

EE/CprE/SE 491 - WEEKLY REPORT 9

November 8th- November 14th

Group number: may25-32

Project title: MicroCART mini: Microprocessor Controlled Aerial Robotics Team

Client &/Advisor: Dr. Phillip Jones

Team Members/Role:

- Daniel Zaucha: Client interaction, Communications Lead
- Jonah Upah: Hardware Lead, Team Secretary
- Ryan Lowe: Technical Advisor
- Yi Hang Ang: Software Lead

Weekly Summary

This week, Daniel went through the health sheet for the CrazyFlies and the radio dongles. When going through some of the crazyflies, some, despite having been marked as non-flashable, were in fact flashable, while other problems were noted and as such, the crazyflie spreadsheet is now officially updated to display the current health of the mini quadcopters and radio dongles.

Currently the goal is to get all crazyflies into the green, while also fixing some other issues such as radio dongles not working properly and battery connections not fitting properly. As a group we have met up to discuss the problematic week we have been having and have come to an understanding and reorganized ourselves for the future.

Past week accomplishments

- Daniel Zaucha
 - Worked on class assignments
 - Went to Lab on Thursday, Monday, Tuesday
 - Went through Drones & radio dongles - Checking health & fixing them
 - Guided advisory meeting
- Jonah Upah
 - Nothing, Was not on campus this last week.
- Ryan Lowe
 - Beginning work on implementing the improved packet structure that was proposed by last years team
 - Having issues with getting started on this and have reached out to last years team for some guidance. No response yet, but hopefully in the next couple days will get an email back
 - Looking at last year's documentation such as their final reports to get more insight, but not helping too much
- Yi Hang Ang
 - Worked on in class assignments
 - Created GitLab issue board

Pending Issues/tasks

- Fix issues on git board
- ETG room fixes for equipment

Individual contributions

NAME	Individual Contributions	Hours this week	HOURS cumulative
Daniel Zaucha	<ul style="list-style-type: none"> • Crazyflie health updating <ul style="list-style-type: none"> ◦ Fixing also • Documenting bugs and solutions found 	R:3.5 + Sat:1 + M:2 + T:1.75	55.25
Jonah Upah		0	33
Ryan Lowe	<ul style="list-style-type: none"> • Getting started on implementing the proposed packet structure. • Reached out to the previous year's team for insight on some questions I had on this task. 	5	37
Yi Hang Ang	<ul style="list-style-type: none"> • Worked on in class assignments • Created GitLab issue board 	R:4 + T: 2	44

Comments and extended discussion

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Plans for the upcoming week

- Daniel
 - Crazyflie health
 - Ongoing Documentation:
 - MP4 Document that shows where students can find what is needed.
 - GitLab issues
- Yi
 - GUI debugging and testing with Daniel
 - Testing all CrazyFlies' health status
 - Debug CF Adapter / CF Groundstation Python code
 - Figure out where the issue is for time traveling packets
- Ryan
 - Hopefully will get an email back from last years team that will help us move forward with the new packet structure they wanted to implement last year but never got to.
- Jonah
 - Backend
 - GUI
- Group Plan:
 - Complete Tasks/issues that we are assigning and claiming on the git
 - Observed issues & solutions document sheet
 - PCB Needs document

Summary of weekly advisor meeting

In regard to logistics, sort out physical parts of the project and make sure they are up to par; the batteries, crazyflies, and radio dongles. Need to switch and actually work on the project itself, not just logistics. Work sub-teams and roles might need to be readjusted (Switched - Yi: Hardware lead => Software lead, Jonah: => Hardware Lead, Ryan: => Technical advisor). Work times need to be adjusted so that the team will work with itself and not individually. (Adjusted, Thursday times that work for everyone, & Sunday times which are better than Saturday times)