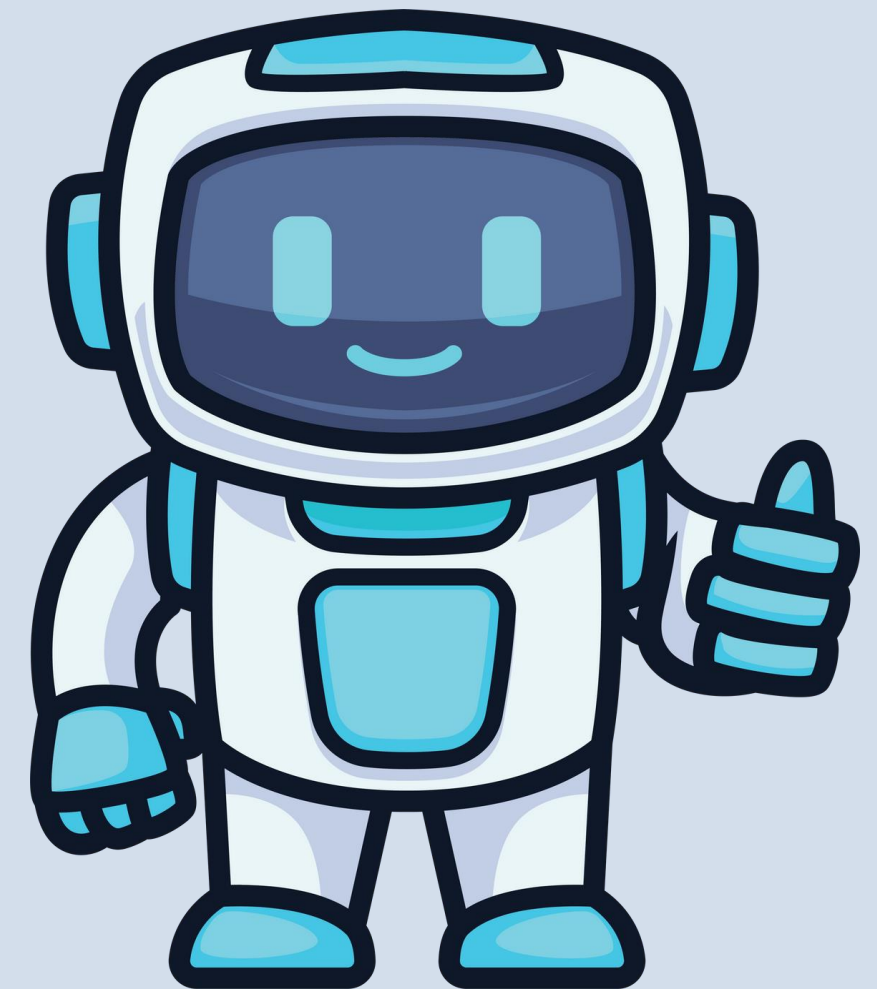
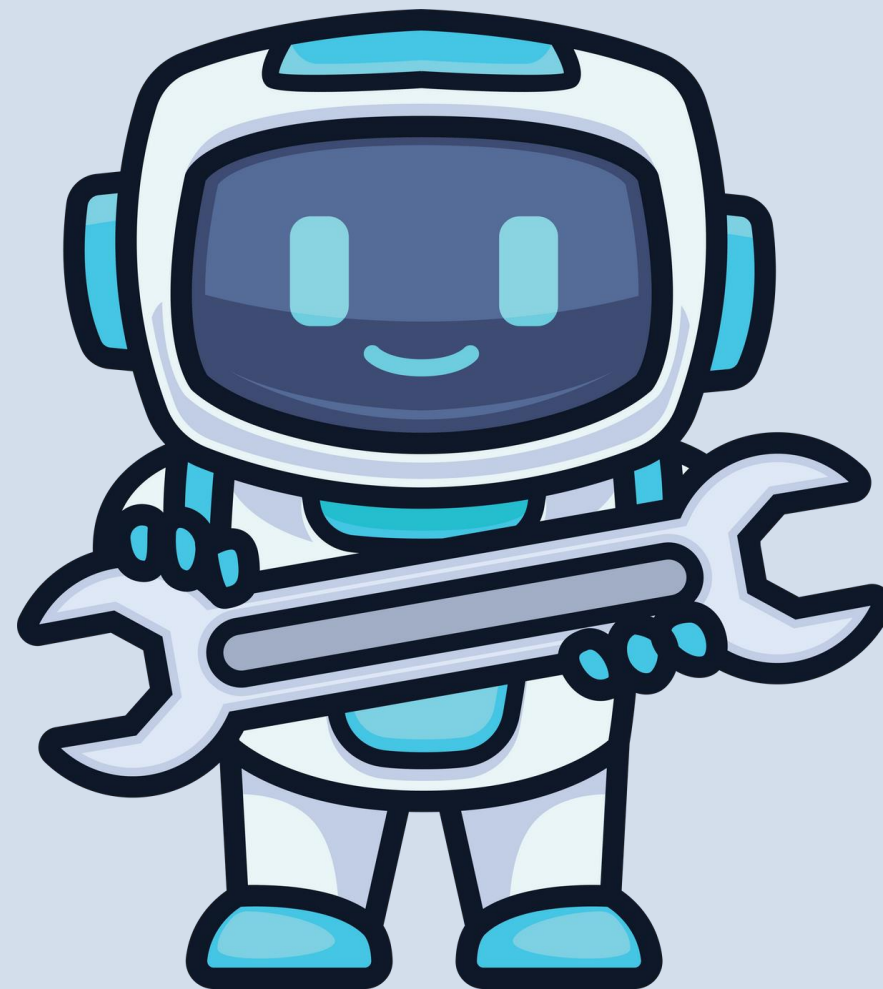
