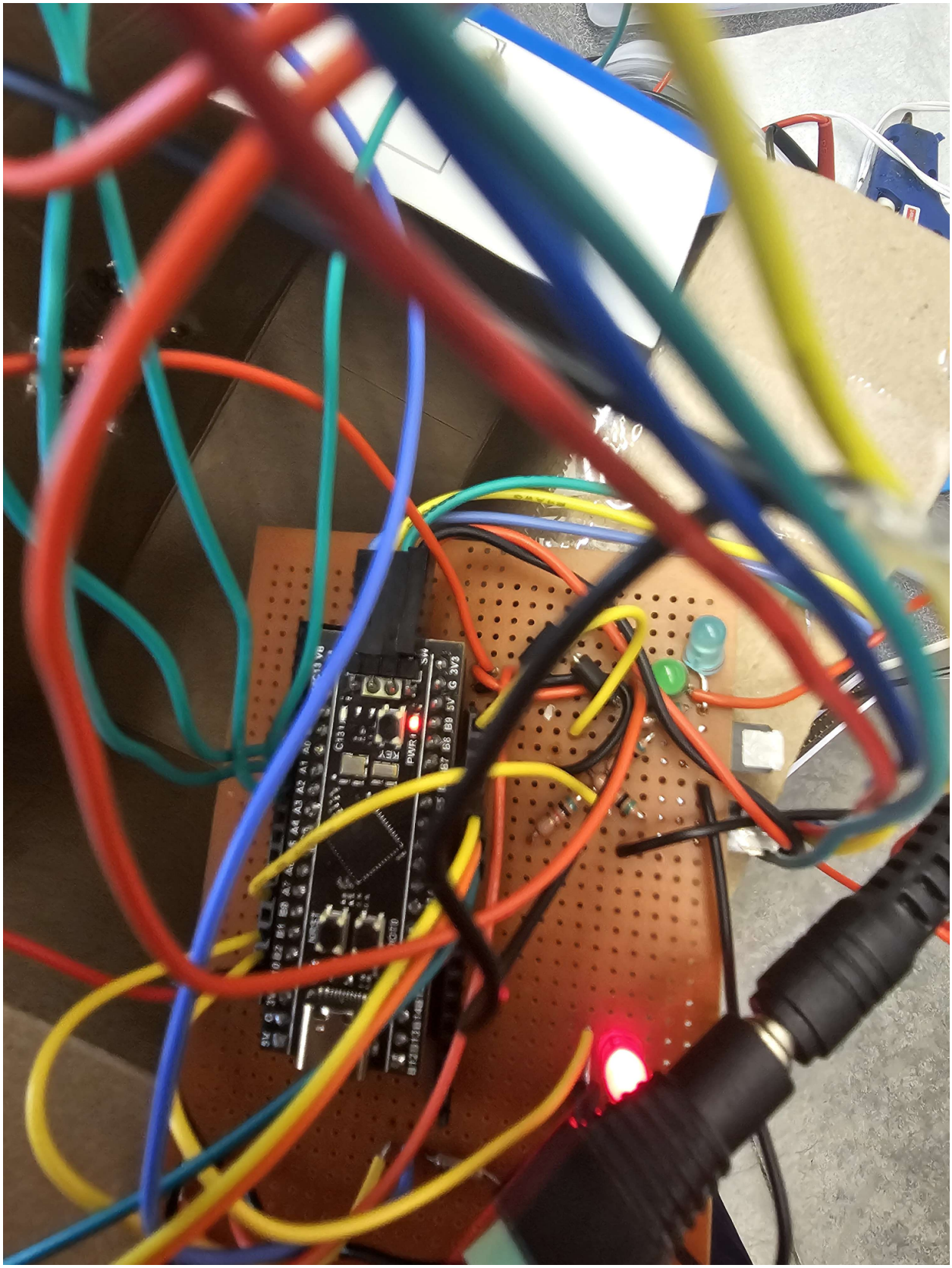
