**Test Plan and Results**

I plan on implementing the following Unit Tests to verify functionality of my project:

* My angle of attack never surpasses 90 degrees in either direction
* I can’t use fuel after my fuel tanks run out
* The duty cycle when in the Blacked-Out range, is 50% with a frequency of 3Hz
* Game over conditions trigger a 50% duty cycle at 1Hz
* In healthy flight, the duty cycle of the LED output is the percentage of the blackout velocity
* All 4 capacitive sensors can be detected independently
* The two buttons increment and decrement the fuel burn rate in the same linear quanta
* The game ends when the ship hits either of the sides of the LCD
* The quanta of fuel burned per time quanta can never be greater than the total amount of fuel in the ship
* The ship cannot be piloted during a pilot black out

All of the tests before this are not currently run as none of the tests have tasks in working condition yet.

**Project Standing**

I currently have no deliverables and have limited functionality. I created my task diagram to define the tasks I need to create my project and the resource management needed to keep conflicts away.

I have completed ~**5%** of my scoped work, (2/40 hours) in roughly 2 hours which is approximately the amount of time that I had expected to spend on this assignment.

**In-Scope Work Items**

My scope items include creating the following tasks: Fuel Control, Angle of Attack Task, Physics Engine Task, Landing Task, LCD Output Task, and the LED output 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 2 hours, and each of the LCD and LED output tasks to take 2 hours.