Nakuja Internship

Week 5 Progress Report

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Tasks completed last week

- Propellant casting
- Static testing
- Research on Payload camera(ESP32 cam)

Tasks to complete this week

1. Continue casting propellant and firing tests.
2. Assemble the engine mount.
3. Acquire Raspberry Pl zero + camera
4. Work on the camera(video logging to sd card, Stream)
5. Getting the GPS signal from rocket

ESP32-CAM

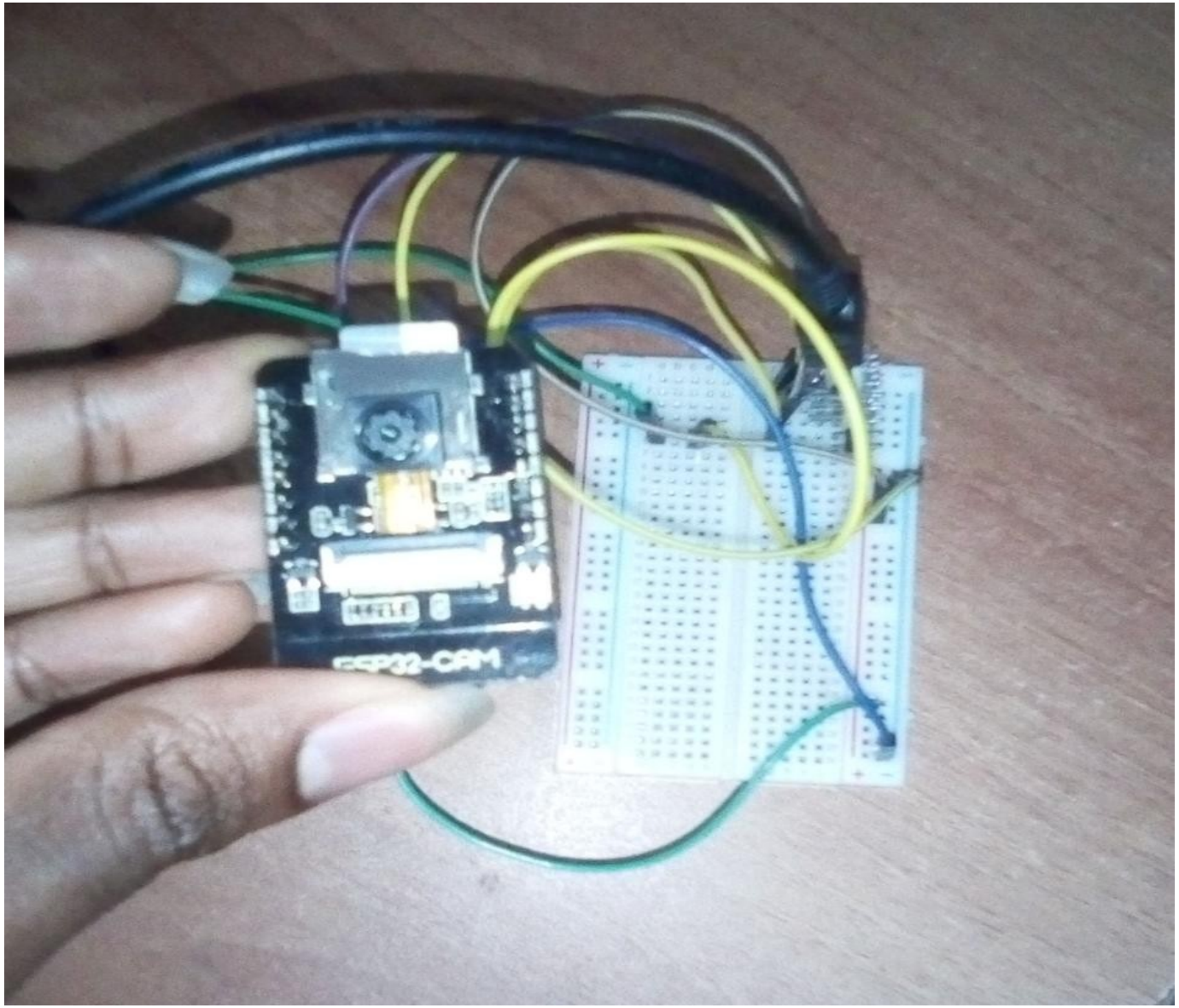
- Poor quality camera
- Cannot stream to multiple devices at once
- Require a server to stream to multiple devices
- Stream is not clear.
- Slow processing speed (160MHz-240MHz)

Raspberry Pi zero

- Considerable size(60mm by 30mm)
- Enough processing power
- Capable of 1080P30FPS
- Easier to code
- Faster(1GHz single core CPU)

Raspberry PI zero

ESP32 CAM



ESP-EYE Development Board V2.1

- Basically an esp32 board with a 2MP camera and a microphone
- Basic facial recognition

ESP-EYE Development Board

Timeline

Month	Week	Tasks
March	Week1	Design and fabrication of nozzle
	Week2	Design and fabrication of test stand
	Week3	Casting propellant
	Week4	Testing the model rocket on motor
April	**Week1**	**Avionics bay development**
	Week2	Integration and testing with avionics
	Week3	Integration and testin with propulsion
	Week4	Launch of N-1 rocket