

Home Automation System

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Abstract: This project presents the general style of Home Automation System (HAS) with low price and wireless system. The switch mode and voice mode area unit want to management the house appliances. The main system implements wireless technology to supply remote access from good phone.

Keywords: Node MCU, Capacitor, Register, LED Light, Connector

I. INTRODUCTION

Although home automation nowadays isn't a replacement issue however most advanced home automation system alive nowadays need a giant and pricey amendment of infrastructure. this implies that it usually isn't possible to put in a home automation system in associate degree existing building. "Home automation" could also be a wire home automation application that's imagined to be enforced in existing home environments, with none changes within the prevailing infrastructure.

"Home automation" lets the user to manage his home from his or her android good phone. Within the good phone application, the user will choose actions what ought to happen with electrical devices. Imagine however useful it'll be to be able to activate your air con system 10 minutes before you get home on a hot afternoon in Jan. however regarding having a security system which will notice smoke, excessive power usage, stealer makes an attempt and unauthorized movements in your house and alert you? this is often what home automation is regarding and there's without stopping to its application. In fact, subtle home automation systems are currently being developed which will maintain a list of home goods, record their usage through associate degree RFID (Radio Frequency Identification) tag, and prepare a looking list or mechanically order replacements.

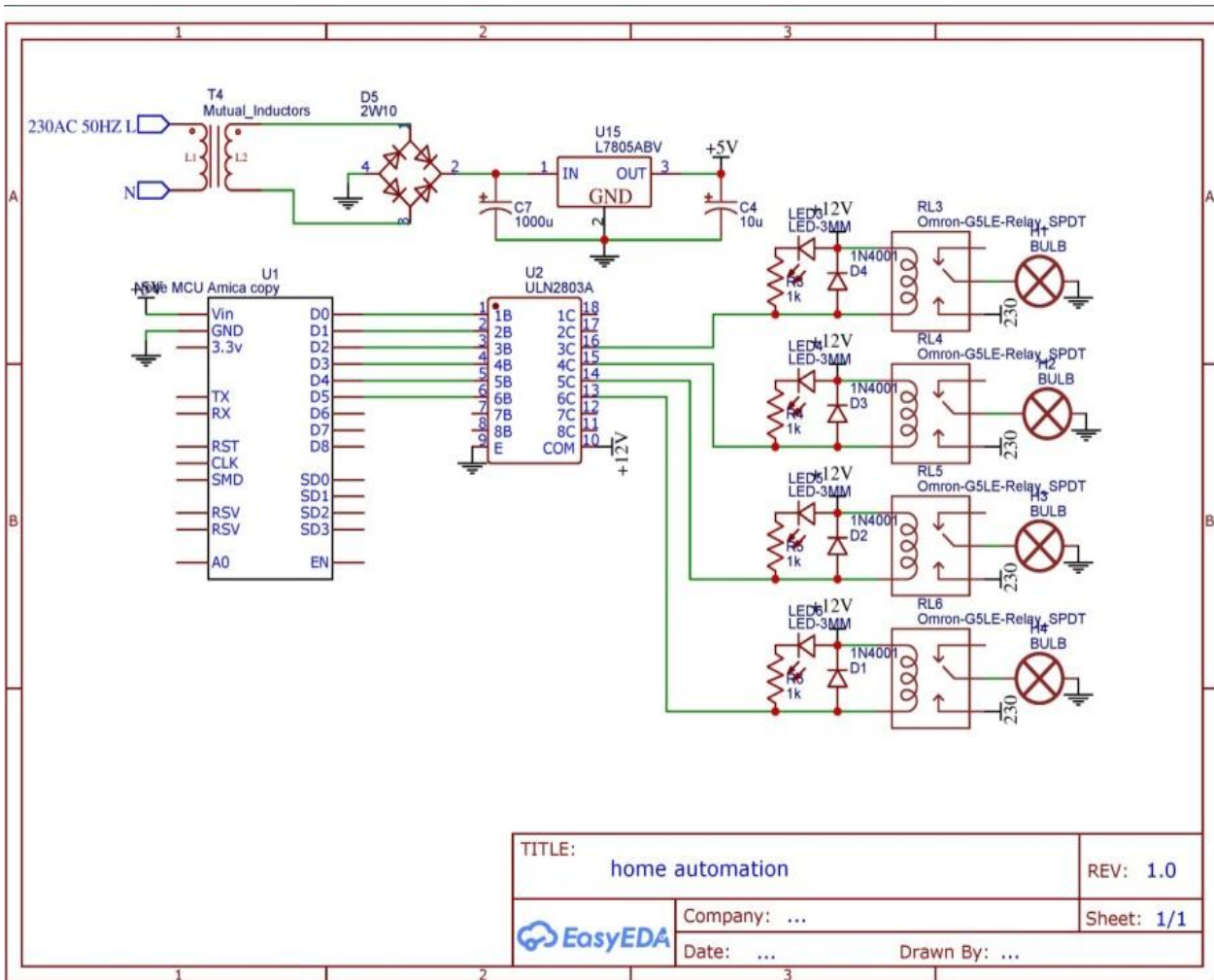
The home automation system following features:

- Flexibility for brand spanking new devices and appliances.
- Increased energy potency.
- Improved appliance practicality.

II. LITERATURE SURVEY

The System is best from the quantifiability and adaptability purpose of read than the commercially offered home automation systems. The User might use a similar technology to login to the server net based mostly application. The application has been developed supported the robot system. associate degree interface card has been developed to assure communication between the remote user, server, raspberry pi card and also the home Appliances. The applying has been put in on associate degree robot Smartphone, an online server. Android application on a phone issue command to raspberry pi card. associate degree interface card has been realised to update signals between the mechanism sensors & also the raspberry pi card. Cloud-based household appliance observance and dominant System. style and implement a home entry to gather information from home appliances and send to the cloud-based knowledge server to store on HDFS (Hadoop Distributed File System), method them exploitation MapReduce and use to supply a observance operate to Remote user.

III. CIRCUIT DIAGRAM



IV. PROBLEM STATEMENT

Today individuals square measure watching ways in which and means that to raised their life-style exploitation the newest technologies that space obtainable. Any new facility or hope appliance that guarantees to reinforce their life-style is grabbed by the customers. The additional such facilities and appliances square measure else, it becomes inevitable to own straightforward and convenient ways and means that to regulate and operate these appliances. typical wall switches square measure placed in several components of a house and therefore necessitates manual operations prefer to start or off these switches to regulate varied appliances. It gets nearly not possible to stay track of appliances that square measure running and conjointly to observe their performances.

V. CONCLUSION

The project has planned the concept of smart homes that will support plenty of home automation systems. It is used for Smart homes are a huge system that includes multiple technologies and applications. That can be accustomed offer security and management of the home easily.

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