Abstract

Home automation is an important milestone that is becoming increasingly prominent day by day because of its various points of interest. Advancement in existing technologies have made smart homes that are more efficient and secure. This can be done either by local system administration or through remote control. Using the Raspberry Pi in home automation provides various features to turn a regular home into a smart home. Raspberry Pi is a small computer, which was presented in the year of 2012. It is at present a standard framework subject to broad accessibility that can be utilized as a part of home automation. Raspberry Pi provides a low cost platform for interconnecting electrical/electronic devices and various sensors in a home via the internet network. The main objective of present work is to design a smart home which can be controlled and monitored by the Raspberry Pi via the Internet of Things (IoT). This will help the home owners to provide a simple, fast and reliable way to automate their environment. This paper shows an ease and adaptable smart home automation framework utilizing Raspberry Pi, with IP availability for getting to and controlling appliances and remotely utilizing Smart telephone application. In proposed framework for designing interface we are using PHP, coding
is done in Python, WiringPi is used in Raspberry Pi as a library.

References


Index Terms

Computer Science Wireless
Keywords

Home Automation, Internet of Things, Raspberry Pi, Printed Circuit Board