Session 21

During this last session, we focused more on the final rendering of the robot (fig 1), first I placed the electrical components on the base of the chassis, making sure to isolate each one from the metal.

Then we had to make cable management and prevent the cables from touching each other, and extend the servo motor power cables within the base to reach the Arduino at the bottom of the chassis. Then we had to upload the code to control the movement of my arm to the Arduino Mēga used by my partner to contain all our code within a single card, it's when we realized that the I2C communication ports (SDA and SCL) was already used for sensor distance control.

It was then necessary to find an alternative: ports 24 and 25 on the Arduino Mēga could be used as such.

Finally, we worked on the arm movement that will be performed during the demo.

Despite the shortcomings related to the modelling of the arm, it managed to reach the handle and return to the 0 position, the first shot.

Of the 6 motors available I have decided to operate only 5, the 6th for the moment will only serve as an arm-clamp junction.

Figure 1 Final product