

Senior Design May 24, 32

MicroCART Senior Design Team

Week 9 Report

October 9 - October 16

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](#)
- [Tentative Project Gantt Chart](#)

Summary of Progress this Week

We have been watching the training videos on the MicroCart YouTube channel, specifically the longer backend video and the GUI editing video. We have begun diving in-depth into the backend code, and have been generally gearing up to begin completing the first set of tasks, generally aimed at improving MP4 in general and the GUI in particular. We have begun completing the Engineering Design Document assignment.

Pending Issues

- Reach out to previous MicroCART members (Austin)
- Which deck is the lighthouse deck?

Individual Contributions

Member	Contributions	Weekly Hours	Total Hours
Justin Kenny	<ul style="list-style-type: none"> ● Worked on Engineering Design doc, slides, and recording ● Spawned each ground station process independently to look at interaction ● Digging around in backend code ● Attempted to run last year's demos (missing lighthouse information) ● Started up Pycrocart GUI 	6	32
Steve Frana	<ul style="list-style-type: none"> ● Watching more MicroCart youtube videos to understand backend ● Thoroughly checked the codebase with my knowledge of the backend. ● Set up Pycrocart GUI with MP-4 ● Running and improving upon my implementation of MP-4 part 2 code 	5	27
Clayton Kramper	<ul style="list-style-type: none"> ● Finished working through MP-4 pt2 ● Watched backend code video ● Watched MicroCart YouTube videos ● Got new student id for room access 	4	20
Travis Massner	<ul style="list-style-type: none"> ● Continued working on MP-4 lab part 2 ● Watched more MicroCART YouTube videos ● Looked at GUI with Qt Creator 	4	23
Will Maahs	<ul style="list-style-type: none"> ● Made progress on part 2 ● Backend videos ● Tried to recreate GUI lagging on my machine with no success ● Started analyzing the crazy fly GUI code <ul style="list-style-type: none"> ○ gain understanding of the code ○ thinking of ways to improve it 	8	24
Trevor Friedl	<ul style="list-style-type: none"> ● Part 2 of MP-4 still needs some work <ul style="list-style-type: none"> ○ Had some apartment issues pop up this weekend that prevented me from being able to be present within the lab ● Started to look into how backend is configured 	4	21

	<ul style="list-style-type: none">○ Read through documentation found on the GitLab page○ Watched a youtube video explaining the integration of the GUI using QT● Started to look into how to add information to the team website		
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Comments and Extended Discussion

Plans for coming Week

- Watch remaining instructional videos in the bootcamp **(High)**
- Make Pycrocart GUI MP-4 viable and determine how to slot it into infrastructure. **(High)**
- Edit current GUI to improve error handling with backend interactions. **(High)**
- Combine crazyflie groundstation and crazyflie adapter using cflib. **(High)**
- Get last year's demos running **(Medium)**
- Begin to consider changes to make for MP-4 lab documentation to push towards improvements **(Medium)**
- Add team information into the team website **(Low)**