Task (0) | The Secret Box | Workday (4) | 13.3.24

Today's output Hardware:

- Did not go to El-Warsha, to be there at 2:00PM and come back in Ramadan with the miserable traffic outside is a mess.
- Tried to explain stuff for him but he preferred a visit to get stuff clearly:/.
- Went to the laser workshop behind my home but he told me it would take a week minimum or 10 days, busy doing Ramadan stuff, it would cost around a 100 pounds he said, before negotiating=).

Today's output Software:

- Developed code for fetching date and time from NTP through WI-FI connection and RTC code.
- Integrated entire project parts/modules developed so far together.
- Re-structured app start code to have only function calls of other static functions, one for each module, one for MPU6050, another for ultrasonic sensor...etc.
- Code is not functioning well all together with WI-FI part, timestamping, and sensors, if MPU works for example then ultrasonic stops and vice versa!
- Knew something interesting! I can use FreeRTOS with Arduino IDE!! There is a library for it with all the same functions/APIs I dealt with before.

To do next:

- Database part using Fire Base.
- Presentation, thinking of Gamma AI.
- Do not forget the 2 7-segments or LCD part for showing battery percentage.
- I will postpone hardware for now, the box itself.
- I will keep working on separate modules until all is perfectly done and then see why integrating things does not go well. I will consider FreeRTOS probably.

Attachments:

- FreeRTOS, Preemptive priority based scheduler, I don't care what type is it now, it will handle the current mess thankfully, this will be version 2 of the code, thanks to El-Habrouk's team for posting their project on LinkedIn and then me knowing FreeRTOS exists on Arduino IDE!
  - https://www.engineersgarage.com/arduino-freertos-task-scheduling/
  - https://github.com/feilipu/Arduino_FreeRTOS_Library/blob/master/examples/AnalogRead_DigitalRead/AnalogRead_DigitalRead.ino

Done for today, hoping all will be done by Wednesday maximum!
Well, it is Wednesday already and not done, let it be Saturday for Software and Sunday/Monday for the physical box.