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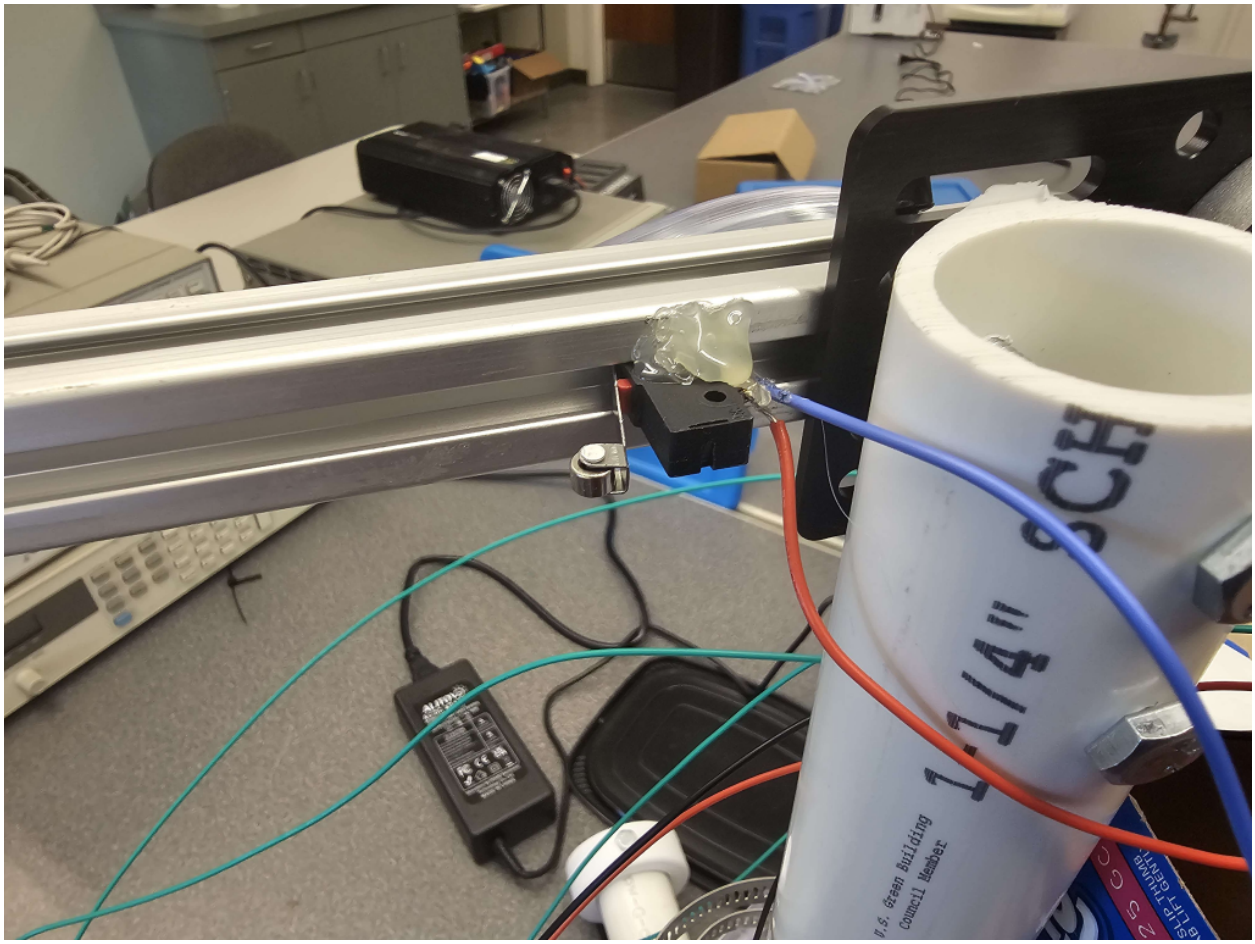
