

Progress Report 3

Progress summary:

We are well behind the deadlines that we have set. We are trying to establish communication with Nordic when the two Nordics are on different boards. We are stuck at a point where according to us the logic of the program is accurate, and the program is running when compiled separately. However, they do not seem to communicate with each other when connected together.

Weekly goal:

We wanted the Nordic to be functioning and we also wanted our motors configured by this week. The Nordic should have been able to send data from one STM board to the other STM board.

The next part that we wanted was the motors working using pulse wave modulation. The power to the motor would be given using timer register. This power can then be varied so that we could control the speed of the car.

Milestone challenges:

- We are not able to communicate with the host and the node.
- We have made header files for the timers, however we are getting a lot of errors in the initialization. However we will fix this in a couple of days.

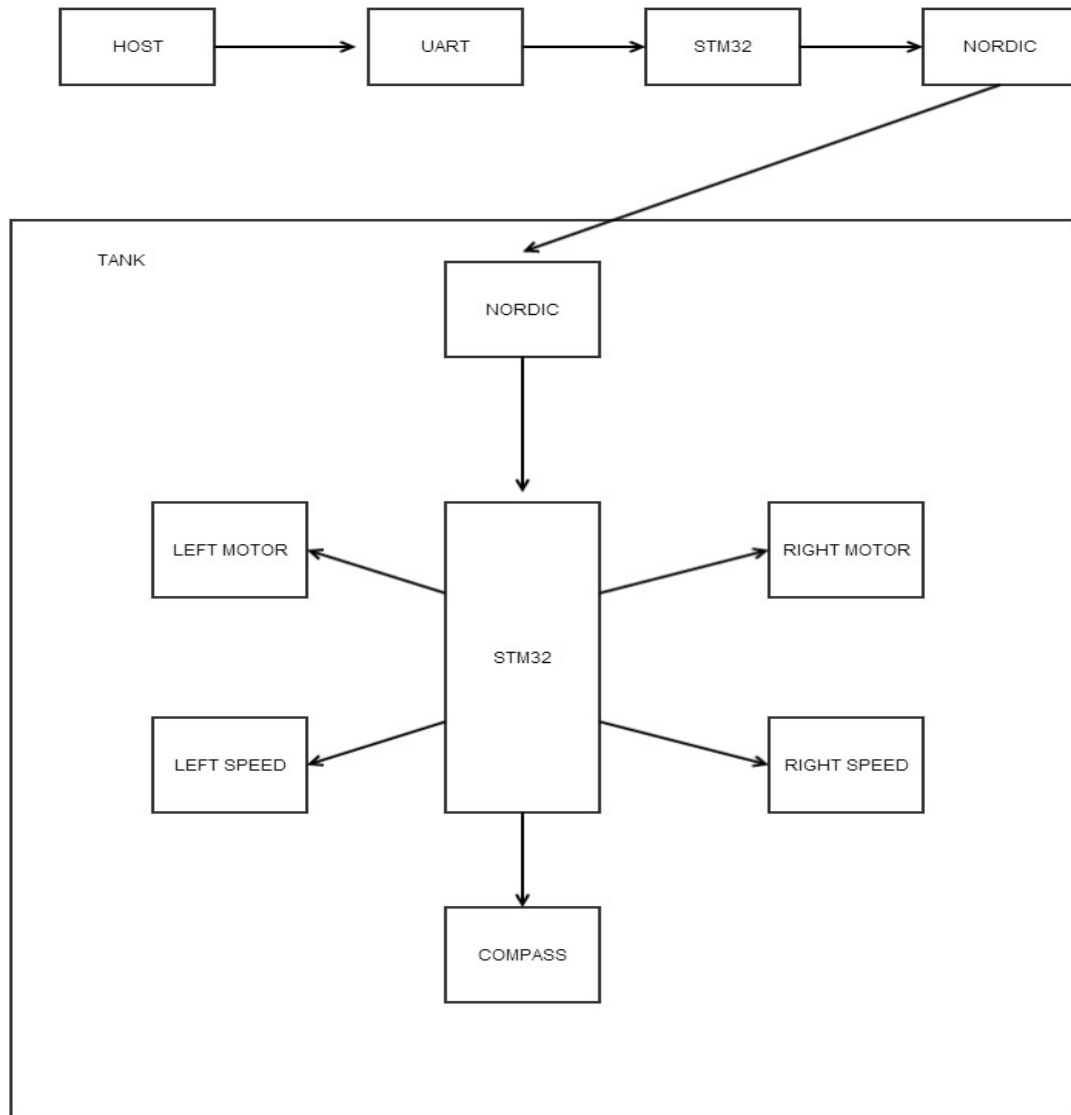
Next week's goal:

Our next immediate goal is to get the pending work completed. As soon as this is done with this task we would like to program the motors so that the tank could take the desired turn. In this process we also want the tank to stop when the desired turn is made.

As we have completed the first milestone, these are the updated milestones:

Task Name	Mar 30							Apr 6							Apr 13							Apr 20							Apr 27							May 4						
	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S							
1																																										
2	Initializing Nordic(Prasad and Vinay)																																									
3	Setting up nordic																																									
4	Implementing the logic																																									
5	Testing of nordic																																									
6	Nordic Initialized (Milestone achieved)																																									
7	Initializing Motors(Vinay)																																									
8	Initializing the motors																																									
9	Testing the motors																																									
10	motors initialized (Milestone)																																									
11	Implementing logic for motors(Vinay & Prasad)																																									
12	Logic for the right motor																																									
13	Logic for the left motor																																									
14	Logic for left speed																																									
15	logic for right speed																																									
16	Synchronizing these with compass																																									
17	Testing of the implementation																																									
18	Logic for motors implemented (Milestone)																																									
19	Implementing the host(Vinay)																																									
20	Designing uart for the host																																									
21	Testing for the uart																																									
22	Host is implemented (Milestone)																																									
23	Synchronize(VInay & Prasad)																																									
24	Synchronize all components																																									
25	Testing of the final project																																									
26	Final implementation																																									

Block diagram:



Technical Profile:

Category	Design Objective	Deliverable	Status
Power	Battery life	Based on the usage	
Power	Battery availability	Uses commercially available AA batteries or any other batteries	
Communication	Wireless Link	The wireless modules should communicate with each other	Completed
Communication	Tank movement	Device and the host should reliably communicate	In Progress
Compass	Data relay and tank heading	Should relay the current heading value	Completed
User Interface	Command line access	An interface that will help user to communicate with the device	
User interface	Device updates and information	Relays the status to the user	
Mechanical	Environmental	Device should be run under suitable condition	