Automated Microbial Analysis Weekly Meeting Notes

01/23/2020

* Group Members in Attendance
  + Bendt, Zachary
  + Bruslind, Jorian
  + Hall, Macklin
* Project Unknowns and Risks
  + Do we want to use a different motor driver that has limiting built in?
  + Do we want to continue using GRBL or find another solution?
  + Should we use an additional arduino dedicated to handling the encoders?
  + PCB for the optical sensors?
* Tasks from This Week
  + Zach
    - Interface Property Updates (1hr)
    - Discussed Controls coding (30 min)
    - Prepared Block 1 check-off (30 min)
    - Began building Graphic User Interface (2 hrs)
  + Jorian
    - Prepared for Block 1 check-off (1hr)
    - Troubleshoot AtTiny interrupt/serial signals (3hrs)
    - Designed motor node housing mounting (2hrs)
    - Designed distance sensor PCB (30min)
  + Mack
    - Discuss finalizations of Stepper Motor PCB (30 min)
    - Discuss plans for new PCB to encapsulate RPi, Arduinos, and relays (30 min)
    - Troubleshoot ATtiny econder transmission (1 hr)
    - Test power supply characteristics (30 min)
* Group Meeting Topics
  + Future meeting times
  + Updating Block diagram
  + PCB design
  + Meeting with Don to discuss changes of course expectations
  + Problems with the ATtiny and their solutions
* New Items
  + Documentation for the system has been updated and is now current
* Tasks for Next Week
  + Zach
    - Begin writing and testing controls G-code sent from RPi (4 hrs)
    - Draft CS details for client update email (1hr)
  + Jorian
    - Finish Main PCB control board and sensor board (1hr)
    - Create more stable end stop limit mounting points (2hrs)
    - Test stability fixtures for end effector (2hrs)
  + Mack
    - Continue to work on developing new PCB (1 hr)
    - Further improve block interface definitions (1.5 hrs)
  + Everyone
    - Do good; don’t do bad.
* Hours This Week

|  |  |  |  |
| --- | --- | --- | --- |
|  | Total Hours | Hours w/ Team | Hours Helping |
| Bendt, Zachary | 4 | 1 | 1 |
| Bruslind, Jorian | 6.5 | 2.5 | 2.5 |
| Hall, Macklin | 2.5 | 2.5 | 2.5 |