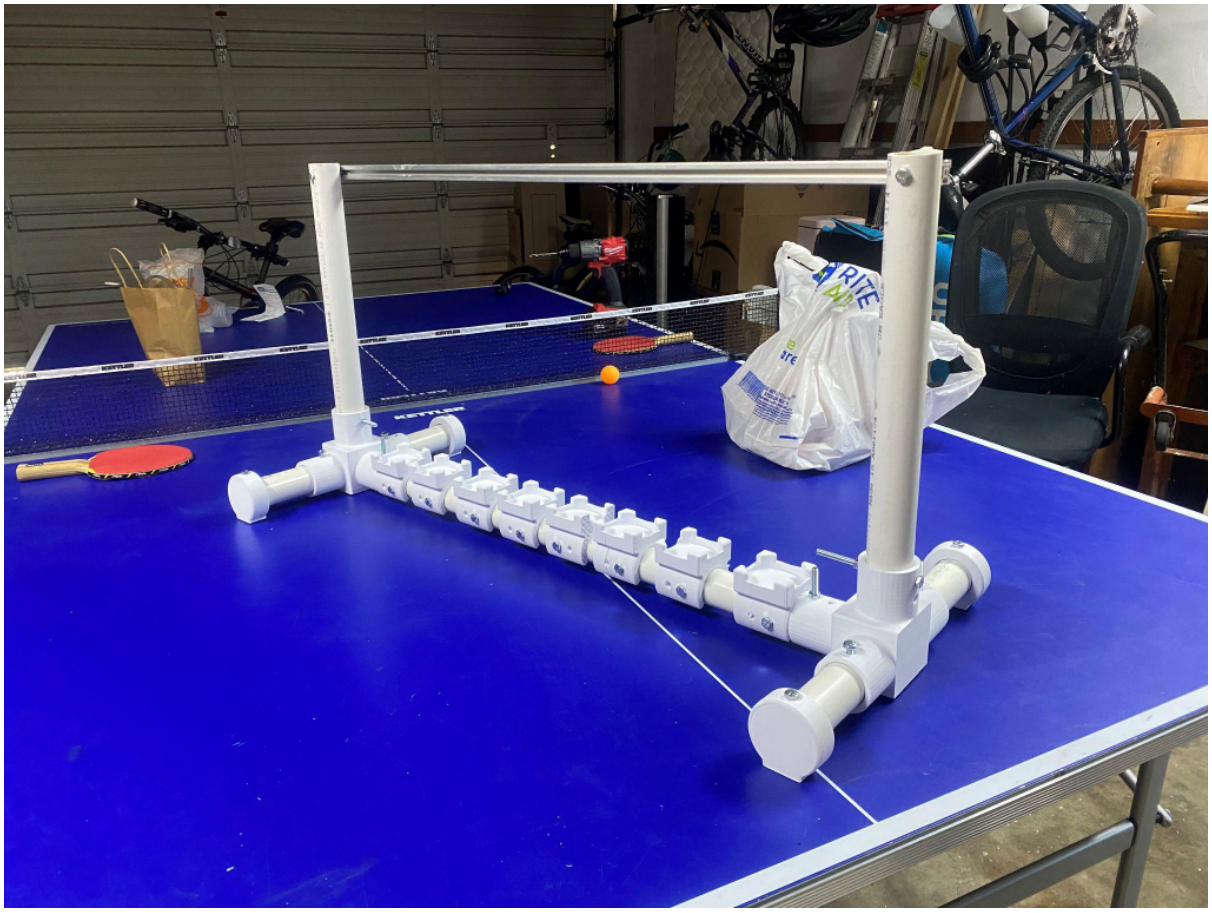