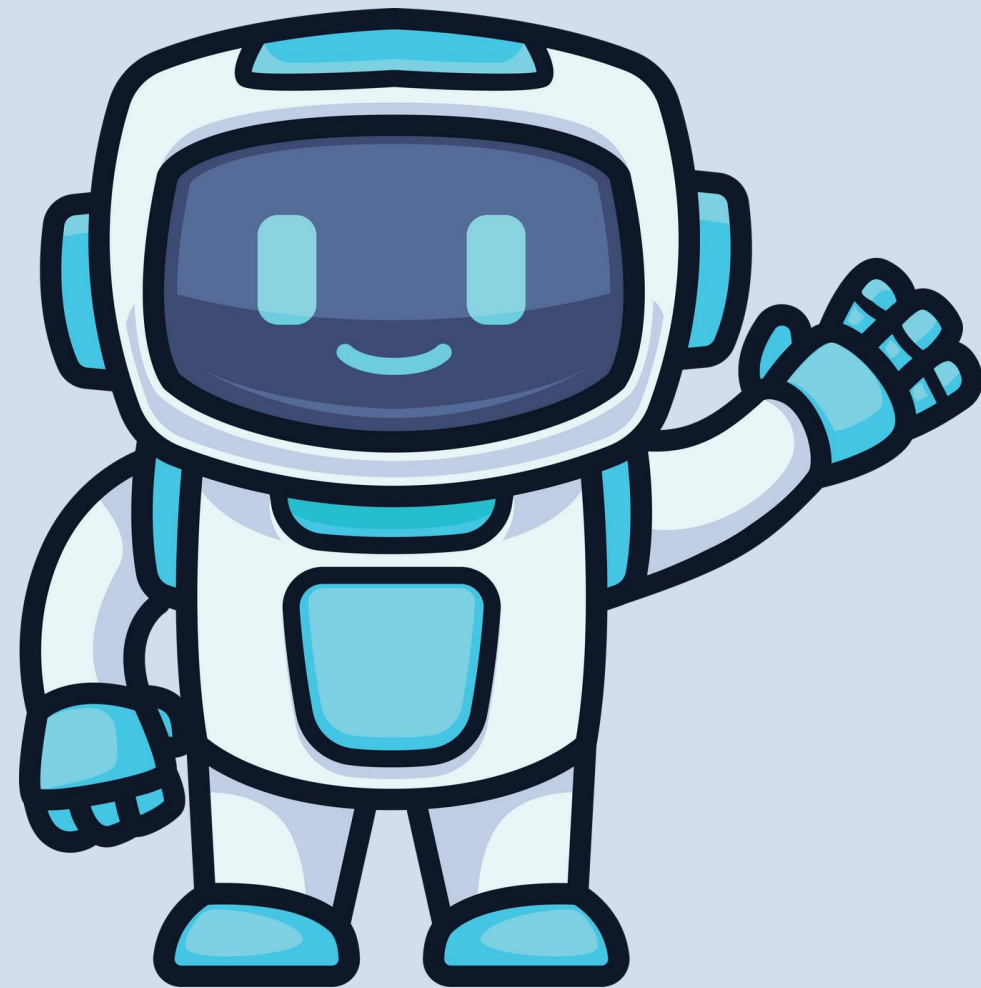


