

The Development of a Remotely Controlled Home Automation System for Energy Saving

ABSTRACT

The purpose of this study is to showcase the design and development of a web-enabled home automation system prototype. The unit was developed using low-cost components such as the ubiquitous Arduino microcontroller. One of the features of the developed unit is the ability to monitor the power consumed by electrical loads. The unit also has the ability to control the status of individual loads through the internet using a web-enabled mobile application. This feature enables load management that could contribute to energy saving.

EXISTING SYSTEM

In general one can forget to switch off the switches at home. Then the power consumption is more as we cannot go back to switch off the switches. There by we are getting high bills. We cannot operate the switches from remote areas. Sometimes there is a chance of damage to the house if we forgot to switch off.

DRAWBACKS

- Power consumption is more.
- Security is less.

PROPOSED SYSTEM

In proposed system, One of the features of the developed unit is the ability to monitor the power consumed by electrical loads. The unit also has the ability to control the status of individual loads through the internet using a web-enabled mobile application. This feature enables load management that could contribute to energy saving.

ADVANTAGES.

- It increases energy efficiency.
- It provides convenience for users.

SYSTEM REQUIREMENTS

H/W System Configuration:-

- Processor - Pentium –IV
- RAM - 4 GB (min)
- Hard Disk - 20 GB
- Key Board - Standard Windows Keyboard
- Mouse - Two or Three Button Mouse
- Monitor - SVGA

S/W System Configuration:-

- Operating System : Windows 7 or 8 32 bit
- Application Server : Tomcat5.0/6.X
- Programming Language : Java
- Java Version : JDK 1.6 and above