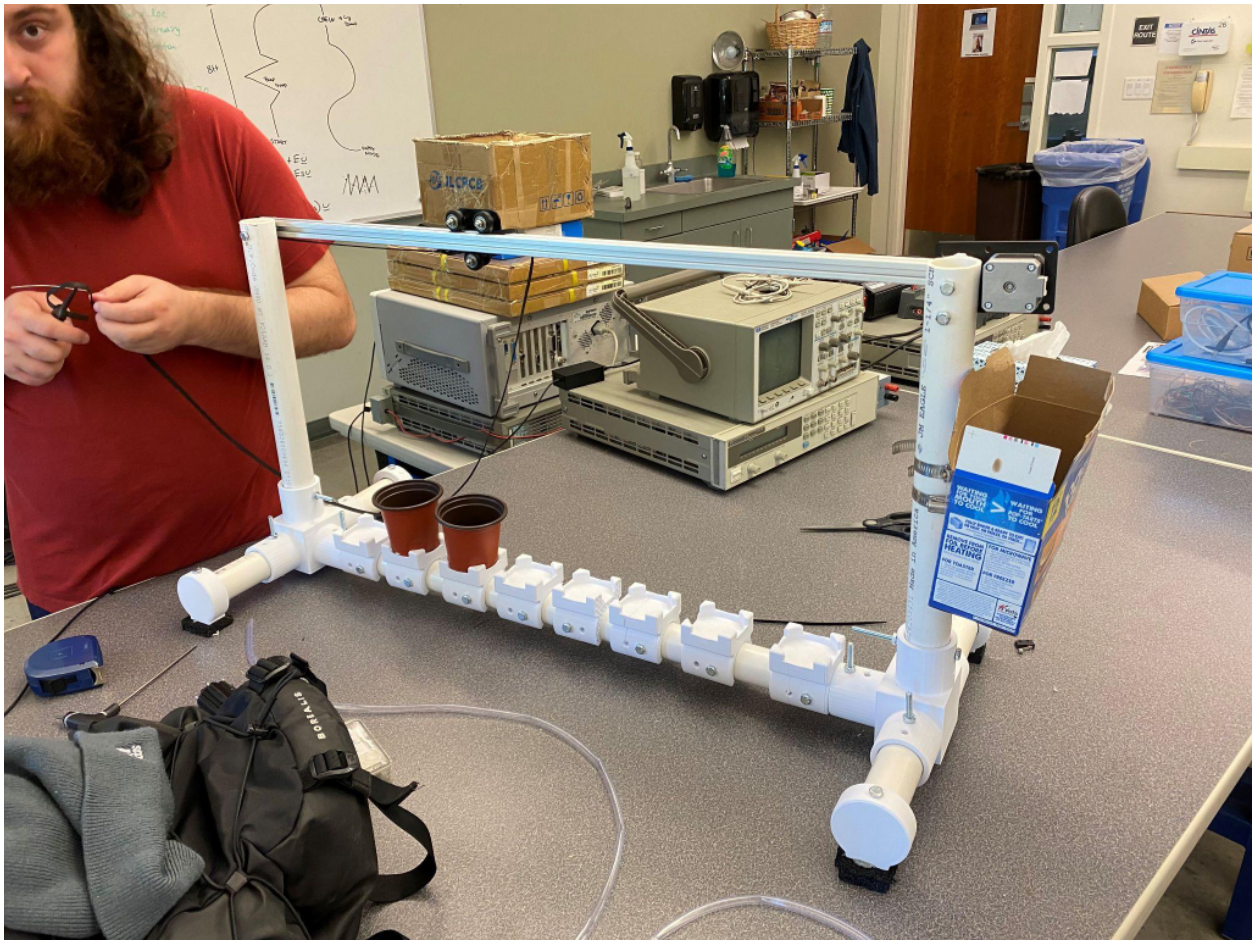
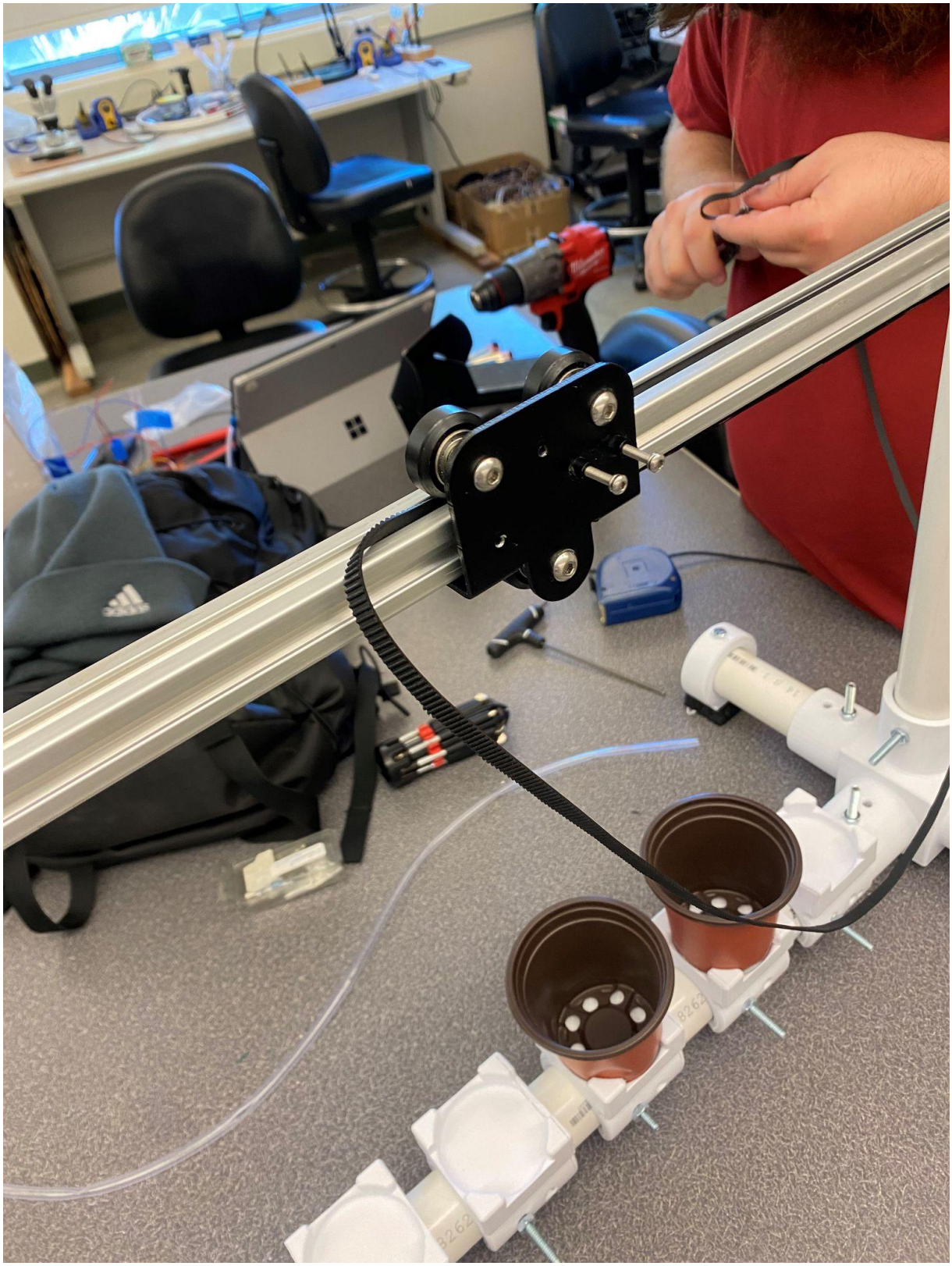
