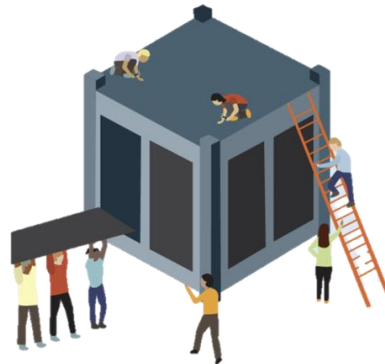




JIBEBE INTERNSHIP 2022

WEEKLY REPORT : PAUL MOSES MULWA





TASKS COMPLETED LAST WEEK

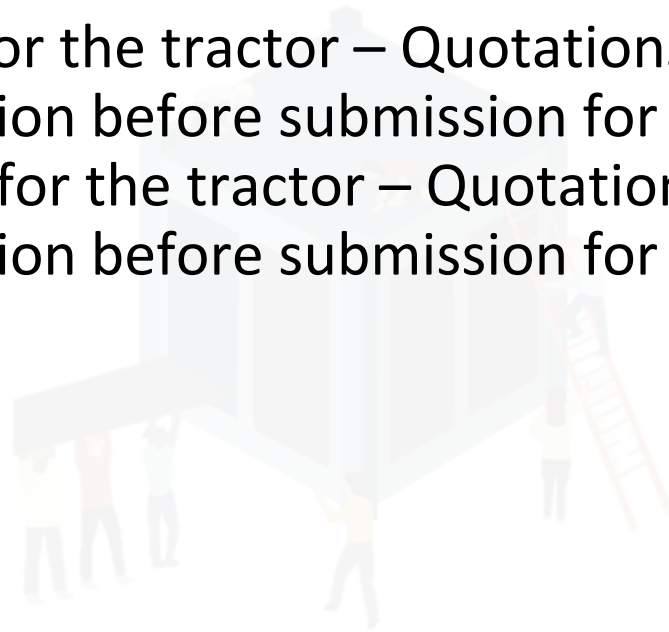
- [#46] Acquisition of Lithium-Ion Battery for the tricycle – Several quotations have been generated awaiting approval by the supervisor.
- [#34] Determination of components for tractor and calculation of their values- The calculation of the motor required have been done.
- [#60] Writing a program to calculate required Torque and plot Power-Time and Power-Velocity graphs. – This was completed successfully and results are shown in the subsequent slides.





PROGRESS UPDATES

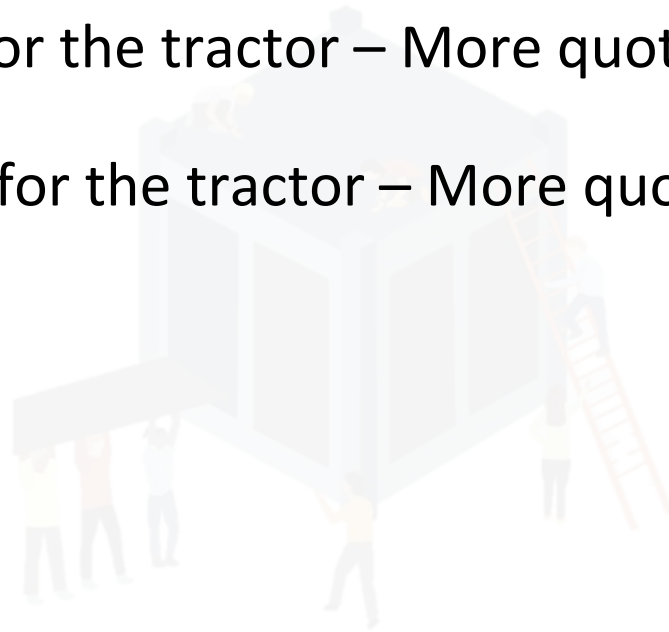
- [#6] Acquisition of Throttle Switch– The throttle switch has been acquired and should be delivered this week
- [#30] Getting experimental characteristics of loading of motor – Several avenues have been suggested on how this will be achieved and progress should be made in this front this week
- [#61] Acquisition of Motor for the tractor – Quotations from suppliers have been acquired. Awaiting compilation before submission for approval.
- [#62] Acquisition of Battery for the tractor – Quotations from suppliers have been acquired. Awaiting compilation before submission for approval.





