Progress Report 5

Progress summary:

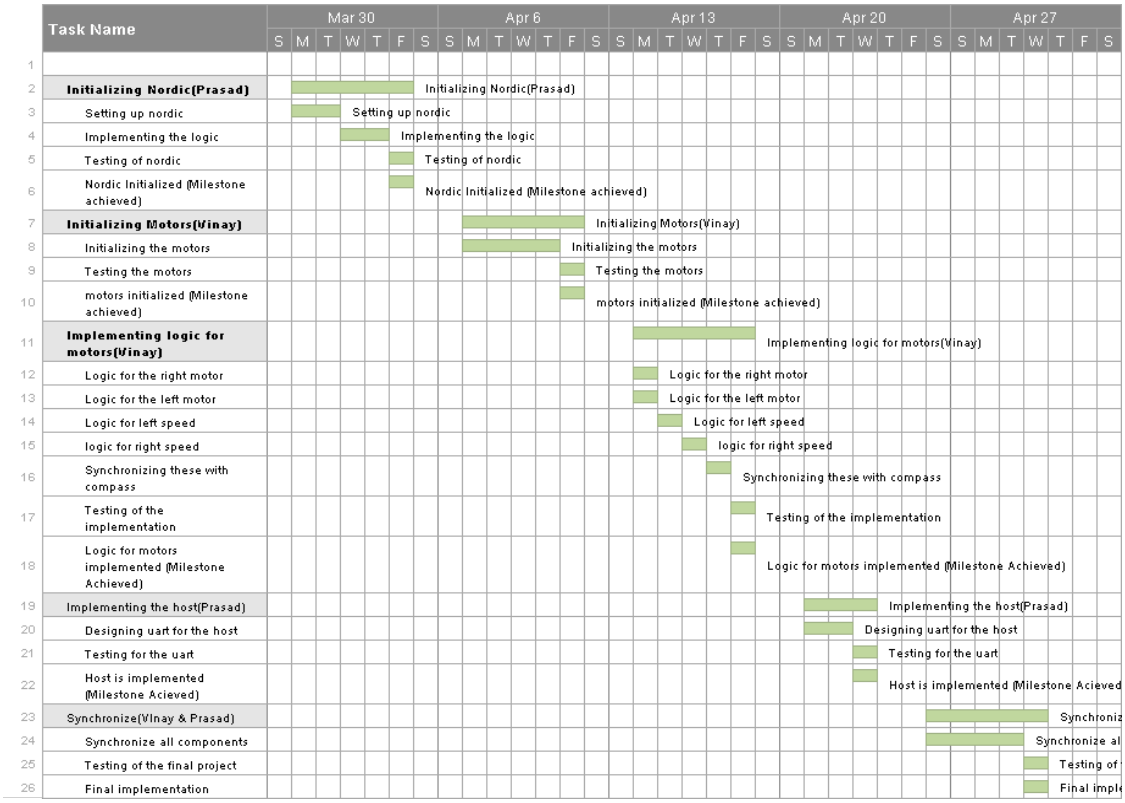
This week we basically focused on fine tuning the project and fixing bugs by testing it for a number of values. We have implemented the objectives that we had set up.

Milestone challenges:

