Automated Microbial Analysis Weekly Meeting Notes

3/5/2020

* 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
    - PCB Assembly (1.5 hrs)
    - Controls Testing (5 hrs)
  + Jorian
    - PCB Assembly (2hrs)
    - PCB Troubleshooting (1hr)
    - Mechanical Assembly (4hrs)
  + Mack
    - PCB Troubleshooting (5.5 hrs)
    - PCB Assembly (2.5 hrs)
* Group Meeting Topics
  + Troubleshooting TMC2209 stepper driver issues
  + Strategies to implement physical limit switches
  + Reverse kinematic calculation techniques
  + Scaling reverse kinematic solutions to our machine
* New Items
  + System now capable of moving using new PCBs: <https://drive.google.com/open?id=13c1x6EY7PM9deQItWoW2seTo6jeSGhhQ>
  + All Stepper PCBs now assembled
  + Reverse kinematic code now working
* Tasks for Next Week
  + Zach
    - Continue integration of controls code into GUI (5 hrs)
    - Continue Testing Controls and Pick-and-Place functionality (5 hrs)
  + Jorian
    - Help with kinematics code and general testing (4hrs)
    - Print and assembly casing units for PCBs (3hrs)
  + Mack
    - Complete Main PCB assembly (1 hr)
    - Help scale reverse kinematic solution to our system (1.5 hrs)
  + Everyone
    - Do good; don’t do bad.
* Hours This Week

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| --- | --- | --- | --- |
|  | Total Hours | Hours w/ Team | Hours Helping |
| Bendt, Zachary | 6.5 | 6.5 | 6.5 |
| Bruslind, Jorian | 7 | 5 | 5 |
| Hall, Macklin | 8 | 7.5 | 7.5 |