



TEAM 18300

<https://fll-18300.github.io/home/>



What we're doing today...



Research Independently:

- **Research Team 1:** Write down in a shared google doc; what is JIRA used for?
- **Research Team 2:** Write down in a shared google doc; what are the steps in the engineering process? Provide at least a 1 sentence description of each step.
- **Research Team 3:** Write down in a shared google doc; what is github used for?

Research teams, present your findings!



Discuss Together:

- Kyle's Tape Measure Tool
- Gyro Sensor demonstration & discussion

Work Independently:

- Possible Basebot modification(s) and improvements
- Work on the mission ranking table
- Mission Strategy and planning – use the sketching tool
- Replace Broken EV3 Brain
- Prototype and program



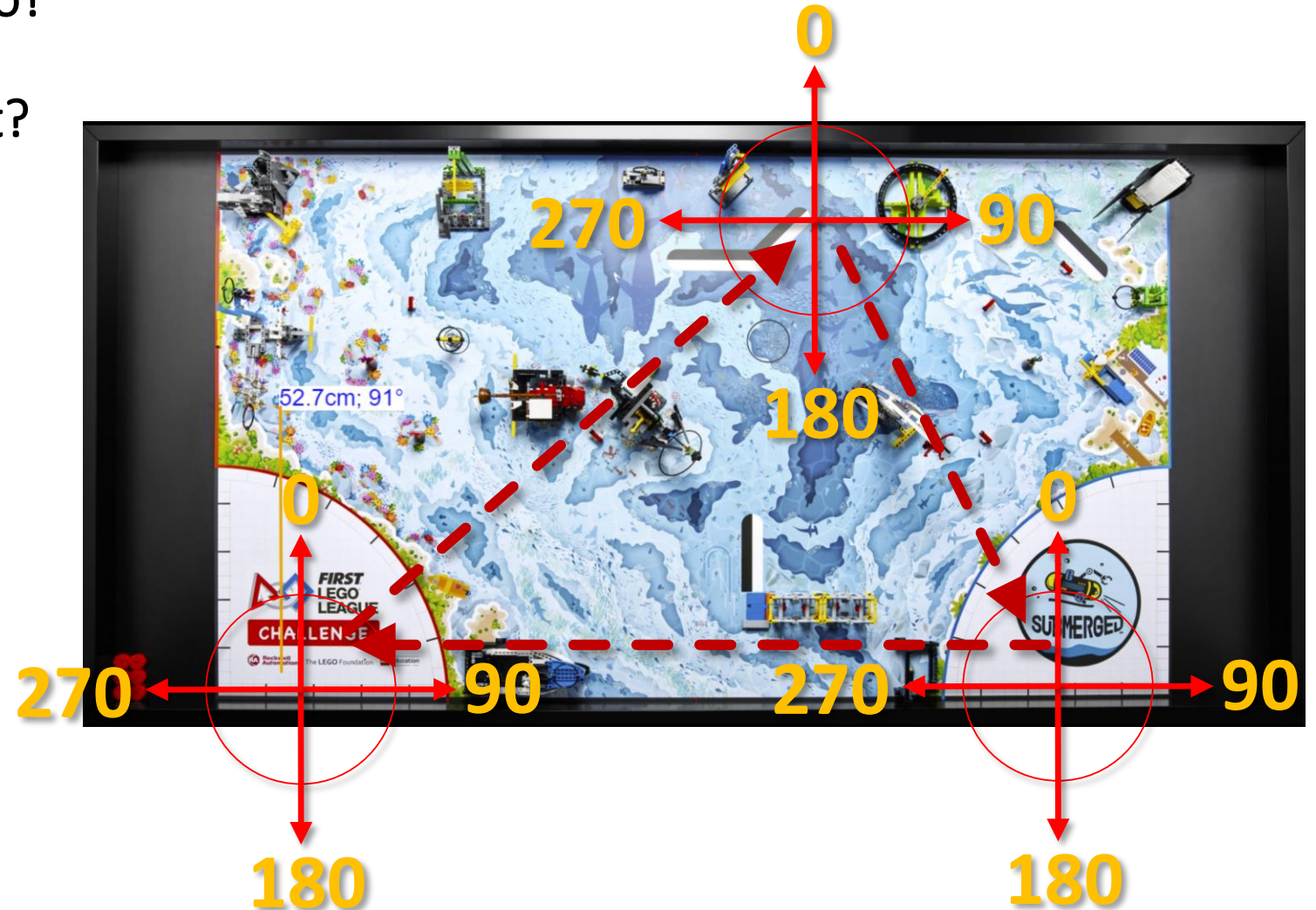
Gyro Discussion

Think About...

- What is a gyro, what does it do?
- How can we use it?
- What are the problems with it?



Compass Rose

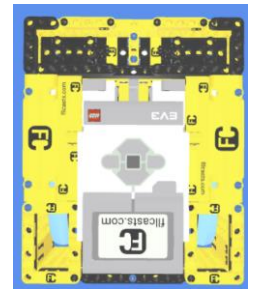
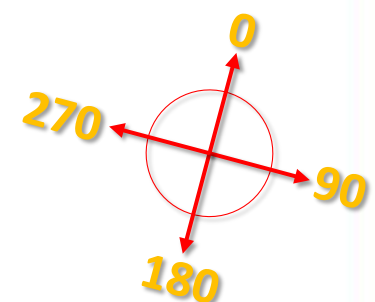
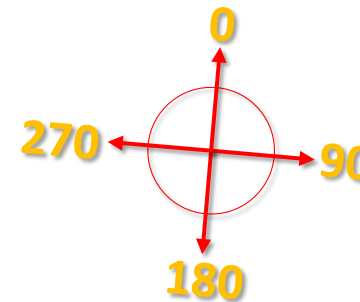
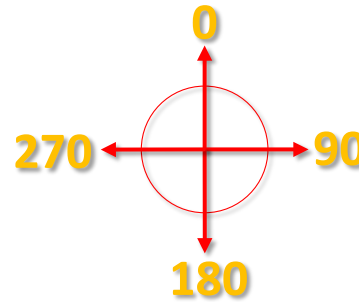


Think About...

Gyro Drift

- What is gyro drift?
- What problems could gyro drift cause?
- How bad is it really, can we measure it?
- What can we do about it?

- “The gyro auto-calibrates when the robot is turned on or the gyro wire is connected. If the robot is moving during calibration, the gyro “learns” the wrong value for “still” – this causes drift” -From [Gyro \(ev3lessons.com\)](http://Gyro.ev3lessons.com)
- We can remove MOST of the drift by resetting the gyro while the robot is very still. This is called calibration.
- Even with calibration, all Gyros are expected to drift over time. Sometimes very slowly, sometimes bit faster.



-----time----->

Prototype!