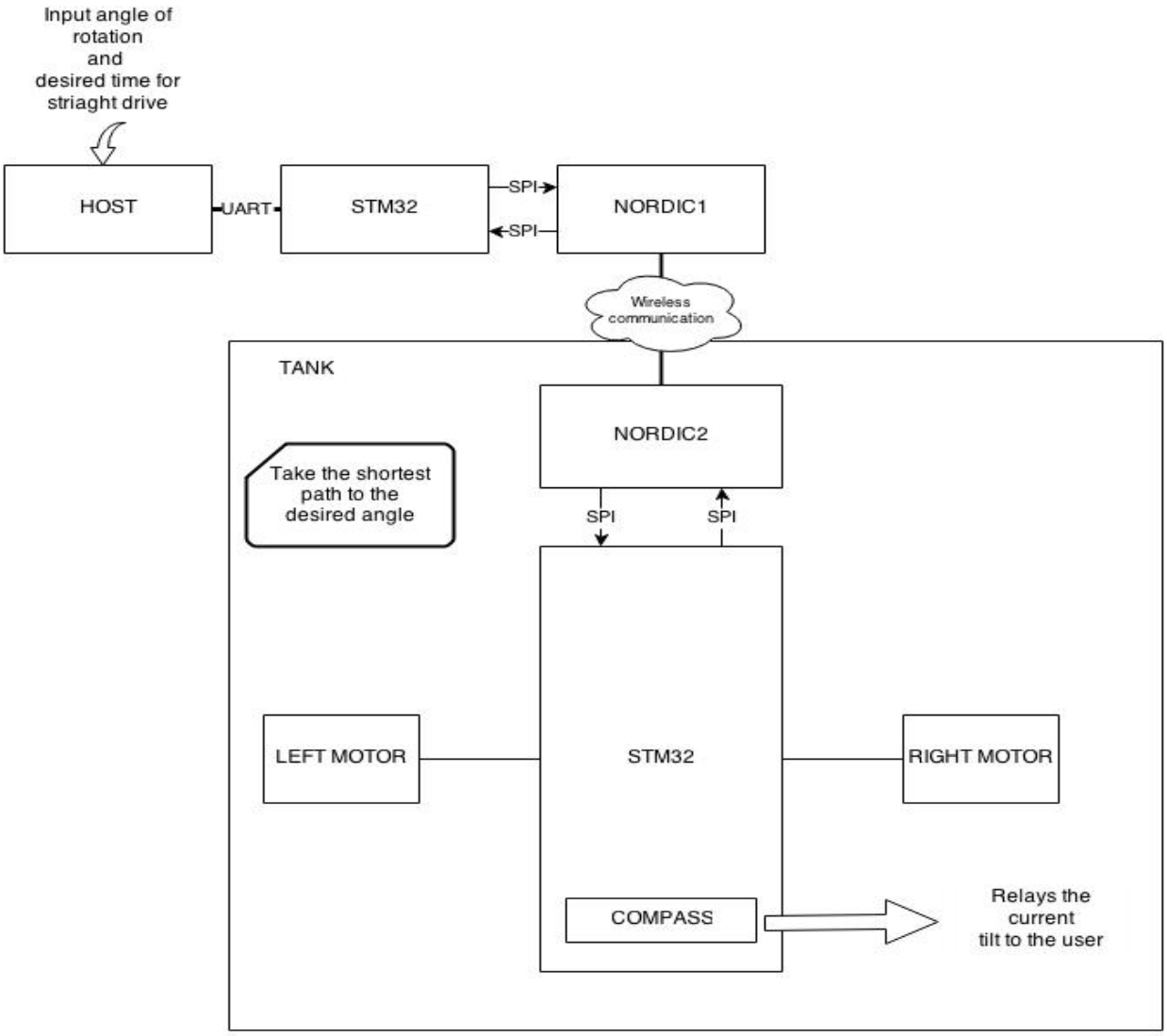
Upon testing, we found that the device was malfunctioning for the cases which finished before the program looped out. This caused synchronization errors and the program would get stuck in a while loop which determined if there was data on the channel to receive. We finally fixed this bug by repeatedly sending an EOM message to the receiver. And we finally figured out why the receiver would hung up in the middle of the execution and rectified the error. The receiver essentially waits for the AUTO-ACK sent by the transmitter. If the receiver misses it, it gets stuck in the loop. This we resolved by programming the transmitter to send the AUTO-ACK message once again.

Updated Milestones:

We have completed all our major Milestones in a timely manner.



Blockdiagram:



Technical Profile:

Category	Design Objective	Deliverable	Status
Power	Battery life	Based on the usage	Completed
Power	Battery availability	Uses commercially available AA batteries or any other batteries	Completed
Communication	Wireless Link	The wireless modules should communicate with each other	Completed
Communication	Tank movement	Device and the host should reliably communicate	Completed
User Interface	Command line access	An interface that will help user to communicate with the device	Completed
User interface	Device updates and information	Relays the status to the user	Completed
Movement	Device moves to the absolute or relative user input angle	Device should turn at the desired angle of rotation	In progress
Mechanical	Environmental	Device should be run under suitable condition	Completed