0.1 BARRIER GATE CONSTRUCTION

0.1.1 Tasks:

1. Construct the barrier gate according to video instructions.
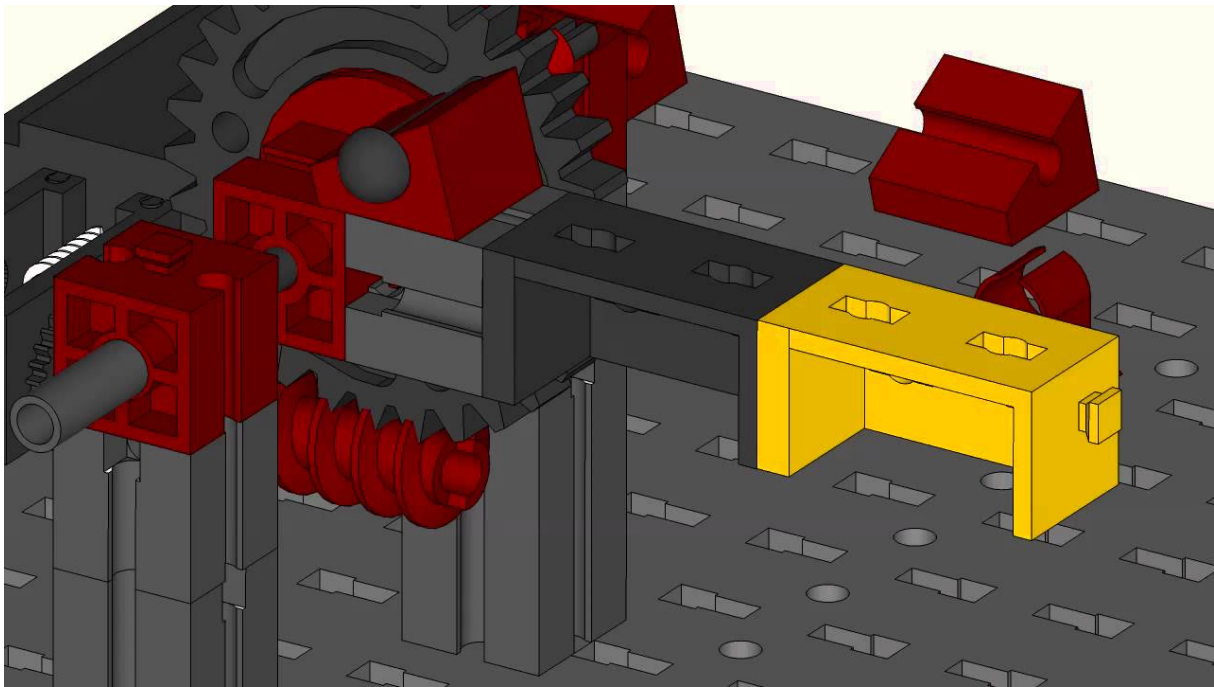

Figure 1: Constracting a barrier gate.

2. Connect the motor to digital outputs D7 and D6,

   - declare meaningful constants for output pins,
   - write a function `setIOpins()` for settig output pins and
   - include it in setup() function.

3. Write 3 time controlled functions for essential control of the barrier gate :

   - `moveGateUp();`
   - `moveGateDown();`
   - `stopTheGate();` and test this actions in setup() function.

4. Put this action of lifting and lowering the gate in For-loop and repeat it several times (e.g. 15 times).

Some sample code can be found in next example:

```
 1    const int MOTOR_PIN_1 = 7;
 2    const int MOTOR_PIN_2 = 6;
 3
 4    [-] void setup() {
 5            pinMode(MOTOR_PIN_1, OUTPUT); //declaration of I/O pins
 6            pinMode(MOTOR_PIN_2, OUTPUT);
 7
 8            moveGateUp();                   // Lift the barrier.
 9            delay(3000);                    // Wait a bit...
10            moveGateDown();                 // Lower the barrier.
11        }
12    [+] void loop() {
13    [+] void stopTheGate(){
14    [-] void moveGateUp() {
15            digitalWrite(MOTOR_PIN_1, HIGH);
16            digitalWrite(MOTOR_PIN_2, LOW);
17            delay(1000);
18            stopTheGate();
19        }
20    [+] void moveGateDown() {
```

0.1.2 Questions:

1. What is the time for raising and lowering the barrier? Compare it to your colleague's value.
2. What is the disadvantage of time controlled loop?

0.1.3 Summary

0.1.3.1 <++> <++>

0.1.4 Issues:

0.1.4.1 <++> <++>