TASKS IN THIS WEEK

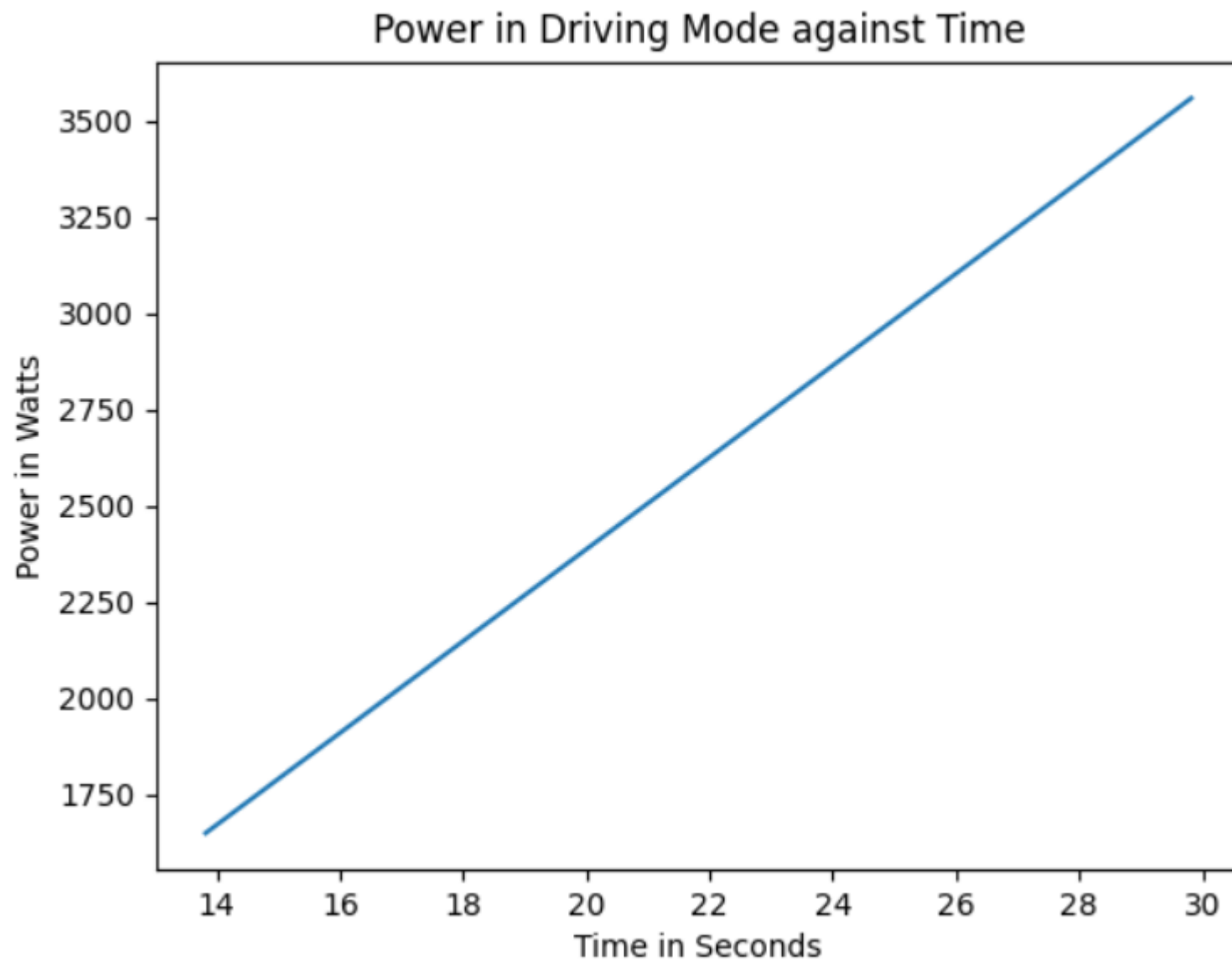
- [#53] Calibration of the throttle for the Tricycle– Calibration of newly acquired Throttle
- [#30] Getting experimental characteristics of loading of motor – Several avenues have been suggested on how this will be achieved and progress should be made in this front this week
- [#61] Acquisition of Motor for the tractor – More quotations from suppliers to be acquired.
- [#62] Acquisition of Battery for the tractor – More quotations from suppliers to be acquired.





