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## SURVEY ON SMART ENERGY METERS USING IoT

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**Abstract-** The current system of taking the reading of meter is manual where person have to go physically and should take the image of meter reading then he have to add the reading according to that bill is generated. Due to this the time required to this is more. The main objective of the project is to develop IOT based meter system and load control through GSM. Electricity board sends employees to take reading of meter every month which is costly and time consuming task. The proposed system provides a efficient system to avoid this problem. The electricity board and user can get the bills via GSM. The board will get reading hourly/daily/weekly/monthly. The controller takes reading from meter and sends to server via GSM.

**KEYWORDS:** GSM, IOT, LAN

### I INTRODUCTION

The billing process of electricity board should be faster and efficient to generate bills and give it to customer so that the customer can pay bills earlier. The process of board should be time efficient and straight forward to take actions. However the billing process of electricity board is time consuming, costly and error-prone .By wasting time and money current system makes board inefficient and slow. In general, networks are form by connecting multiple computers through the LAN. To control and monitor the activities of network form the admin office is very easy job but what? If the admin is not in the admin o ce. In that case how do you going to control and monitor the network? Instead of depend on any third person for the information about the network we developing the new android application through which we can easily monitor the network. The communication between particular client and the admin is achieved through a central monitoring server, our goal is to develop an integrated software application that will help network admin to remotely monitor network through android phone. The communication between the client and the android phones is done through the server.

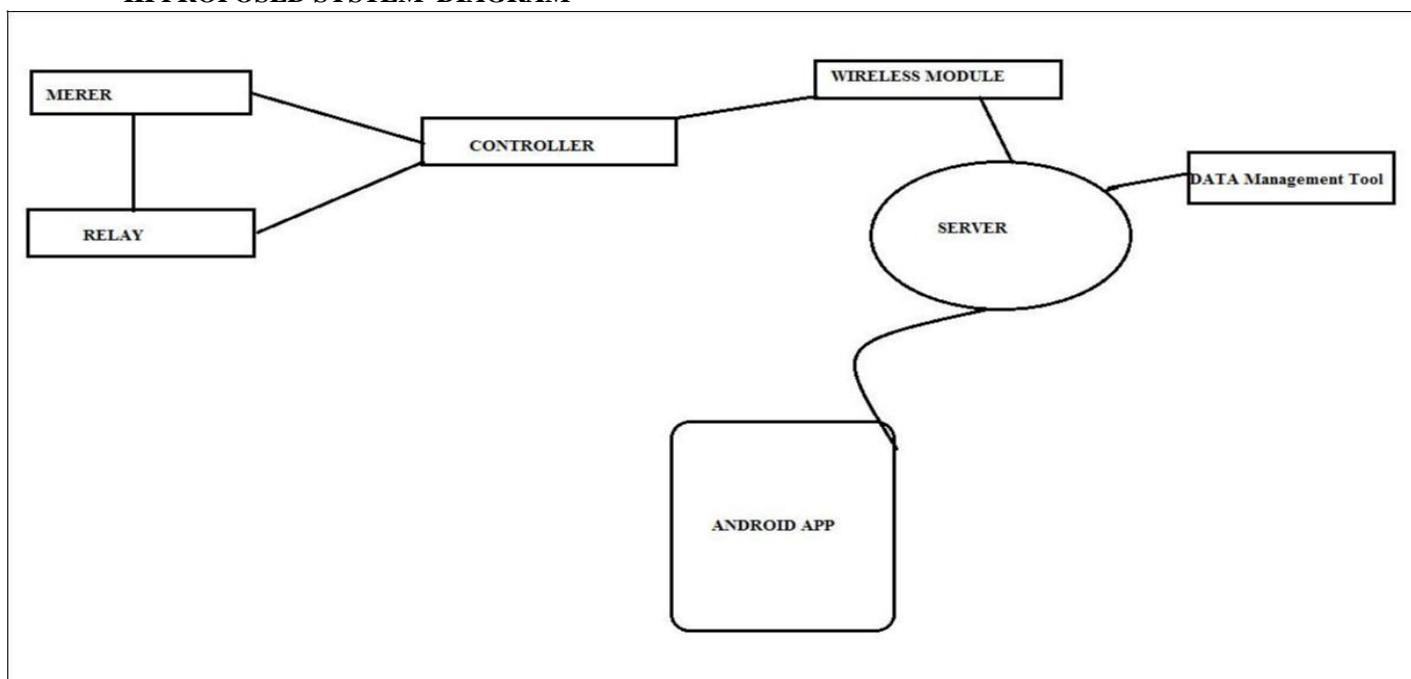
### II LITERATURE REVIEW

Embedded Laboratory Environment Monitor System This framework exhibits a presentation of an installed processor-based lab environment screen framework and its outline for equipment and programming. This framework goes for nishing checking an assortment of constant information. This framework accomplishes the keen administration of research facility. By wired or remote means, the lab checking framework can speak with PC.[1]

Design and Implementation of Open Computer Lab Monitoring and Management system. This depends on sensor in which checking is done through implanted sensor in framework. Yet, we are actualizing the framework on LAN without utilizing sensor. We are including the idea of message sending, summon giving, and so forth.[2]

The issues confronted in PC research facilities is inadequate with regards to cognizance for administration and institutionalized administration, lacking means for executing and keeping up, no institutionalized procedure, no record for programming and equipment design and change too, furthermore changing setup arbitrarily. Our undertaking will help in lessening these issues.[3]

### III PROPOSED SYSTEM DIAGRAM



**Figure 1: Architecture diagram**

Today system is exceptionally basic necessity from little business to corporate area. In Windows organizing utilizing the system Places application we can without much of a stretch search each PC which is associated with LAN. Yet, now and again the prerequisite is distinctive, assume we need to duplicate, erase, rename or introduce application on each PC which is associated. There is one disadvantage with windows organizing. We need to play out these operation on every PC physically. Implies we need to search every PC one by one and after that play out these same undertaking on each PC over and over. This procedure is extremely long, exhausting, furthermore tedious. So the answer for this issue is our venture i.e. System Command Execute. When we begin this venture it show every one of the PCs which are associated. At that point we have put some regular errand in our undertaking like, duplicate a document, make an envelope, erase a record, erase an organizer, rename a document, introduce application, shutdown , begin a specific application, printing , message passing and some more. After that simply select any charge from the rundown and after that that chose summon is executed on every PC which is in system. So there is no compelling reason to play out this operation physically on every PC.

#### IV APPLICATION

This is used in applications such as Also if consumer gets faulty bill he has to go to Electricity Board office to correct it.

Also as customer is getting message of bill printing can be avoided to reduce paper wastage.

#### V ADVANTAGES

- Collect meter reading data accurately and without manual interference and errors.
- Proven solutions with guaranteed results.
- Ready to integrate solution reducing the time-to-market.

#### VI CONCLUSION AND FUTURE WORK

Electricity Billing process using IOT is the framework which is introduced in this paper is for time efficient and cost efficient. The LAN Monitoring framework is the framework which screen the framework which associated in LAN. Framework Introduced in this paper is far superior than existing framework and is cost pro client. Executive can screen the LAN system, which gives overseer to do different assignments same time while observing

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