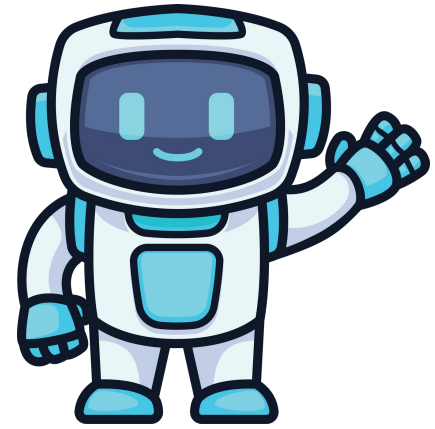
PROJECT 31:

ROEB
WOODD 😊

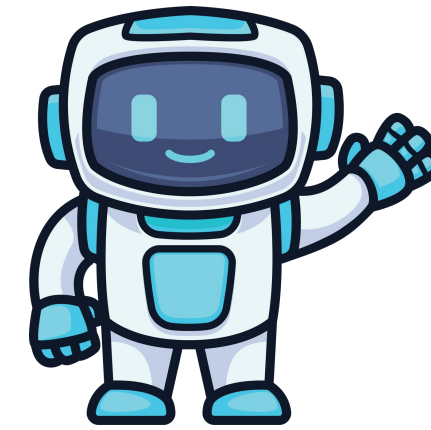
a robot friend



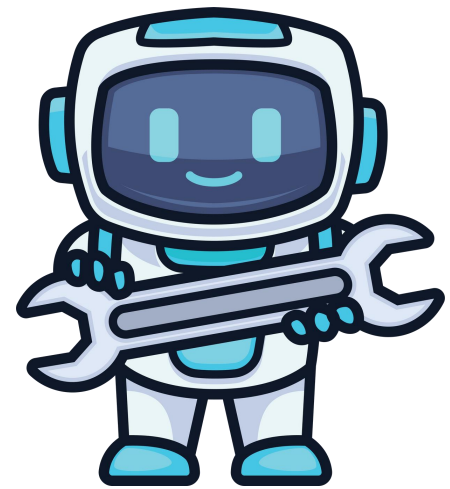
OUR AGENDA



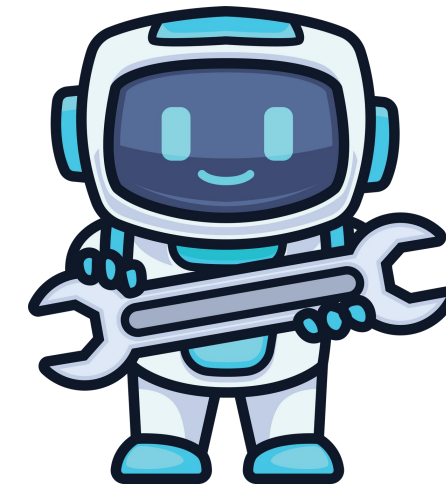
Results



Challenges

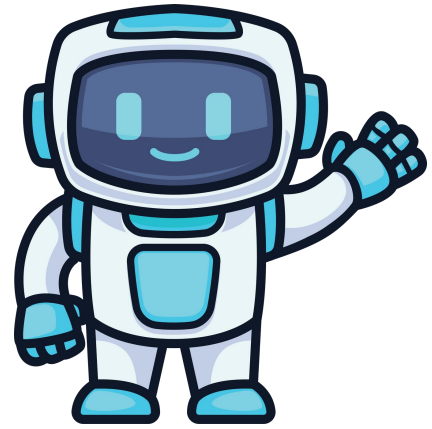


**Deviations
from
original
schedule**

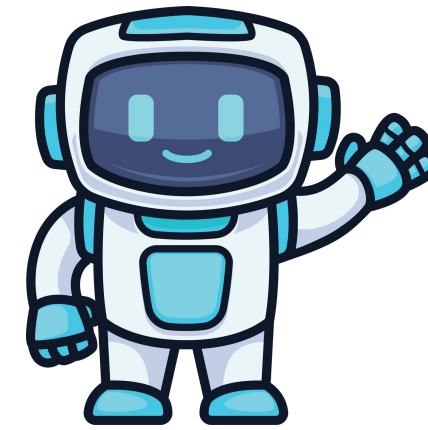


**Accomplished
work**

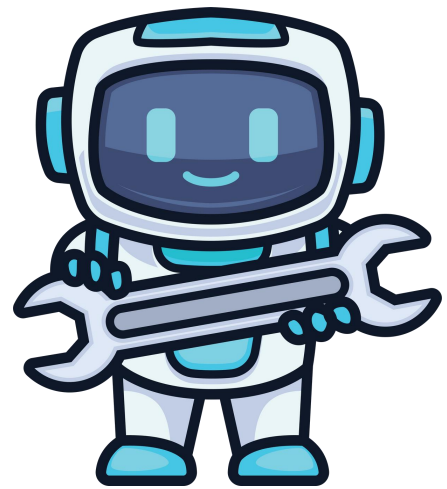
OUR AGENDA



Status

