



FLL ROBOT DESIGN

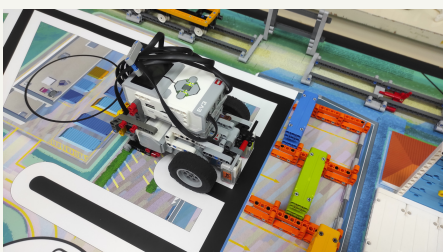
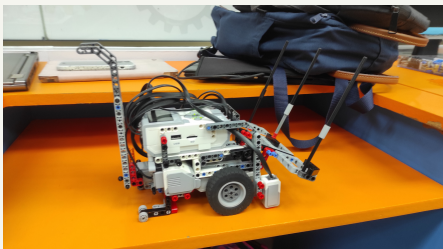
Prototype

Firstly, Our Challenge on the first problem is we need to read the rules and how to score points, which leads to our next step is how we're going to plan out the prototype which we'll use to test whether it's gonna work or not. So, Our team decided to split up into three groups: Technicians, Programmers, and Helpers.

Secondly, We will brainstorm and make a prototype of how will the robot move on the field and will it work. Our technicians will think of the best solution to the question 'can it carry heavy weight' 'can it change functions quickly' 'how fast can it travel' 'can it track the dark lines'. Then the programmers will make a program which can travel through the field using the prototype.

Next, Our next problem is how are we going to do the missions that were given to us. We brainstorm with each other to think of a mechanic that can carry out most of the tasks which can give us the most points first. Then we can think of other mechanics which will give us the remaining points.

Lastly, We get our technicians tell our programmers how the mechanic will function on which part of the field and the helpers think of what's the best way to program it.



Objectives

- Score the most points
- Find and Solve the Problem
- Find the best solution to each Mission on the field
- Make the most progress out of one mechanics

Procedure

- Starting
 1. Firstly we read the Rule Book of FLL2022
 2. We pick our roles and brainstorm
 3. Make the Robot
 4. Test the Robot
 5. Find the Problem of the robot
 6. Redo step 3) until the robot can make lots of points
- How it works on field
 1. Firstly we set the robot facing the north of the field
 2. Secondly we run the program. This program will do the missions M02, M04, M08, M10, M13, M14. Then comes back to the start
 3. Next, We modify our robot with another mechanic with another program. It will do missions M01, M03, M09, M11, M16. Then comes back to the start
 4. Lastly we modify for the last time and the last program of the mission. It achieves M05, M07, and finishes at M06 when the robot stops there.
 5. After this M12-chicken and M17 will give us points for

Data and Result

The robot has done most of the results and helped us up to this point so that we could make an estimated value of 450 points in total. It could accomplish most of the Mission that was given. Therefore the project is a success.