

## JIBEBE INTERNSHIP 2022

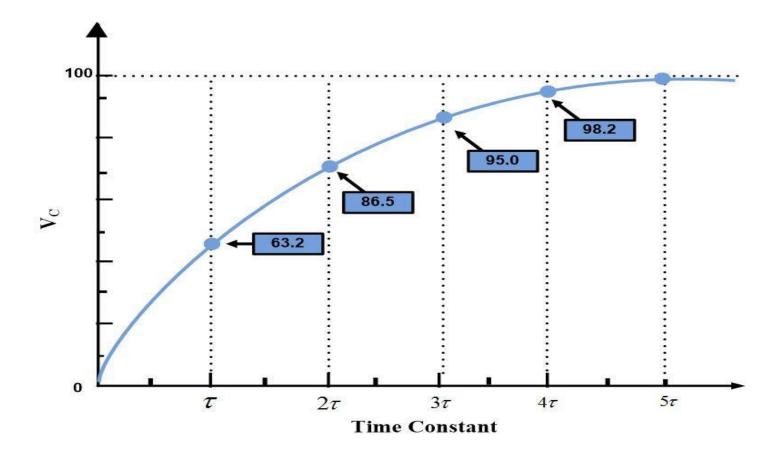


# WEEKLY REPORT WEEK 9 ELECTRIC TEAM ELIAS LAN'GAT

### Tasks completed last week

[#70] Acceleration control\_ The team managed to archive this using a RC circuit to introduce a delay of initially 9. An experiment was done to check the voltage supply to the throttle switch as shown below.

[#72] Start/Stop mechanism: The team was able to create a start stop scheme for the vehicle. The throttle was dissected and its mechanism studied to achieve a start stop action.



The effect of the delay circuit on the motor was observed to take effect using a laser tachometer and a conclusion made that the effect produced was a replica of the initial experiment that showed exponential relationship between the voltage supply against time.











#### Tasks in this week

[#18] Assembly of the e-tricycle subsystems

[#67] Alpha testing of battery for the e-tricycle

[#73] Speed meter mechanism.

#### **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 subsytem	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 resuts of the components and NDT to validate correct operation and performance under load	None	24	
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10 - Integration	on			
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 - Deploym	ent			
12.1	Deployment of Shujaa Tractor	Team meeting	40	April