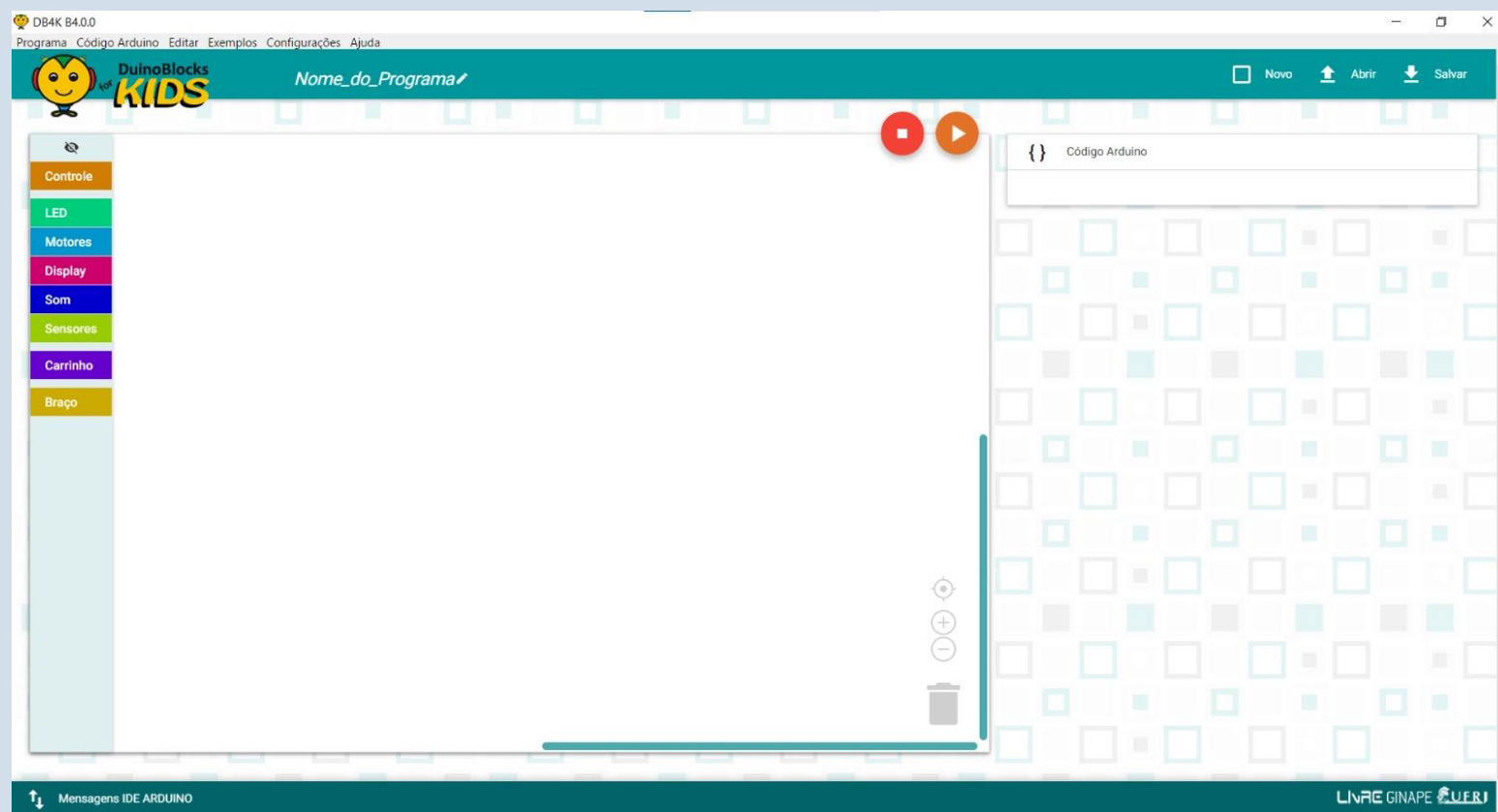


**Work
division**



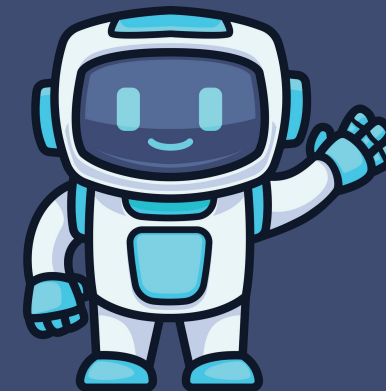
**Corrected
schedule**

RESULTS



GUI interface

- The user interface (GUI) is finished, however, some errors require correction.
- The design of two possible robot chassis is in development, with the modular chassis being printed, designed to adapt to future modules.
- We were able to reuse a few materials and components from the Electronic Engineering Student Organization



