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OPTIMIZATION OF ELECTRICITY USING IOT

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ABSTRACT

The world is moving fastly towards automation. People do not have much time to do their work so automation is a convenient way to manage their appliances from anywhere. People often forget to turn off the light sources and other appliances. This may cause wastage of energy and sources available. The goal of this technique was to maintain a balance according to the user requirements .By using minimum amount of energy user can get the desired comfort. In the use of automation is emerging with the help of internet providing possibility of objects to work it-self. IOT is offering feasibility and effectiveness to the system that are based upon it. In this modern world, where things are going to be on our finger tips, our daily appliances will also be controlled with our smartphones. This may lead to usage more efficiently, and can help in building of an eco-friendly environment. This study based on how appliances may be automated smartly with motion sensor and software applications that are integrated with hardware board.

INTRODUCTION

IOT is a network of physical devices that are embedded with Sensors, softwares and network connectivity to collect and exchange relevant data. The goal of our project is to shorten the wastage of energy and make devices automatic using motion sensor but we have also provided application. People often forget to turn off the light sources and other appliances. This may cause wastage of energy .In our proposed method we are going to make devices automatic with use of sensors and through application which may lead to reduce the wastage of energy.

RELATED WORKS

1]IMPLEMENTATION OF INTERNET OF THINGS FOR HOME AUTOMATION: Mamata Khatu, Neethu Kaimal, Pratik Jadhav and Syedal Adnan Rizvi [1] they presented a paper on the implementation of Internet of things for home automation. This paper mainly focused on IOT coverage that connects all the variety of objects like smart phone, tablets, digital cameras and sensors in the internet and thus provides many services and huge amount of data and information.

2] Sarthak Jain, Anant Vaibhav, and Lovely Goyal have designed a home automation system using Raspberry Pi through reading the subject of the e-mail. The algorithm used has been developed in python environment and LEDs are used to indicate switching actions.

3]Tan, Lee and Soh (2002) proposed the development of an Internet-based system to allow monitoring of important process variables from a distributed control system (DCS).

4]Potamitis, Georgila, Fakotakis, and Kokkinos, G. (2003) suggested the use of speech to interact remotely with the home appliances to perform a particular action on behalf of the user. The approach is inclined for people with disability to perform real-life operations at home by directing appliances through speech. Voice separation strategy is selected to take appropriate decision by speech recognition.

5]In the year 2006, S. M. AnamulHaque, S. M. Kamruzzaman and Md. Ashraful Islam proposed a system entitled "A System for Smart-Home Control of Appliances Based on Time and Speech Interaction" that controls the home appliances using the personal computer. This system is developed by using the Visual Basic 6.0 as programming language and Microsoft voice engine tools for speech recognition purpose.

PROPOSED METHOD

In this we will provide sensors that will automatically detect movement of the object or person. Then by detecting it will turn ON the devices .If no person detected then it will gets off.

We will also provide application that person can handle any devices from anywhere In mobile application also will provide various features. By using Google assistant through voice command like Google Alexia we can also control any devices. We are also providing scheduling feature . Live status will be shown on application which shows, which device is on or off. If smoke and flame is detected the alert notification will send to the application.

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