Automated Microbial Analysis Weekly Meeting Notes

3/12/2020

* Group Members in Attendance
  + Bendt, Zachary
  + Bruslind, Jorian
  + Hall, Macklin
* Project Unknowns and Risks
  + Increased disruption of the Chinese PCB industry due to delays caused by CoronaVirus.
  + What should the enclosure look like? How should it be laid out?
  + PCB for the optical sensors?
* Tasks from This Week
  + Zach
    - GUI Integration (6 hrs)
    - Assembling testing enclosure (2 hrs)
    - Project Management tasks (2 hrs)
  + Jorian
    - Laser cutting enclosure parts (4hrs)
    - 3D printing enclosure parts (2hrs)
    - Preparing System checkoff videos (2hrs)
  + Mack
    - Finished assembly of Main PCB (30 min)
    - Troubleshooting motor encoder feedback (1.5 hrs)
    - Troubleshooting ATtiny85 serial output (1 hr)
* Group Meeting Topics
  + Motor encoder signal flow
  + Strategies to implement physical limit switches
  + Reverse kinematic calculation techniques
  + Scaling reverse kinematic solutions to our machine
* New Items
  + Motor encoders now report motor position accurately
  + Main PCB now fully assembled
* Tasks for Next Week
  + Zach
    - Vacuum Pump integration into GUI automation controls (1 hr)
    - Troubleshooting automation controls (4 hrs)
    - Finals
  + Jorian
    - Mounting ABS panels (2hrs)
    - Cutting ABS panels (4hrs)
    - Printing final enclosure parts (2hrs)
    - Mounting enclosure parts (2hrs)
  + Mack
    - Implement vacuum pump with Main PCB
    - Implement camera LED with Main PCB
    - Re-implement homing process with new chassis
  + Everyone
    - Do good; don’t do bad.
* Hours This Week

|  |  |  |  |
| --- | --- | --- | --- |
|  | Total Hours | Hours w/ Team | Hours Helping |
| Bendt, Zachary | 10 | 4 | 4 |
| Bruslind, Jorian | 8 | 4 | 4 |
| Hall, Macklin | 3 | 3 | 3 |