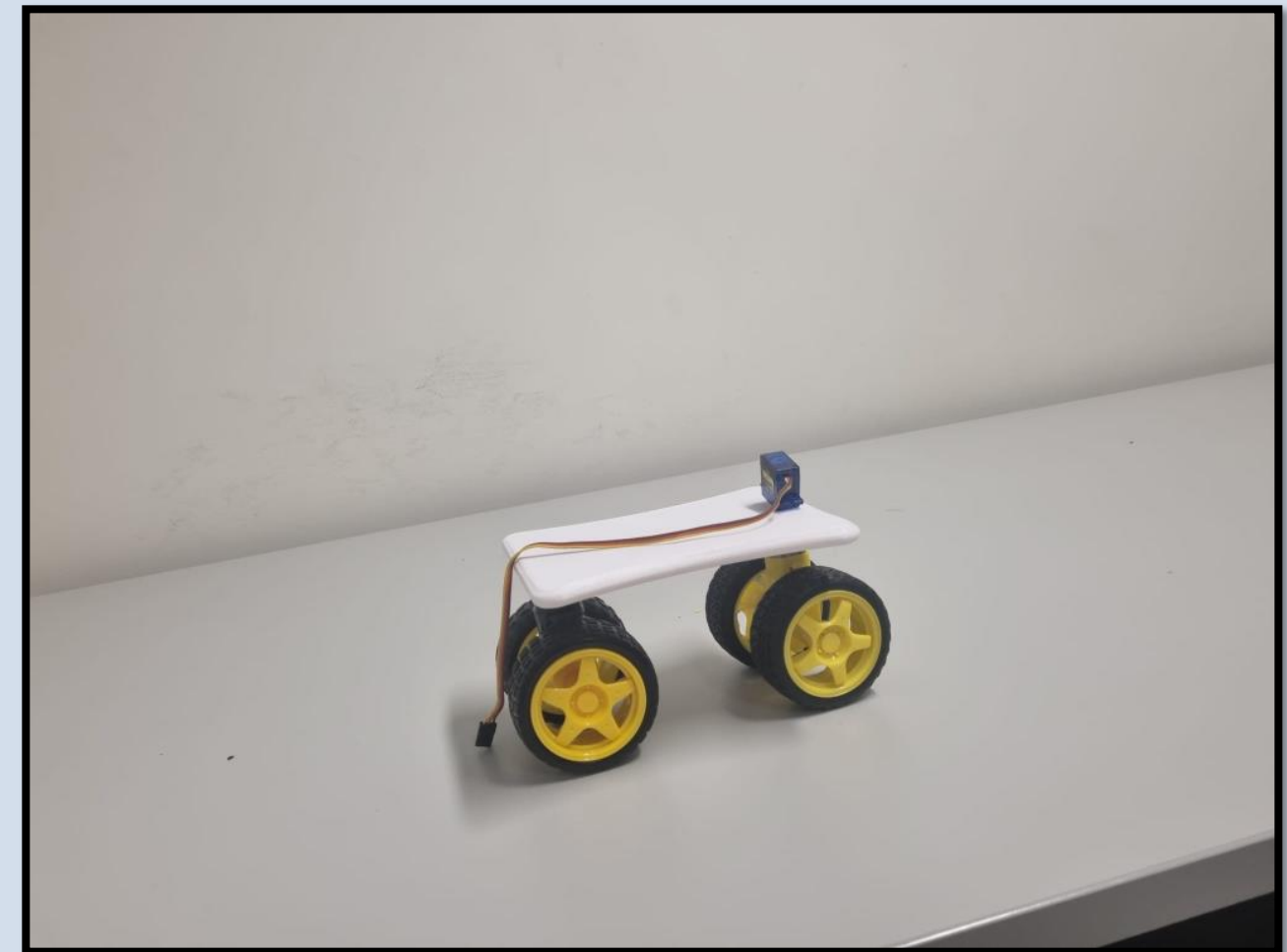
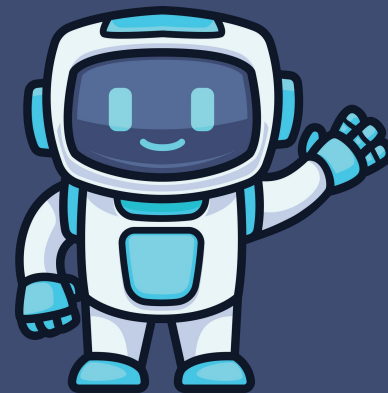
RESULTS



