evaluation.md 8/25/2019

Evaluation

The day of the evaluation you'll be asked to demonstrate the behaviors your robot can execute. Each group will have ~10 minutes to do so and answer a few questions. A mark will be given to the group, but keep in mind that the final mark is individual as it takes into account the continuous evaluation.

Warning: Not using the inverse kinematics for the validation of a behavior is a crime. Your mark will be 0, and you might even get fined.

Note: Originality is absolutely encouraged, showing interesting behaviors or approaches during the evaluation can only be good for you.

Mandatory behaviors:

- Moving an arbitrary leg to an arbitrary (x, y, z) position
- Moving the center of the robot to an arbitrary (x, y, z) position (the 6 legs staying on the floor)
- · Walking in a straight line
- · Rotating without moving the center of the robot

Advanced behaviors:

- Untethered robot. You can use the battery and the low level control board
- · Controlling the robot with a keyboard/mouse/whatever
- Walking X mm in a straight line (odometry)
- Rotating theta degrees (odometry)
- Walking in a straight line in any direction without rotating (holonomic robot)
- Variable movement speed
- · Legs move smoothly
- · The robot can change its direction on the go

A few fun ideas:

- · Attaching a pen to a leg and draw something with it
- Making the spider dance to the rythm of an arbitrary (i.e. not predetermined) song