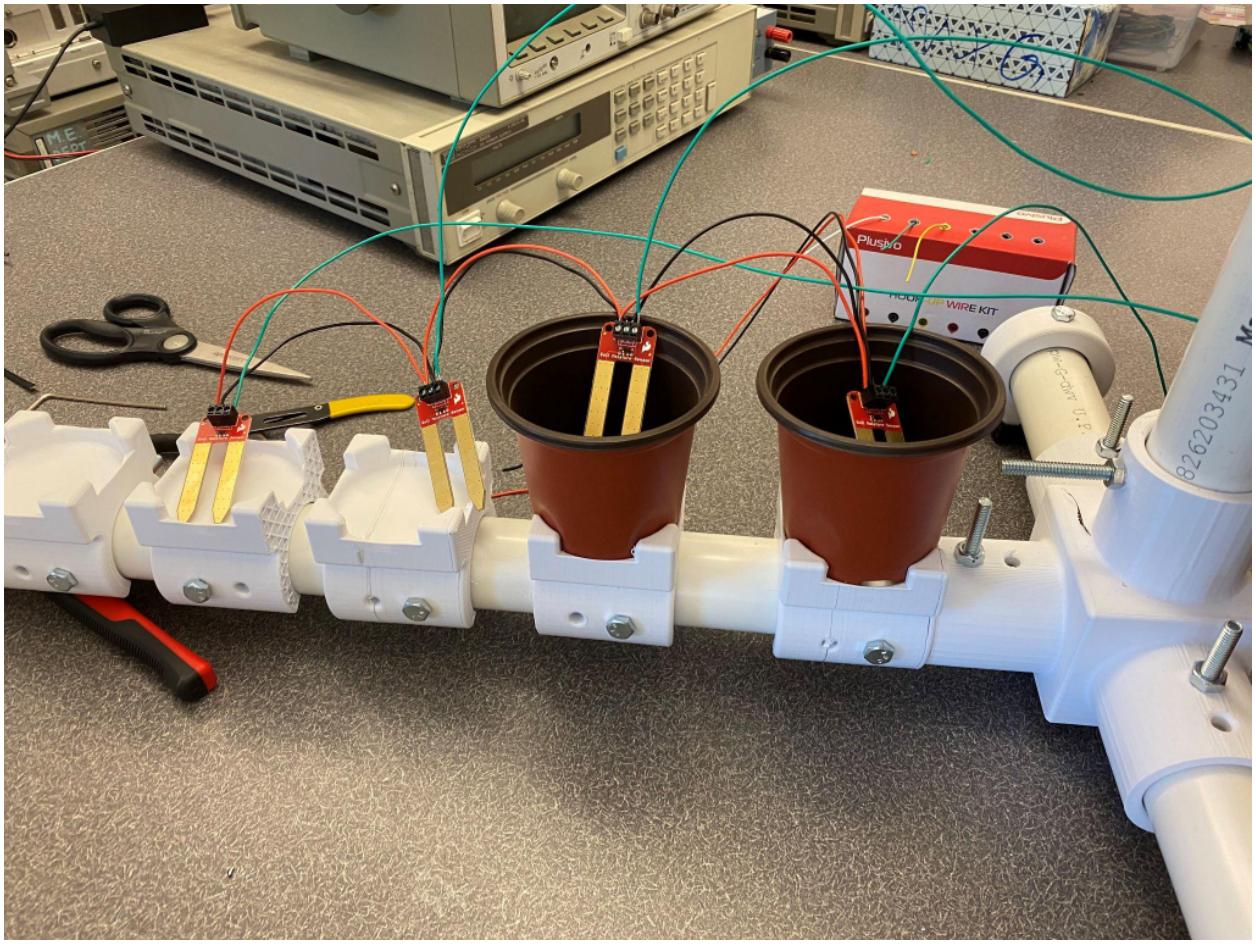
SW
3V3
5V
G