GUI interface modules

RESULTS

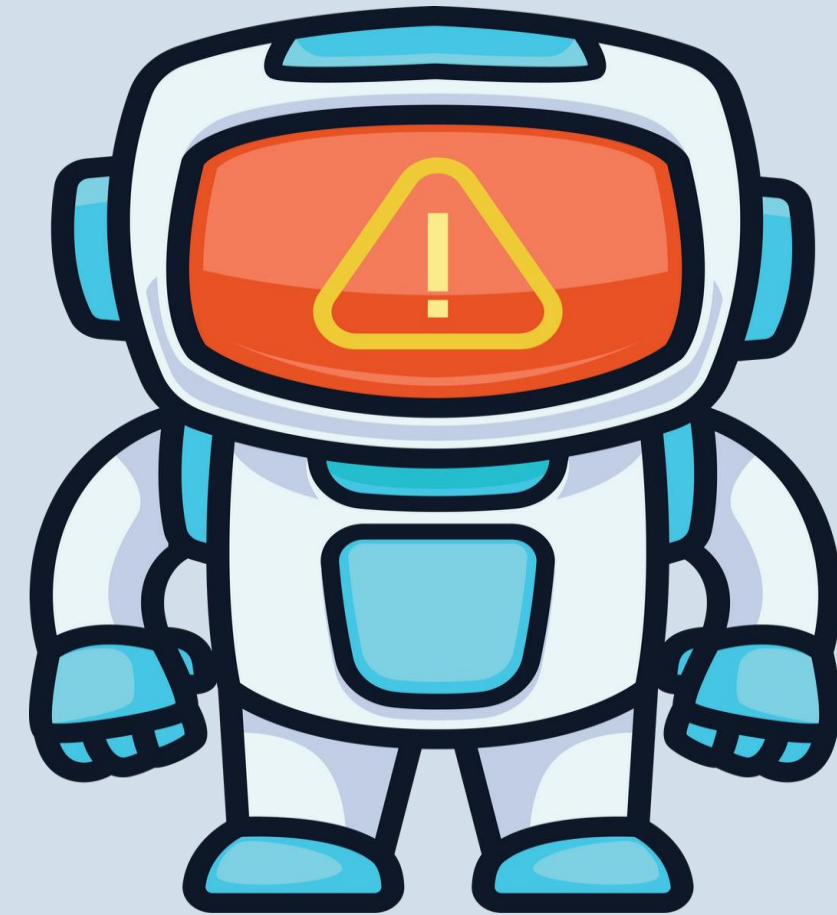
- A functional prototype of the first module (line follower) is operational, although there are still corrections to be made, such as wheel misalignment.
- A chassis prototype has been printed for the first module and can be adjusted as needed for the addition of more modules.



1st chassi prototype

CHALLENGES

- Difficulties in the design of the prototype chassis, especially in the base and the modules.
- Changes were made to the wheels of the base and the layout of the modules to fit the available material.

