SMART HOME SYSTEM USING ANDROID MOBILE

ABSTRACT:

Automation of the surrounding environment of a modern human being allows increasing his work efficiency and comfort. There has been a significant development in the area of an individual's routine tasks and those can be automated. In the present times, we can find most of the people clinging to their mobile phones and smart devices throughout the day. Hence with the help of his companion – a mobile phone, some daily household tasks can be accomplished by personifying the use of the mobile phone. Analyzing the current smart phone market, novice mobile users are opting for Android based phones. It has become a second name for a mobile phone in layman terms.

Home Automation System (HAS) has been designed for mobile phones having Android platform to automate an 8 bit Blue-tooth interfaced micro-controller which controls a number of home appliances like lights, fans, bulbs and many more using on/off relay. This paper presents the automated approach of controlling the devices in a household that could ease the tasks of using the traditional method of the switch.

The most famous and efficient technology for short range wireless communication-Bluetooth is used here to automate the system. The HAS system for Android users is a step towards the ease of the tasks by controlling one to twenty four different appliances in any home environment.

EXISTING SYSTEM

- In previous system high power devices also used in control board.
- We have used more number of hardware.
- Power Loss

DISADVANTAGE

- High Cost
- Operation is to Complicated

PROPOSED SYSTEM

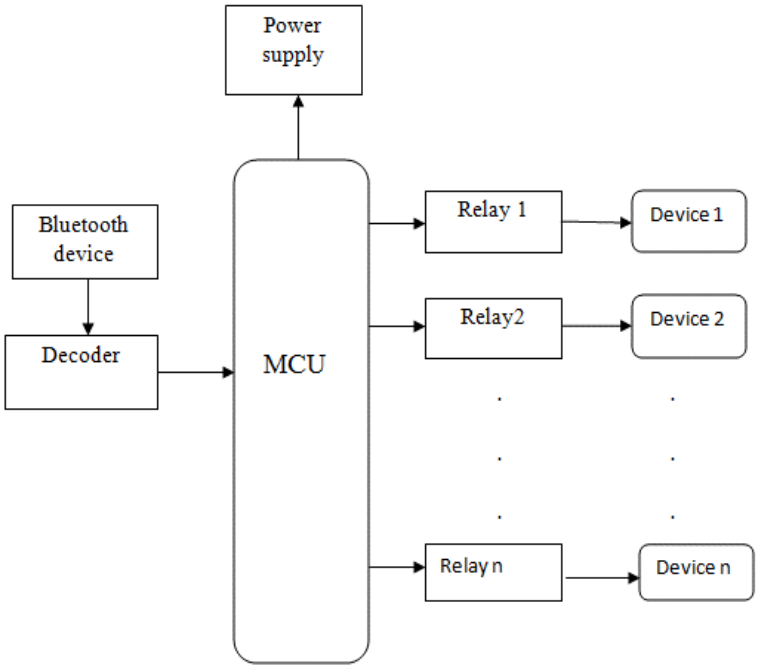
Proposed system is a fine combination of Android mobile technology and embedded system. An application should be installed on android mobile handset to control various home appliances. User can send commands using that application. Wireless controlling technique used in this project is Bluetooth technology. This project consists of a Bluetooth receiver. This Bluetooth device is connected to the circuit which has a decoder. This decoder sends code for respective command sent by user. Then the respective device connected to the circuit will be turned on or off depending on the command given.

ADVANTAGE

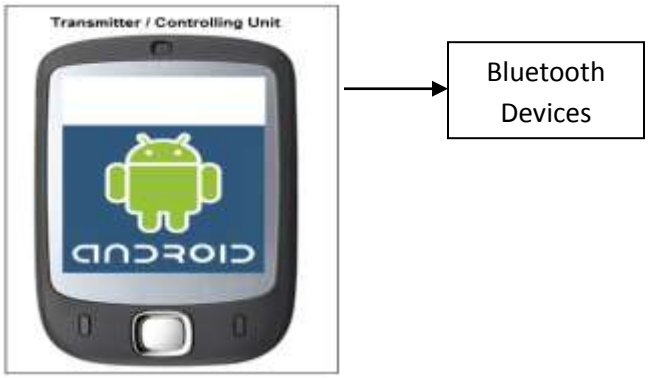
- Faster operation and efficient.
- No need to carry separate remote or any other controlling unit.

BLOCK DIAGRAM

1. Receiver unit (Home)



2. Transmitter unit



HARDWARE REQUIREMENTS

- Power Supply
- Bluetooth device
- Relay
- Micro Controller
- Decoder
- Home Appliances like Lights, Fans, etc
- Android mobile

SOFTWARE REQUIREMENTS

- Microcontroller Compiler
- PROTEUS SOFTWARE

Microcontroller May be ATMEGA, 8051 OR PIC