Functional Testing

1. Holding the board with the LCD closest to my chest, parallel to the ground the LCD should read “speed: 0” and “direction: straight”. **FAIL**
2. Holding the board with the LCD closest to my chest, parallel to the ground the LCD, rotating counter clockwise (fast), should read “speed: 0” and “direction: hard left”. **FAIL**
3. Holding the board with the LCD closest to my chest, parallel to the ground the LCD, rotating clockwise (fast), should read “speed: 0” and “direction: hard right”. **FAIL**
4. Pressing the button should increment the speed by 5. **FAIL**
5. Incrementing the speed (pressing the button 16 times), the LCD should read “speed 80” and the green LED should come on. FAIL

The reason these tests fail is because my board WILL NOT initialize the gyro and/or the LCD which causes the tasks to never start. However, at some point (without changing the code, so not sure how it broke) the code was working.

No SystemView screen shot because the tasks WILL NOT initialize, instead I get stuck in:

A screenshot of a computer program

Description automatically generated

It wasn’t doing this until around 10PM on 3/15, at which no matter what I did would restore functionality of the code (again, despite not changing anything).

**Questions:**

Each task was scheduling as expected, but my code just random broke. I have no idea why. I tried automatic allocation, static allocation, different priorities. I can’t fix it.