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ADVANCED HOME AUTOMATION SYSTEM USING RASPBERRY-PI AND ARDUINO

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ABSTRACT

The rapid advancement of the internet of things (IoT), life is getting easier and simpler in all aspects. At present world, automatic systems are being favored over the manual system. Today's world automation has become an inseparable part of ordinary households and subjects to constant evolution. IoT is a growing network of conventional object- from industry to consumer that can share information and complete jobs while you are involved with other activities. A smart home automation system can help to have a centralized method to control all home appliances. In this paper, a cost-effective system is proposed to achieve such automation system based on IoT concept. All the devices of this system are connected to Raspberry Pi. The proposed system also provides a facility to control all home appliances locally without the internet via a local network. Raspberry Pi runs a web server to host a web -based control interface and a SQL database to maintain the current status of appliances. The interface can be accessed through the internet or locally without the internet. Besides our automatic re-start mechanism makes the system more efficient.

KEYWORDS: *Dataplicity, Home Automation, IoT, Raspberry Pi, Web Interface*