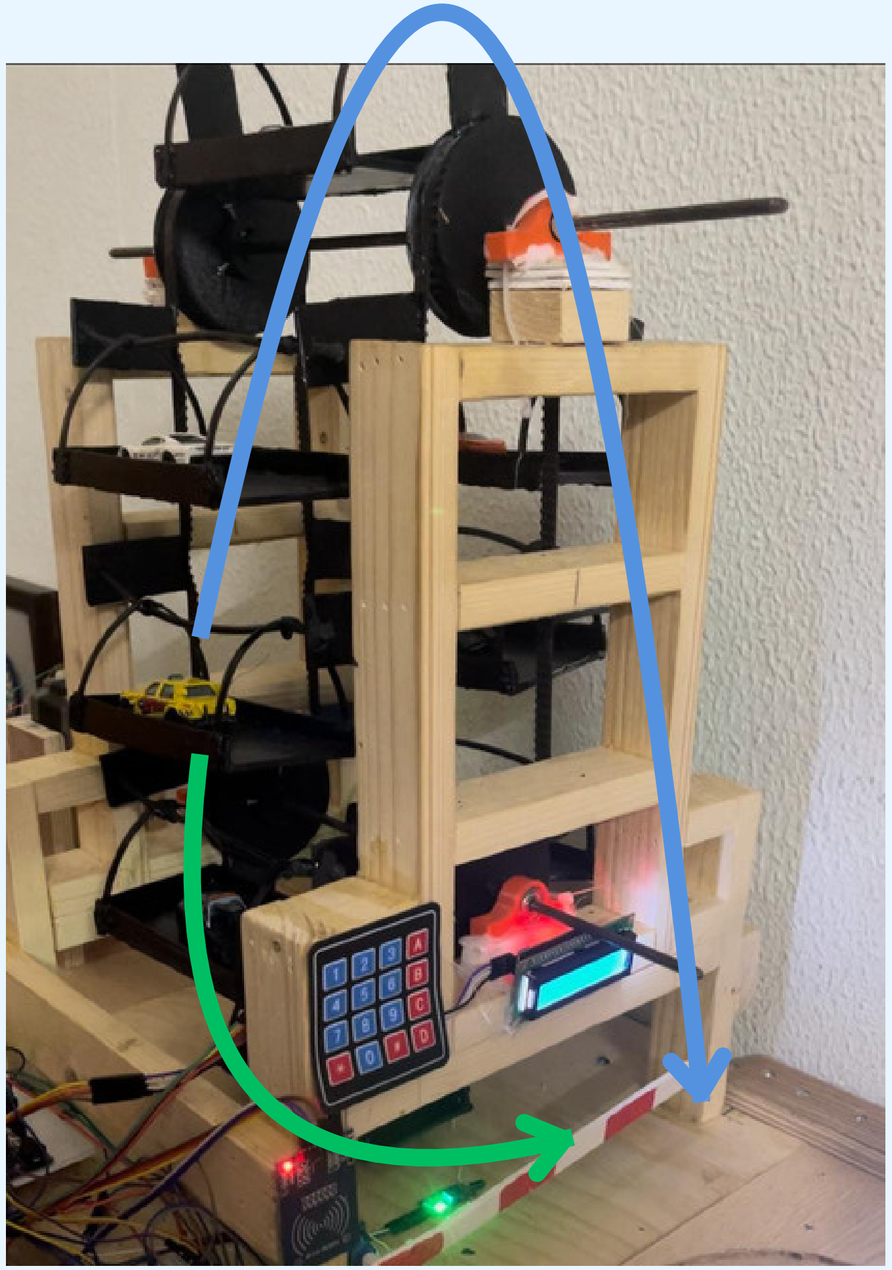
LCD 16*2 With I2C

Servo Motor

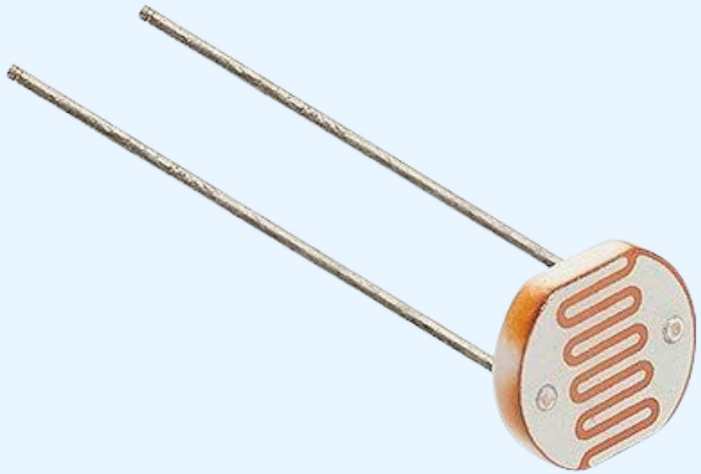
SHORTEST PATH

Longest Path

Shortest Path



BASE ROTATION

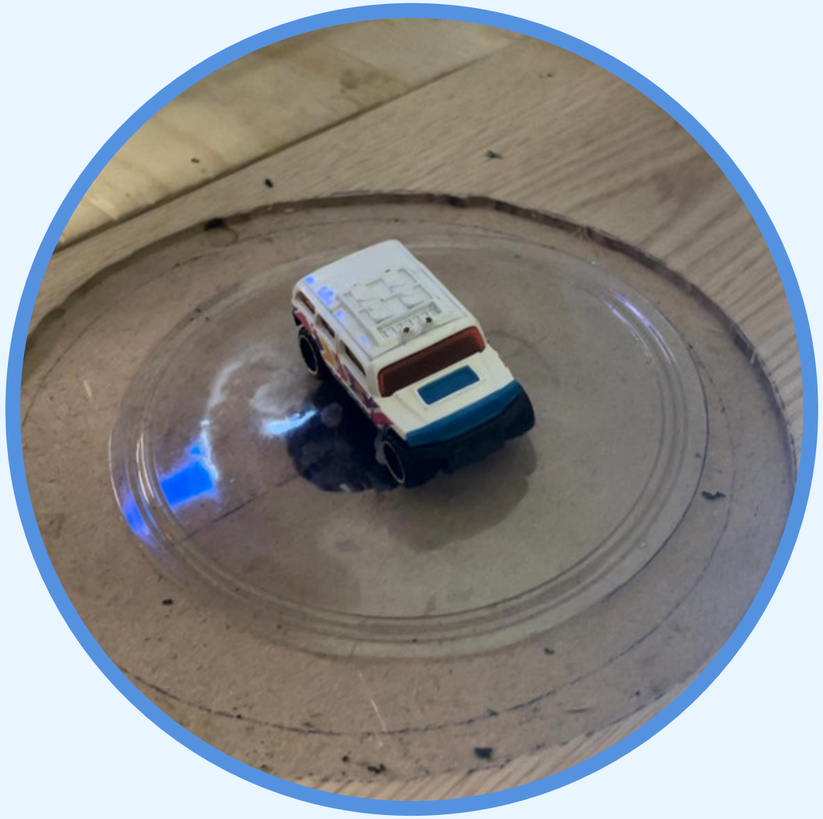


LDR sensor

Servo Motor

BASE ROTATION

Before



After

KEYPAD FOR ADMIN

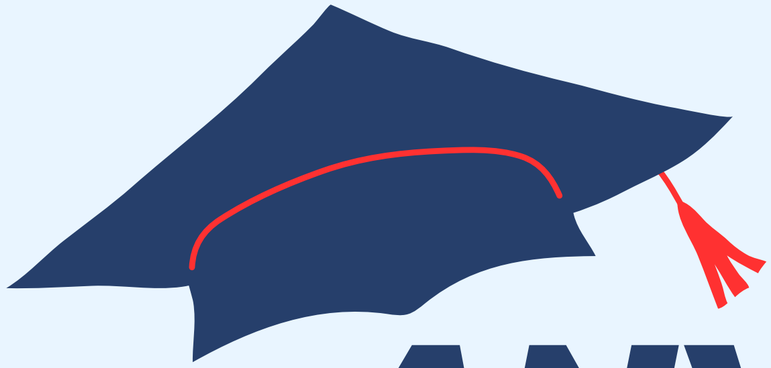
CHALLENGES

- LDR and IR sensors are affected by light intensity
- We also had difficulty finding a serrated belt that applies to the Sprockets, and also a suitable Coupler for the motor.

FUTURE WORK

Mobile Application

Solar cells for charging electric cars



ANY QUESTIONS ?