IOT design for smart city: (An integrate and centrally managed Traffic signal, Street light & Garbage management using IOT for smart city.)

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i Abstract:

Increasing the population density and therefore the traffic in the city centers brings traffic related problems.

Nowadays IOT (internet of things) has changed the people way of using technology.

Generally this study focused on the concept of smart city.

In these study three application have been developed that taking to consideration the serious of smart city problems such as managing traffic signals & street light and garbage management using IOT.

ii Overview& problem statement:

due to increased population, traffic signal management is the most necessary task.

Traffic signal management involves the planning, design ,integration, maintenance & proactive operations of traffic signal system in order to achieve policy based objectives to improve efficiency, safety reliability of signalized intersection operation.

Increase in the population and the corresponding increase of road has increased the number of street light for the road and people safety, whish rises the investment and energy, lighting consumes adequate amount of energy in both the out door and indoor.

However different approaches are being proposed for making system energy efficient & upgraded with latest technology.

This project also deals with the problem of garbage management in smart cities, where the garbage collection system is not optimized. This project enables the organization to meet their needs of smart garbage management system. This system allow user the know the fill the level of each garbage being in a locality or city at all time, to give cost efficient and time saving route to the truck drivers.

iii Literature of view:

The literature reviews of various papers are as follows:

[1] Neha Firdaush Raun “Smart environment using internet of things (IOTS) - a review” Published in 2016 IEEE 7th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON) This paper provides a broad overview on what is IOTS, different applications of IOTS, challenges and future scope of IOTS. A world where the real, digital and the virtual are converging to create smart environments that make energy,

transport, cities and many other areas more intelligent.

[2]Madhvi A. Pradhan ; Supriya Patankar ; Akshay Shinde ; Virendra Shivarkar ; Prashant Phadatare "IoT for smart city: Improvising smart environment" 2017 International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS) In this project we have developed a system smart city that is equipped with Internet of Things. System is also facilitated with different features like water pollution detection, weather monitoring, accident detection and video surveillance

[3] C. Tejaswini Roy ; D. Sri Lakshmi ; G. Anirudh Kumar ; H. N. Vishwas "International Conference On Smart Technologies For Smart Nation (SmartTechCon)" 2017.Smart environment using IoTThis paper describes an efficient pollution monitoring system which monitors the emissions from each vehicle on a daily basis and updates it to the web server so that respective action will be taken by the authorities. It uses GPRS/GSM,RFID,AWS i.e, Amazon web server.

[4] Amany Alnahdi ; Shih-Hsi Liu "Mobile Internet of Things (MIoT) and Its Applications for Smart Environments" Published in: 2017 IEEE International Congress on Internet of Things (ICIOT): In this paper, we propose a new model for IoT that provides mobility in terms of location change. In addition, we propose our positional view of the components of Mobile IoT model. Moreover, we provide scenario applications for Mobile IoT uses.

[5] Neeharika Cherukutota ; Shraddha Jadhav "Architectural framework of smart water meter reading system in IoT environment",2016 International Conference on Communication and Signal Processing (ICCSP)Internet of Things (IoT) has provided promising opportunities to create powerful industrial and domestic applications. One of its main applications is smart metering. Water is the most precious resource that must be used responsibly. Information about the usage of water can reduce the water wastage and will help in water management.

iv Conclusion:

Design a project which is IOT based for smart city.

This involves three applications traffic signal management, street management & garbage management system.

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