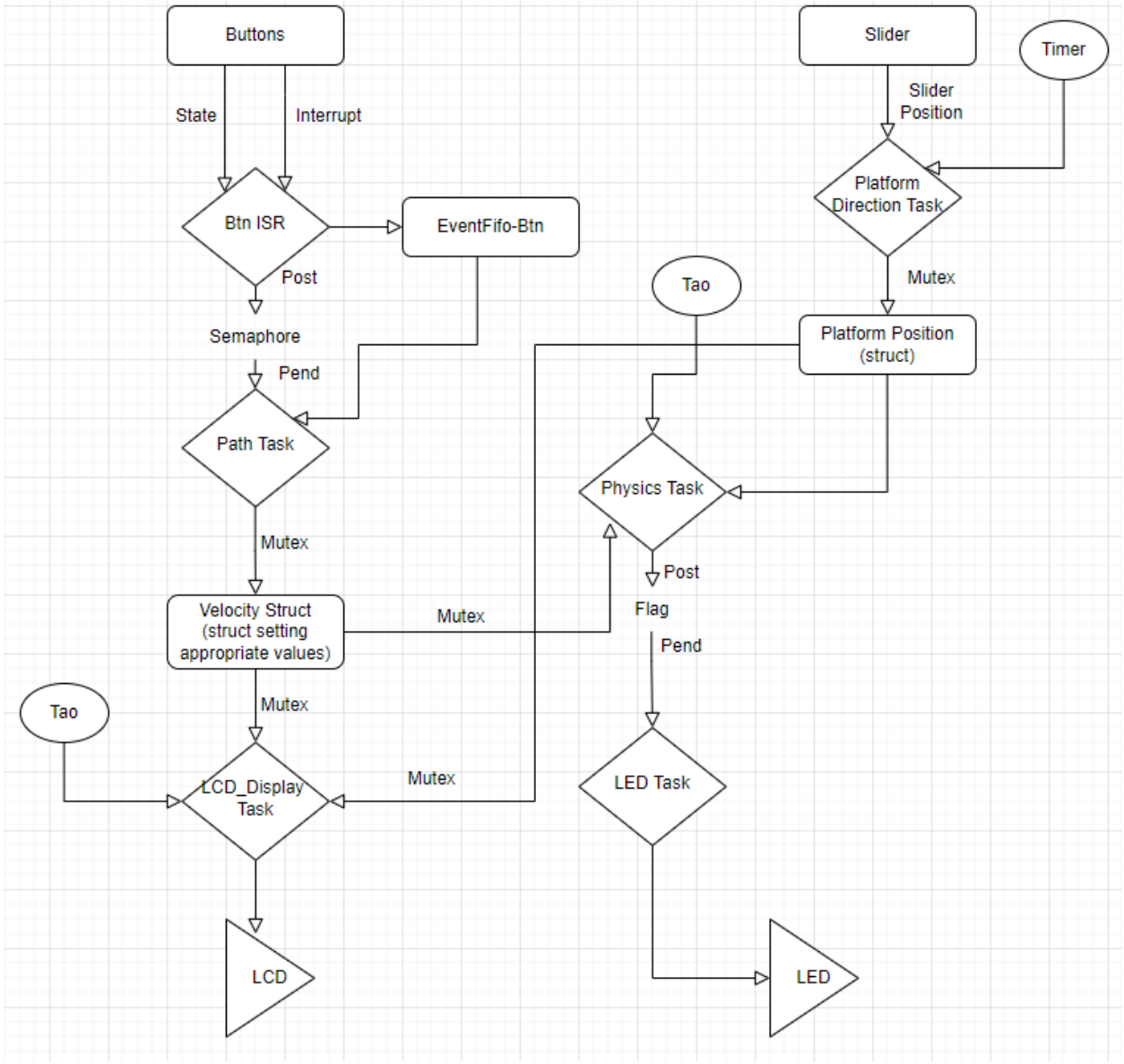
Justin Robert

Project Week 3

Task Diagram:



Unit Testing Codes:

- Platform Direction Tests:
- Test if platform doesn't move when force is applied and velocity is 0
- Test is platform maintains nonzero velocity when no force is applied
- Test if platform increases velocity when force is applied in the same direction of the velocity
- Test if platform decreases velocity when force is applied in the opposite direction of the velocity
- HM Tests:
- Test if HM screen is the same as the Platform Direction given
- Test LEDs turnon when HM crashes
- Test both functions of each LEDs. Left LED current force magnitude, Right LED showing MAX_FORCE
- Error HM Tests:
- Test to make sure CapSense works with new setup
- Test to make sure PushButtons work with new setup
- Test physics (later on)

Project Stands:

This week I did the unit test coding. I did 10 tests but only about 3 and a half (the half is basically almost done) have passed, and started on all tests overall. I also added one risk register that occurred throughout the week.

Summary - I have completed 85% of my currently-scoped, estimated work (6 actually spent /7 hr total estimate) in 100% of the initially-estimated time. (6 estimated for the items I have completed, of 6 hr total estimate). For the work that has been completed, I took about 1.15x as much time as I estimated.

Last week during spring break I did a lot of coding which I added to this current week. I wish that I had known what to do a little bit more before starting, because the unit tests format was a bit confusing and I finally understood the concept once going to office hours. I didn't think that all of this unit tests would take this much time but it did and I did go through and did the amount of time I thought, but it was a bit more than I originally thought

List of in-scope work items:

- Last Week

  During spring break I did a basic understanding of the equations that are needed in the project. I just didn't understand what to do with it.
- This Week

  I went to office hours and understood what to do with it after, which would be to use vscode and do similar tests to lab 4 and 5. What I specifically did this week was to control LED PWM with the slider. As well as create tasks and test them on Segger. So far it seems to be working as I thought and it was somewhat simple to implement.

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Still many of the tasks are not fully completed

Risk Register:
(No Registers Added This Week)

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	**Item**	**P**	**I**	**Risk (P*I)**	**Recognized**	**Mitigated/ Resolved**	**ROAM**	**How**		Justin Robert			
2	Late office hours so I could not get to them			4	8-Mar-22	Resolved	R	Since I didn't have class afterwards, just come later					
3	Office hours were same time as this class lab			200	6-Mar-22	Mitigated	M	Decided to go to other class office hours but instead went to more office hours this week					
4	Slept during office hours			120	15-Mar-22	None	A	I fell asleep and that was my bad, got little sleep					
5	Test during lab			200	13-Mar-22	Mitigated	M	Went to office hours as long as lab was					
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