1 1/4"
U.S. Green Building
Council Member








Plusivo
WIRE KIT
826203431


WARNING
WARNING
adidas
STACKED
Frozen

Additional ‘Rubric Specific’ Comments:

Note: I am including this section as a failsafe. If I missed something elsewhere that was required I will be sure to have it here. There may be some redundancy but that is something I have simply accepted. I will respond to some of the statements/questions on the rubric as appropriate.

I also want to take this opportunity to remind whoever is grading me that this was supposed to be a 2 person project that I did mostly without a partner with minimal accommodations/adjustments made for that. This includes more than just the project as I had to make the portfolio and memo by myself too. I trust that my final grade will reflect this.

Performance/Functionality:

- Have you diagnosed the problems that occurred?
    - In a way I have. I have identified several current problems but it is not clear how many problems will arise once the first set is resolved. I would say I have diagnosed the available problems but not all of the problems.
- What was the root cause for each issue?
    - Regarding the issues that have been identified, the root cause is also clear. More generally the root cause of any problem I have is my lack of a partner and lack of plentiful experience in the field.

Features/Objectives/Challenges/Workarounds:

- What features did you set out to include?
    - Initially we set out to include a robot that could handle a 2D grid of small plants and maintain them both in terms of watering and light. We ended up implementing a 1D grid without light, but this still maintains the core concept and only needs to be placed near a window to function fully.
- Does the scope of work scale properly with your group's size?
    - Yes, when there were 2 of us and we thought it was a 7-8 week project the plan included LED grow lights, and a 2 axis grid of pots. When we realized it would be a 4-5 week project we removed the grow lights (with the potential to add them back later) and switched to a 1 axis grid. When the group size switched to 1 the custom PCB requirement was lifted. The scope has naturally rescaled itself several times to match the group size and timelines.
- If your team found roadblocks or challenges, how effective was your team at overcoming the issues?
    - There were many such scenarios where roadblocks/challenges had to be overcome. I think I was very effective considering my limited background,

but rather ineffective without that consideration. A good example of this can be found in Terak's portion of the mechanical hardware section above.

- Did you learn from the issues for the future?
    - Yes, absolutely I did. For example I have a personal project that has been on hold for quite some time. I am building myself a microphone for my PC. I had been having issues with the assembly of the circuitry when I last worked on it. As the circuitry is well defined and rather simple I feel that I can make a custom PCB in fusion and have it fabricated so I can ensure the circuit is connected properly. This is something I certainly would not have been able to do (without asking a friend to do it for me) a few months ago. This concretely indicated I have learned from this experience and can use my new (limited) skills going forward.
    - Additionally, my most valuable takeaway here was my new knowledge about what aspects of applied mechatronics fit into the following categories: things I am capable of doing on my own without issue, things some people consider trivial but I struggle with, and things that I have no business doing myself in any sort of professional setting.

Videos/Attachments:

- Can the bot move properly on its own accord?
    - Nope…. I asked Charlie what I should do regarding the video due to the fact that it isn't working and he told me to take a video giving new angles and perspectives of the build so that is what I did.
- Does the "deadman" switch work properly?
    - Too well. The man has died and like many instances of death it seems permanent.

Note: I am fairly sure I exported the code correctly, If not let me know and I can resubmit that part fairly easily.