

Senior Design May 24, 32

MicroCART Senior Design Team

Week 29 Report

Apr 19 - Apr 26, 2024

Faculty Advisor: Philip Jones

Members:

Justin Kenny - Scribe

Steve Frana - Technical Lead

Trevor Friedl - Project Manager

Travis Massner - UI/UX Designer

Clayton Kramper - Technical Lead

Will Maahs - Team Organization Lead

Links

- [Shared Google Drive Folder](#)
- [Crazyflie Status](#)
- [Needed Documentation](#)
- [YouTube Slides/Scripts](#)
- [Git Branch Status](#)

Summary of Progress this Week

We have continued to work on documentation, some of the documentation that is ready for review is listed below. We have also been working on the final deliverables for 492, and with our demo recording and final clean-up this weekend we should be able to finish that.

The Git Branch Status linked above shows the current plans for all branches on the git repository. Submodules and LFS have been permanently removed from the develop branch, and the crazyflie firmware can still be compiled correctly. Develop also contains the separate folders for lab part 1 and lab part 2. Once our final presentation and demo are finished, we will test develop, incorporate any final changes, merge to master, and generate a new VM.

Pending Issues

- Why doesn't changing timeout in firmware work?

Individual Contributions

Member	Contributions	Weekly Hours	Total Hours
Justin Kenny	<ul style="list-style-type: none"> • Worked on Final Deliverables. • Participated in the practice presentation. • Removed submodules from develop for good. • Finished slides and script for Summary and Next Steps video. 	12	197
Steve Frana	<ul style="list-style-type: none"> • Documentation • Practice Presentation 	6	156
Clayton Kramper	<ul style="list-style-type: none"> • Worked on final deliverables • Began updating documentation on creating VM snapshot with Grant's fix 	2	134
Travis Massner	<ul style="list-style-type: none"> • Met with 488 TA for blue light of death fix • Began putting together documentation for crazyflie broken fixes • Looked into broken power button parts 	4	137
Will Maahs	<ul style="list-style-type: none"> • Documentation for pycrocart and submodules • Created Git Issues based off of MP-4 Feedback • Debugging C++ GUI 	5	151
Trevor Friedl	<ul style="list-style-type: none"> • Exported copy of most recent lab VM and shared it with Dr. Jones • Worked on final deliverables for 492 presentation • Updated wiki documentation 	5	141

Comments and Extended Discussion

Documentation ready for review:

- MP4 timeline wiki page
- Git structure and workflow wiki page

- Summary and next steps script and slides.

Plans for coming Week

- Review finished documentation and post any feedback for next revision.
- Incorporate feedback from MP4 into final VM iteration to give to next year's team.
 - Post MP4 crazyflie status check.
 - Refactor default time values for log blocks.
 - Getting rid of the shared_folder
- Finish cleaning up the Git repository.
- Determine if timeout is actually the issue with dropped setpoints.
- Finish and submit final deliverables.
- Add a diagram of users/usage of overall system early in the presentation
- Change slides to 20 pt font
- Add slide numbers.
- Change testing slides to focus more on experiments we run/test stands.
- Mock walkthrough of fresh MicroCART team startup process.
- Reorganize YouTube channel to be more intuitive.