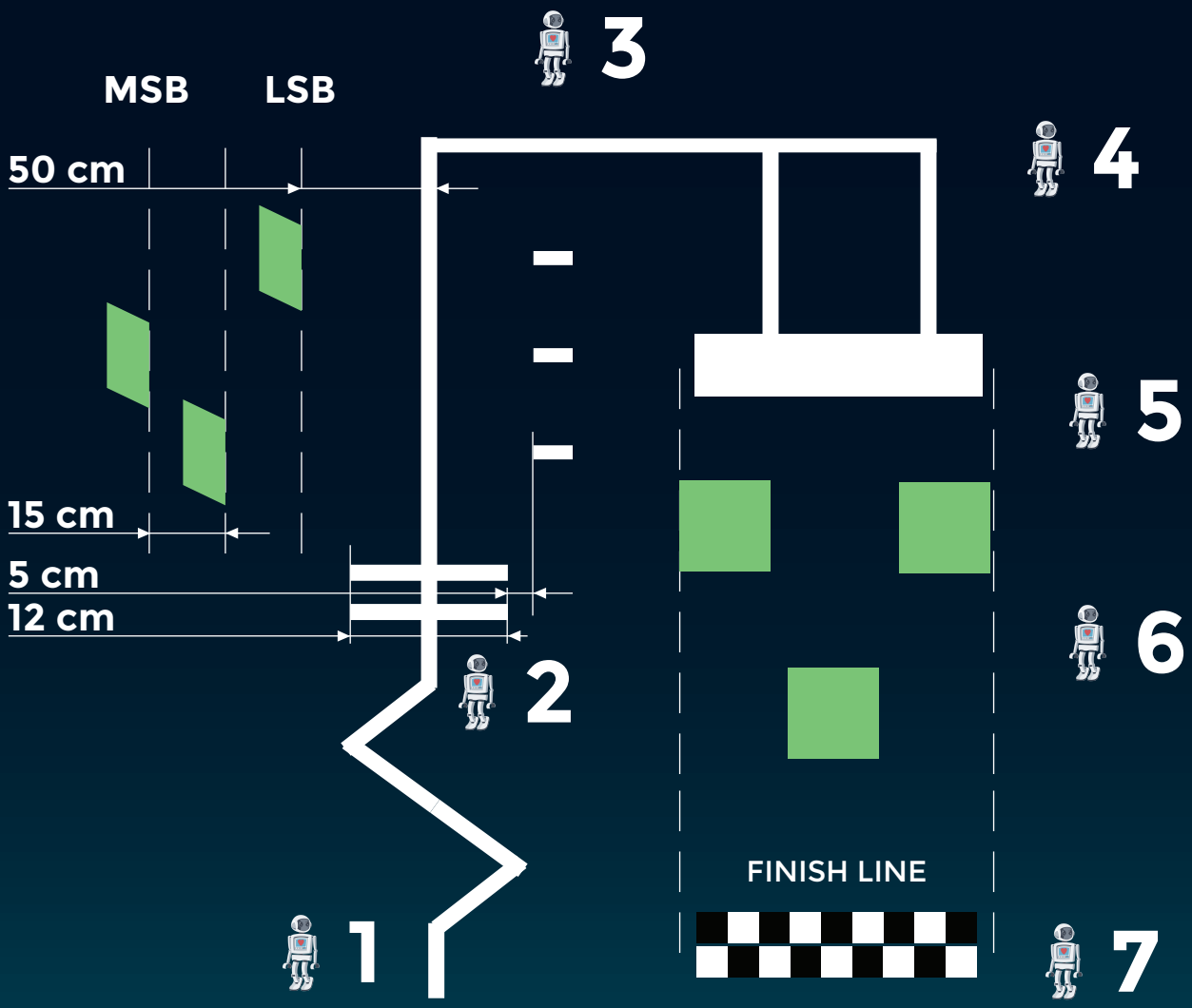
Scoring milestones



1 : Initiate AUTO MODE _20 points_

2 : Reach the end of the ZIGZAG _30points_

3 : Reach the checkpoint _10 points_

4 : Choose the right path _50 points_

5 : Stop at the BALCK AREA for 5 sec _20 points_

6 : Switch to RC MODE & start driving the robot _50 points_

7 : Reach the Finish Line _30 points_

Maximum total = 210 points

ELECTRONIX ENSTAB

Game rules

The robot starts at the first milestone, where **once put and the stopwatch is started**, the contestant is **no longer allowed to touch it**.

The robot must **autonomously** navigate the ZIGZAG, then when it "sees" the two consecutive horizontal lines, start recording the three next distances **at each "point" located at its right**. Then decode the collected binary (**3 bits**) number and choose one of the two pathways according to the next classes:

Decoded binary = {1, 2, 5, 7} -> Route one (the first one encountered)

Decoded binary = {0, 3, 4, 6} -> Route two (the one in the middle)

If the robot chooses the **correct route**, it will be awarded with 50 points, otherwise, it will be **punished with -30 points**.

Once the robot reaches the **big black area** (white in this document), it will have to **autonomously switch to RC MODE and connect to the contestant's phone** (remote controller), then the contestant ought to navigate to the finish line in the least amout of time, **without touching the obstacles**. (-5 each time it touches an obstacle)

Notes:

* All lignes that are meant to be followed/detected by the robot are 4cm wide.
* The background of the playing area is **white**, while the **lines are black**.
* The robot will have to have maximum dimensions of: 25x25x25 cm.
* The binary number (route) will be **randomly** chosen for each contestant.
* The obstacles are garenteed to be taller than the robot's maximum allowed height.

/* ---------- Good luck ---------- */