

Test Plan & Results

I have not actually gotten to writing code for any of my functional tests as of yet.

Project Standing

This week I created all of the tasks and necessary OS resources/defines for my code. I realized during implementation of my LED task that it would be easier to implement two different LED tasks that turn on and off the LEDs respectively and that used an OS timer delay to implement my LED blinking with a given duty cycle. So I updated my task diagram to reflect this change.

I also thought that it would make sense to add an additional data structure to hold necessary information for the LCD task that the Landing Task could update and the LCD task would use for output. I updated my task diagram to reflect this change as well.

As of now, my project will not run in Simplicity because the full task communication and blocking/yielding functionality has not been implemented yet.

I estimate that I have completed roughly 15% of my currently-scoped work (6 hours out of 40) in about 25% of the initially estimated time (9 hours). Redesigning my task diagram took roughly an hour, and coding to get back took roughly 4 hours (with ~4 hours of initial coding before my initial project was lost).

In-Scope Work Items

My scope items include creating and implementing the following tasks: Fuel Control, Angle of Attack Task, Physics Engine Task, Landing Task, LCD Output Task, and the LED ON/OFF task.

I anticipate that the Fuel Control task will take roughly 2 hours to implement, the Angle of Attack Task will take roughly 4 hours, the physics engine will take 10 hours, the landing task will take 4 hours, LCD task taking 6 hours, and the LED On/Off tasks taking 2 hours. Aside from task creation and implementation, I anticipate that I will spend roughly 6-8 hours debugging my different tasks.

All in all the project, from start to finish, should take at most 36 total hours. Though I am adding 4 hours to the total finish time because that was the amount of time I spent on my project before my computer's hard drive died. So after I have completed the project I should have spent a total of 40 hours on it.