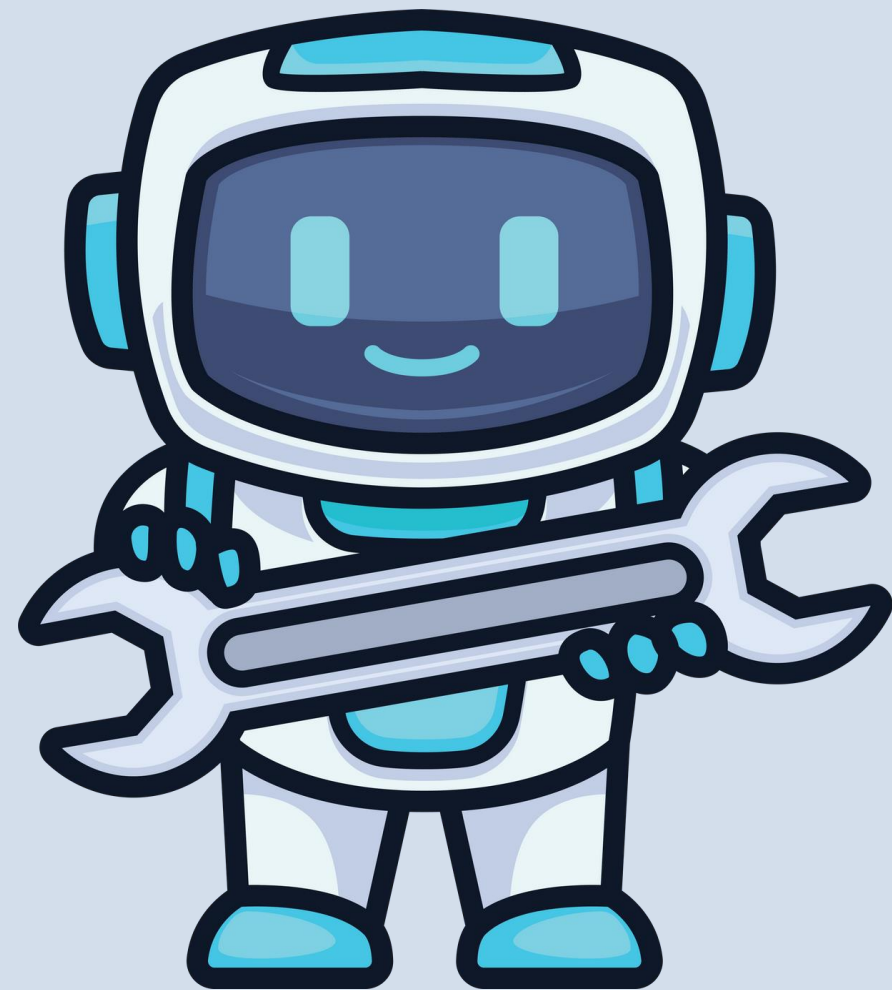


CHALLENGES

- Website editing due to lack of experience in HTML, resulting in a less interactive website than planned.
- Conceptual challenges when trying to implement the idea of using modular and detachable modules.



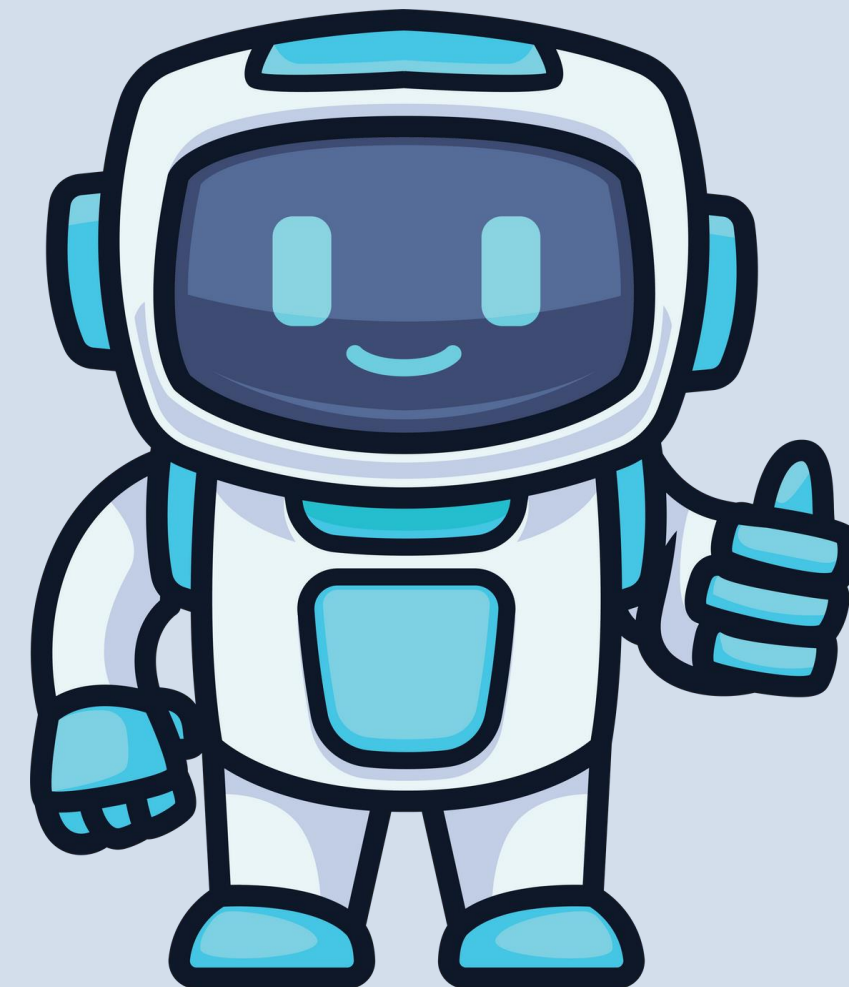
DEVIATIONS FROM ORIGINAL SCHEDULE



- Regarding the original planning, we anticipated designing the bases and modules, but we experienced some delays in this regard, not having reached a definitive solution.
- We came up with some possible designs, but further testing will be needed once the 3D printing is completed.

DEVIATIONS FROM ORIGINAL SCHEDULE

- Due to the change in the material used for printing the chassis, this, in turn, led to a considerable delay in the project's completion.
- Since not all group members were familiar with "Python," as it is often not taught throughout the course or at least up to this point, it led to certain delays in this part compared to the initial planning.



