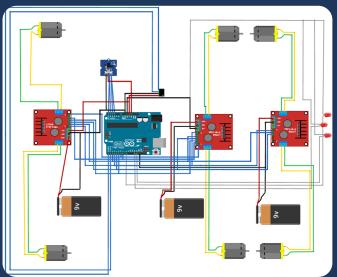


### Challenges

- Lightening the robot
- Bluetooth pairing & connecting
- ↓ Choosing a design

## 5. Testing

## 4. Electronics & Programming



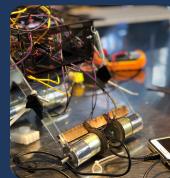
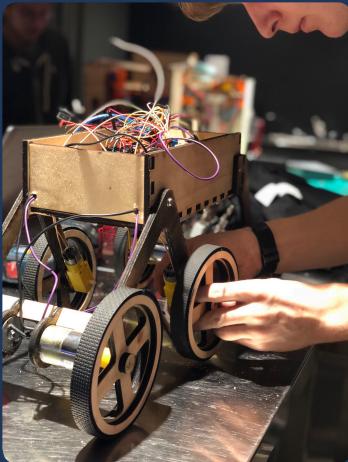
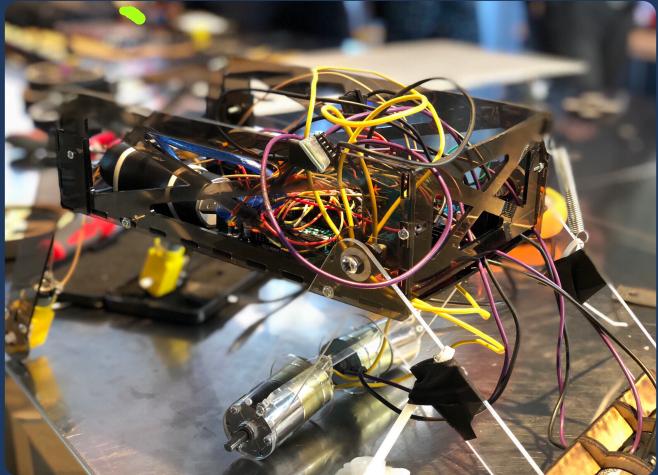
```
ENGR202_Bluetooth.ino
// This sketch will control the robot's movement via Bluetooth
// Connect the robot to your computer via USB
// Then open the serial monitor and type "f" for forward, "b" for backward, "l" for left, and "r" for right
// You can also type "s" to stop the robot
// If you want to turn off the robot, type "q" to quit the program
// Note: Make sure the robot is connected to the same port as the Arduino
// If it's not, change the port in the code
// Also, make sure the battery is charged
// Good luck!
// Author: [REDACTED]
// Date: [REDACTED]

void setup() {
  Serial.begin(9600);
}

void loop() {
  if (Serial.available() > 0) {
    char c = Serial.read();
    if (c == 'f') {
      // Move forward
    } else if (c == 'b') {
      // Move backward
    } else if (c == 'l') {
      // Turn left
    } else if (c == 'r') {
      // Turn right
    } else if (c == 's') {
      // Stop
    } else if (c == 'q') {
      // Quit
    }
  }
}
```

# "CLIMB STAIRS"

## 3. Building Process



### Goals

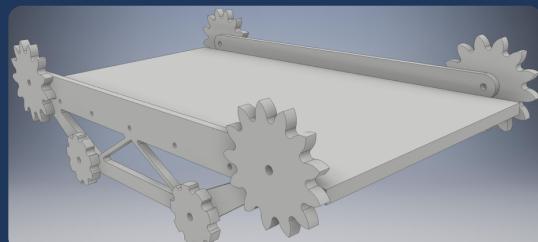
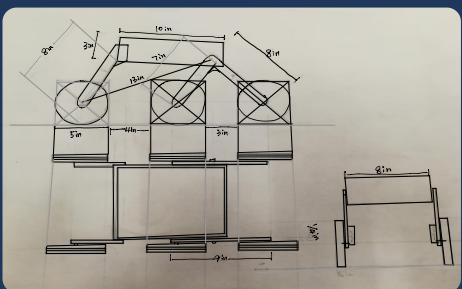
- Drive on 1. a level surface ✓
- 2. a ramp ✓
- 3. a set of stairs ...
- Operate with 4. Bluetooth ✓
- + Autonomous ...
- + Holds its own power source ✓

1.

2.



## 2. CAD Designs



### Future

1. Add sensors
2. Stronger Motors ⚡
3. 18V → 12V 🔋

## 1. Concept Designs