Record Electricity Blockchain DB

System
ElectrcityUse: int recordTime: datetime currentMonthlyRate: double discountedRate: double Timer: double finalCost: double
The System will read in the Time that the electricity was used and based upon that, will calculate it using the current monthly rate - the discounted. This value will be stored as a final cost, which is then sent to the database to be stored. We can assume that to keep the logs unique for each instance, a recorded datetime is needed to ensure separated records.

Data is sent to Database to be stored for record

Timer sends timestamp to prompt the system to calculate the usage

The data values are sent over to the database for storage

Server: TTUModeling Database:SmartHome Table:ElectricityUse
ElectricityUse: int recordTime: datetime currentMonthlyRate: double discountedRate: double Timer:double finalCost: double Stored Procedure: resetTimer
Once the data is stored, the database needs to execute a stored procedure in order to reset the timer for the next instance of electricity usage.

Timer
Timer: double
The Timer is prompted to record and send over the Electricity time use to the system.

Execute resetTimer Stored Procedure to reset timer for next instance