

## Session 5

During this session I tried to give the robot its final look.

I started by dismantling the tank to recover the pair of tracks. thing done I materialized the wooden plates leaving spaces to integrate the motors and a certain number of holes to target the digital cards.

the laser cutter broke down during the first hour I resumed my work on the robotic arm, unfortunately the base of my arm is 20 cm in diameter the plate of the Prusa printer is 15cm which pushes me to reduce the size of my base and risk impacting the stability of my arm or printing on the volumic.

I opt for the second option in a first place at the risk of having to resize everything. In the meantime, the 2 servomotors acquired during the previous sessions are functional (the class is finalized), their real effectiveness will be measured during their integration into the arm.

```
classes_servomoteurs
#include <Servo.h>

// servo 1 settings
Servo servo1;
const int servo1Pin = 3; // Must use PWM enabled pin
int servo1Value;
// servo 1 settings END

// servo 2 settings
Servo servo2;
const int servo2Pin = 5; // Must use PWM enabled pin
int servo2Value;
// servo 2 settings END

void setup() {
  servo1.attach(8);
  servo2.attach(9);
}

void loop() {
  servo1Value = analogRead(A1);
  servo1Value = map(servo1Value, 0, 1023, 0, 180); // v.
  servo1.write(servo1Value);

  servo2Value = analogRead(A2);
  servo2Value = map(servo2Value, 0, 1023, 0, 180);
  servo2.write(servo2Value);

  delay(5);
}
```

the laser cutter finally functional with plywood I cut the first boards (lower and side) by binding them with a wedge. the result is functional but gives an effect "tinkered not clean". So not satisfied I direct my choice towards a parametric box with notches that can be linked without wedges (to be glued potentially).

The raw model is available on boxes.py :

<https://www.festi.info/boxes.py/UniversalBox?language=fras>

I have already determined the entry of the DC motors and the location of the screws; they just have to add them now on inscrape.