

Internship 2022

Progress report on E- tricycle and Shujaa tractor

Name: Brian Muindi

Tasks completed last week

[#32] Acquisition of parts

➤ Flange couplings



Tasks completed last week

- [#31] Fabrication and assembly of E tricycle

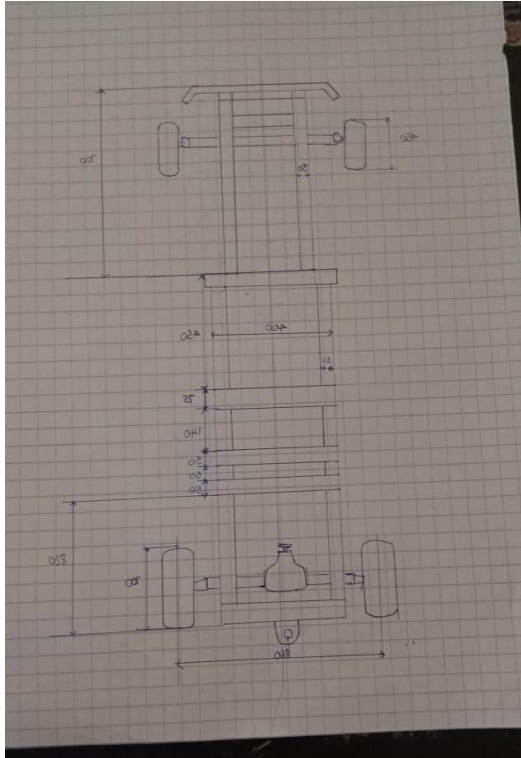


Tasks completed last week

- [#41] Identification of parts to be replaced on the Shujaa tractor
 - Fuel tank-battery pack
 - Engine-motor
 - Gearbox

Tasks in this week

- [#40] Measurement of Shujaa Tractor chassis



Tasks in this week

- [#42] 3D modeling of the chassis
- [#33] Calculation of power requirements for the Shujaaa tractor
- [#48] Design of motor mounting and placement on the E-tricycle

Timeline

| Month | Intern week | Tasks |
|-------|-------------|--|
| Jan | Week 1 | Taking measurements and 3D modeling of the tricycle Identification of parts |
| | Week 2 | Design of chain drive, Shaft design Disassembly of the tricycle |
| Feb | Week 3 | Acquisition of parts Fabrication and assembly of the tricycle Literature review on e-tractors |
| | Week 4 | Identification of parts to be replaced Calculation of power requirements for the shujaa tractor Measurement of chassis |
| | Week 5 | Design of various transmission components 3D modeling of the Shujaa tractor |
| | Week 6 | Vibration and stress analysis Acquisition of parts |
| March | Week 7 | Fabrication and assembly of Shujaa tractor |
| | Week 8 | Testing and performance analysis |