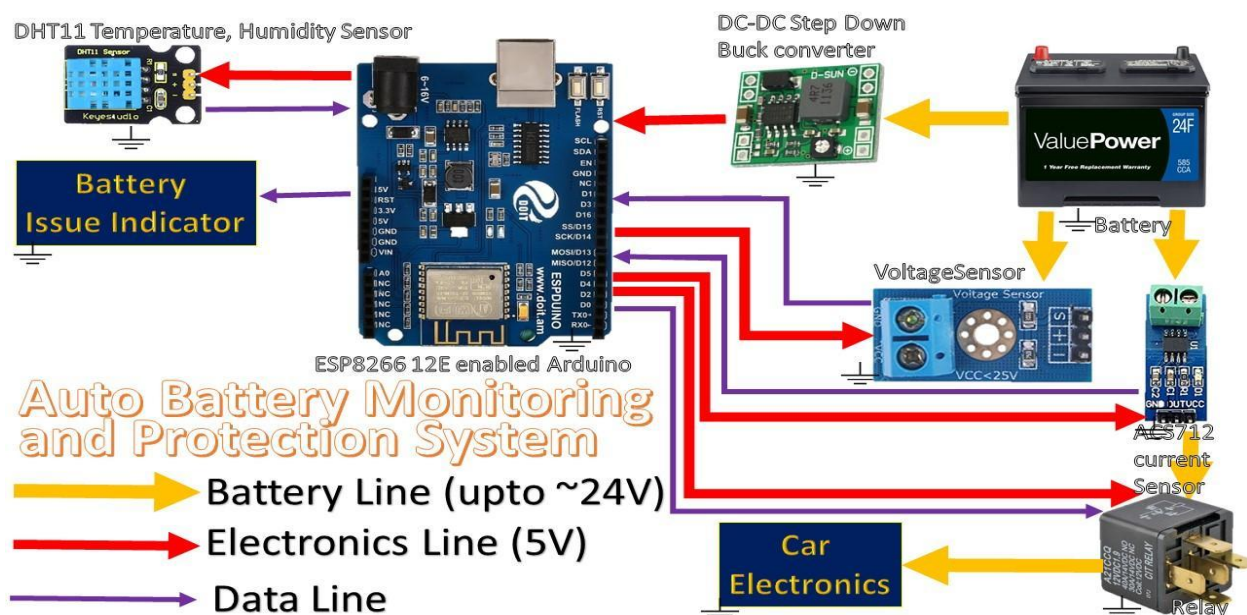


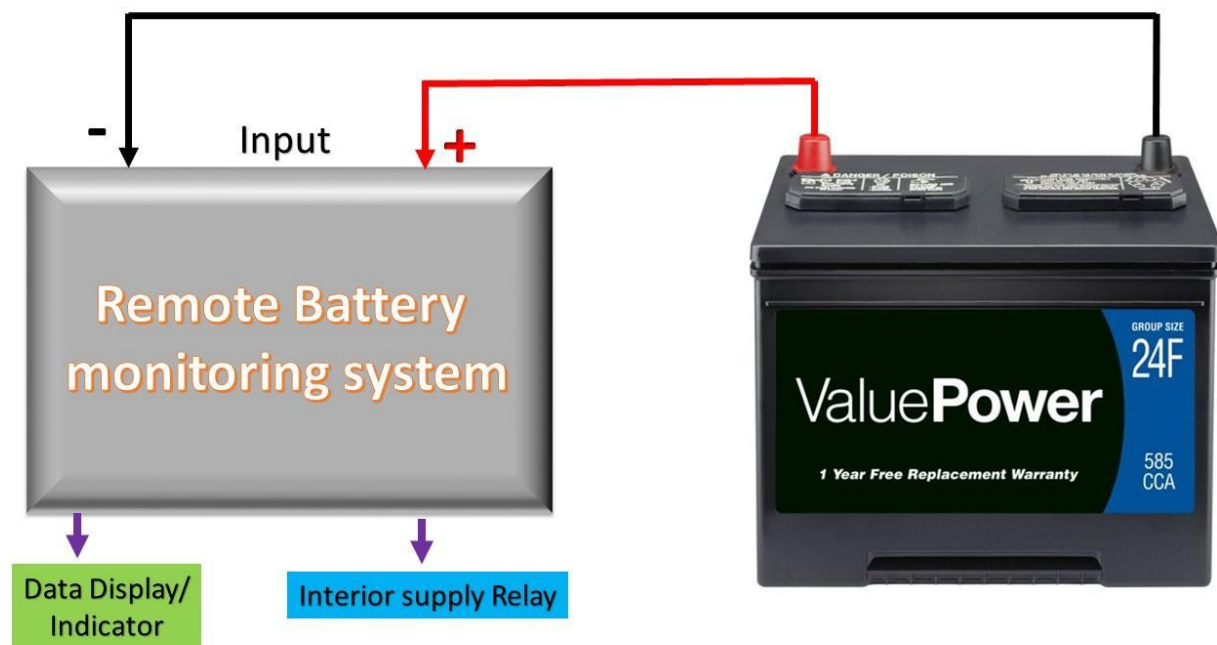
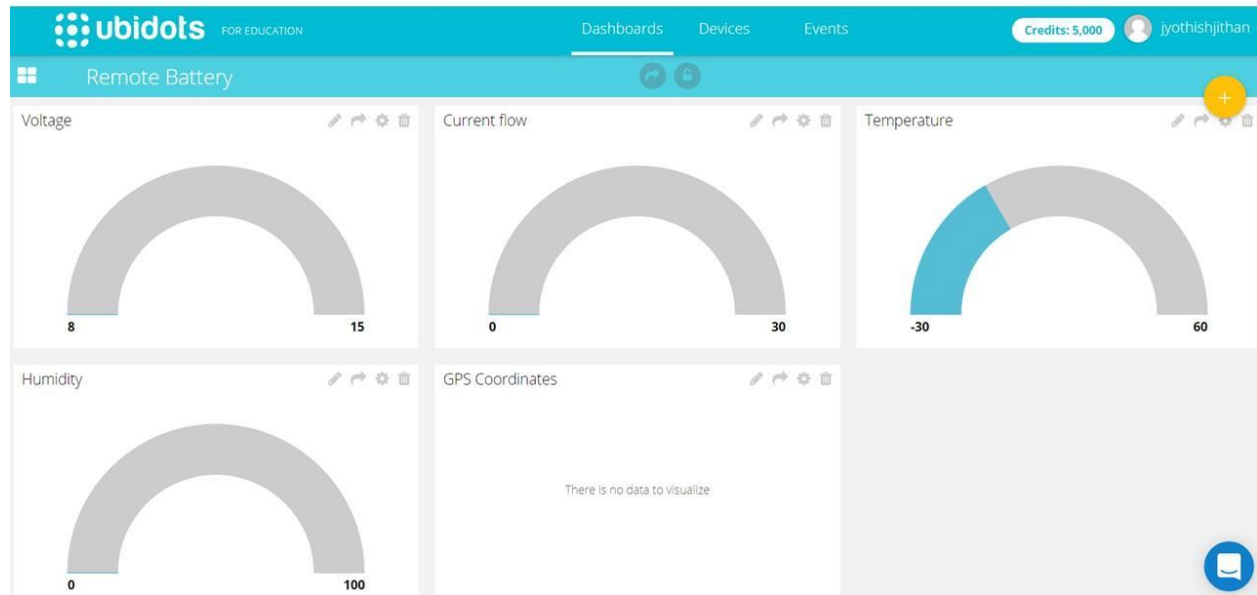
Intelligent Battery Management ST3

Abstract:

By the implementation of the project we can monitor the Voltage, current flow, ambient temperature and humidity. The system constantly monitors the voltage of the battery. If the battery's voltage goes below 10V while starting the vehicle, it means that the battery's condition is poor and needs a replacement soon to avoid starting troubles. The system can detect this and lets the user know through battery indicator which can be a full informative display or warning LED. Sometimes people forget to turn off the headlights after parking which drains the battery below safe level and kills it. To avoid the problem, the current flow, voltage and state of car (whether car is being used or if more current is flowing uselessly without anyone in the car) are detected and then there is a relay connected on the path of current flowing to the controls including horn, Headlights, stereo and other internal components. All of these will be shut off and the battery will be saved even though human makes errors. Once it gets connected to Wi-Fi hotspot, there is also capability to keep the data logged online with graphs to monitor its performance (Optional). This project helps to monitor different parameters of batteries so that they can be taken care and maintained for maximum life span while easily noticing any failures along with the potential to shut off any short circuits. Please note that all the components here have been chosen wisely and according to their availability and cost, so that if this is approved, it can be implemented directly. Any more required features can be added seamlessly if required. **Therefore the Battery's State of Charge(Soc) and State of Health(SoH) are monitored, maintained, reported, warned along with safety features.** It'll be very useful if the live status data of central lock, Starter motor signal are provided, the system can work with very high accuracy. Kindly note that any customization is possible according to the customer/industry needs.



Remote Battery Online Monitoring Console



By

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