

What we will do :-

- 1 Battery Health Management
 - 1.1 SoC Monitoring – Calculating State of Charge of Battery.
 - 1.2 SoH Monitoring :- Calculating State of Health of Battery.
 - 1.3 Temperature and other parameters monitoring.
 - 1.4 Controlling current to gradually increase for battery safety.
- 2 IoT :-
 - 2.1 Creating IoT Dashboard to show all the parameters
 - 2.1.1 Parameters to show:-
 - 2.1.1.1 Battery Percentage
 - 2.1.1.2 Battery Health
 - 2.1.1.3 Charging Time
 - 2.1.1.4 Battery Temperature
 - 2.1.1.5 Speed of vehicle
 - 2.1.1.6 Distance Travelled by vehicle
- 3 Communication Protocols to be used:-
 - 3.1 CAN :- for battery to uC.
 - 3.2 Bluetooth :- for speed sensor to uC.
 - 3.3 UART:- from uC to gateway.
 - 3.4 WiFi :- from gateway to cloud.(using http/mqtt)
 - 3.5 GSM(if needed)
- 4 RTOS ?

What we will not do:-

- 1 Tyre Pressure Monitoring.
- 2 Motor parameters monitoring
- 3 GPS(for time being)

Questions:-

- 1 Which cloud platform to use,
 - 1.1 AWS
 - 1.2 ThingSpeak
 - 1.3 Blynk
- 2 Which sensor models to be used.
- 3 Should we implement RTOS or not.
 - 3.1 If yes , then how
- 4 Whether we should use local on board display?
- 5 How to make it modular rather than specific.