ACCOMPLISHED WORK

Hardware

- Base hardware
- Line follower module
- Sound control module
- 3D robot design

Software

- Website development
- Development of library:
Line follower
- Development of library:
Sound control

Branding

- Graphic design
- Partnerships with
projects in the area
- Establishment of schools
for testing

STATUS



Market research

- According to the target market (schools), the product price will not represent a major barrier.
- Modifications to the products used in the prototype.
- The decision to focus on the TagusPark campus brought greater efficiency to the project.

WORK DIVISION

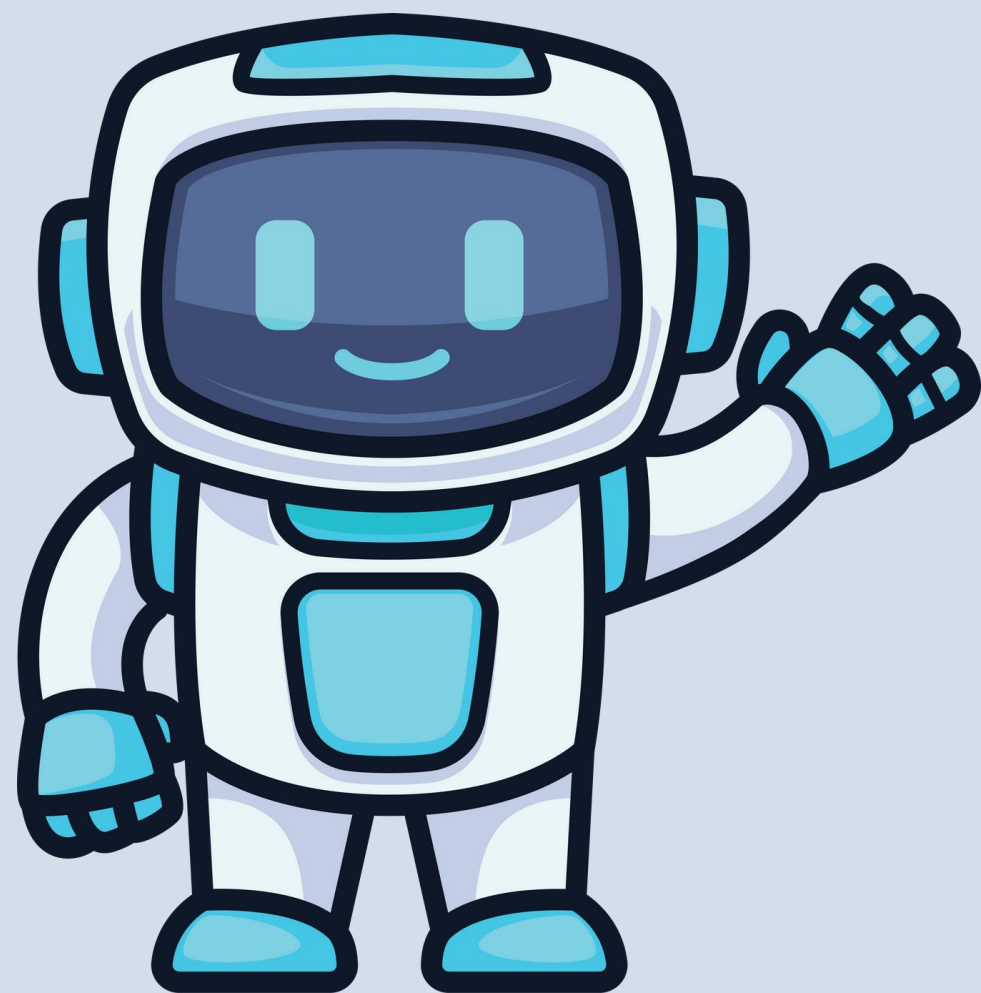
João Eduardo	Duarte Marques	João Le Coroller
Website maintance	Website development	Improved chassi development
Line follower module development	Line follower module development	Line follower module development
	GUI development	Material research

WORK DIVISION

Eduardo Caria	Augusto Azevedo	Tiago Abreu
1st chassi prototype	Presentation	Assistance in developing the 1st prototype
Improved chassi development	Development of content and preliminary objectives in terms of theoretical foundations.	Study of ultrasonic sensors and their implementation in the 1st module.
Assistance in creating the LCD module		

CORRECT SCHEDULE

- By the end of April, we are planning to create an additional module and refine the line-following module that has already been presented but still has some imperfections. Regarding the 3D design, it will be important to consider how we will realize our idea of making the modules interlocking and what will be the functions and base material of the robot.
- By the end of the project, the idea is to gradually add modules and other ideas that may arise to make the robot increasingly differentiated, notably the introduction of a musical module, the use of displays, among others that will be added as the project progresses.



THANK YOU!

ROB
UDD 
a robot friend