GRAPHS

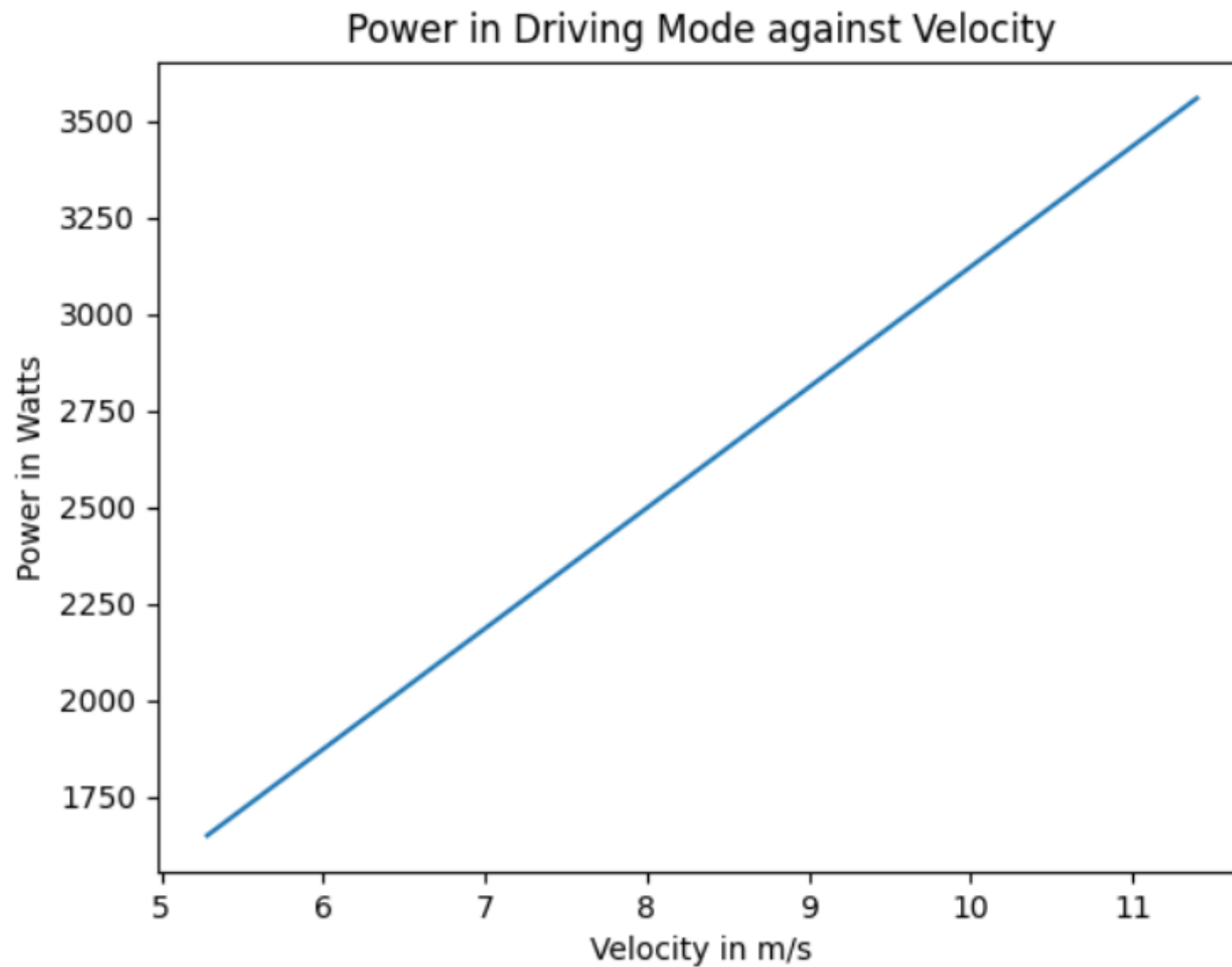
Graph of Power-Time





GRAPHS

Graph of Power-Velocity



Total estimation of weeks: 12

Week	Tasks	Reporting	Hrs	Month
5 - Requirements review				
5.1	Finalize on battery acquisition for the Tricycle	None	20	Feb
5.2	Finalize on motor and torque requirements for the Tractor	None	8	
5.3	Clarify best choice for motor orientation for use in Tractor to allow for automation	Team meeting to review the best course of action	5	
6 - Research				
6.1	Research and recommend best motor for our specific use case in the Tractor	Electric Team Meeting	20	Feb
6.2	Get experimental data for motors and run simulations for verification	None	20	
7 - Testing				
7.1	Alpha testing of newly arrived battery for the tricycle.	Electric Team Meeting	20	Feb
7.2	Testing of integration with other components of the electric subsystem	None	25	
8 - Deployment				
8.1	Deployment of the electric subsystem of tricycle to finalized Tricycle	None	20	March
8.2	Fixing of any issues that may arise during Integration	None	20	
9 - Testing				
9.1	Alpha testing of newly arrived components for the tricycle.	Electric meeting	16	March
9.2	Getting experimental results of the components and NDT to validate correct operation and performance under load	None	24	

10 - Integration				
10.1	Integration with other subsystem	Team meeting	40	March

11 - Testing				
9.1	Alpha testing of entire assembled tractor	Team meeting	40	March

12 - Deployment				
12.1	Deployment of Shujaa Tractor	Team meeting	40	April



Thank You

