

# IOT BASED HOME AUTOMATION SYSTEM USING GOOGLE ASSISTANT

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**Abstract** – Nowadays, technology keeps on upgrading. The aim behind Google assistant-managed home automation is to command home devices with vocalize. On the trade there are many tool available to do that, but making our own is astounding. In this paper, the Google assistant requires voice commands. In this quarters computerization, as the end user grant commands to the Google assistant, Home gadgets like tuber, ventilator and turbine etc., can be controlled appropriately. The orders stated through the Google assistant are solved and then addressed to the microcontroller, the microcontroller successively control the relays coupled to it.

**Key Words:** Google assistant, IFTT, Node MCU, Relays are some of the terms used in this paper.

## 1. INTRODUCTION

While the outlay is increasing, there is a growing pivot to demand technology to nether those prices. With this in intellect the Smart Home forecast allows the end user to construct and nurture a house that is bright enough to keep efficiency levels downwards while providing further automated applications. A automated home will take upper hand of its surroundings and permit seamless control regardless if the user is nearby or away. With a home that has this trump card, we can know that our home is executing at its top in vigour performance.

## 2. EXISTING SYSTEM

The existing methodology built on with the GSM Module & Bluetooth Module lone. The recent development in technology which permit the use of Bluetooth and Wi-Fi have enabled different devices to have capabilities of connecting with each other. The real time applications of IoT, such as smart city, smart home, health care management, traffic management systems, require latency to process the huge amount of data. Utilizing Wi-Fi guard to feat as a micro web server for the Arduino destroys the necessity for wired relationship between Arduino board and computer which lessen price and allows it to toil as a standalone gadget. The Wi-Fi guard needs connection to the internet from a wireless router or wireless hotspot and this would behave as the gateway for the Arduino to communicate with the internet. Having said that, an internet-based home automation system for clicker of home appliances is planned.

## 3. PROPOSED SYSTEM

The proposed method terminates the difficulty of wired automation. Significant quantity of power supply is also feasible. Operating range is more than the Bluetooth. The existing method does not permit remote examining and supervising of appliances. But where as in the proposed method the system using the Wi-Fi built home automation system it permits to track and head up the appliances. The home automation of the existing method in 1990's, the person in every home has electronic gadget which are managed freehand but in our proposed methodology we are controlling all electronic appliances through remotely. The IoT application have become this favoured in this 21st century is due to presiding use of the internet, evolution of smart phone technology and raised standard of mobile communication

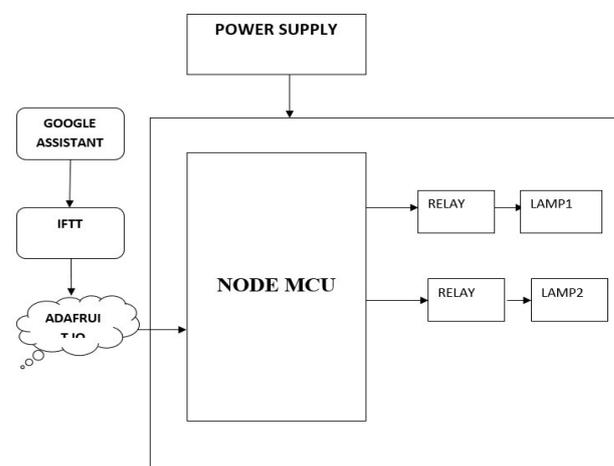
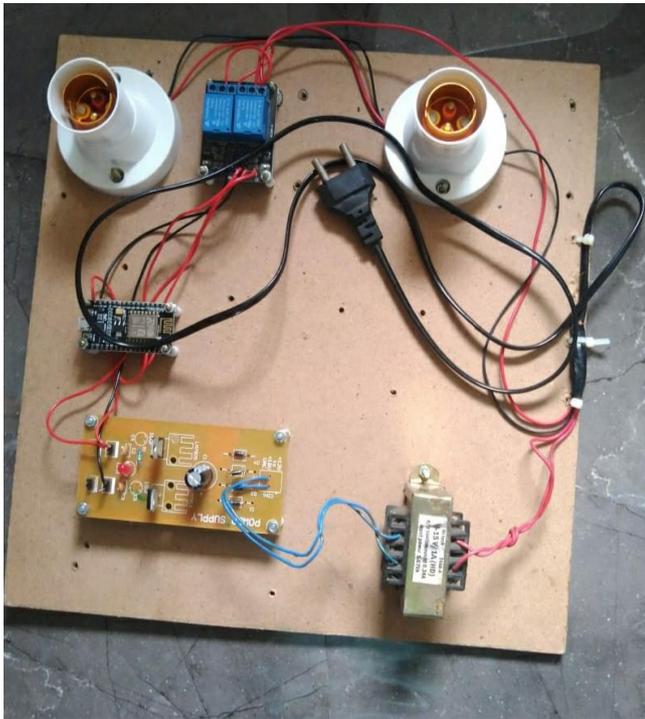


Fig-1: BLOCK DIAGRAM

#### 4. EXPERIMENTAL SETUP FOR MEDICINE BOX



**Fig-2: External Structure Model**

The Potential Transformer is connected with the Plug, the transformer step down the 238V to convert it to 5V and also converts it to AC which fed into the Power Supply and the Voltage flows through the Node MCU and The Relay, Depending on the commands which we are going to given through Google assistant the output of the Relay varies and act as a switch On/Off the Lamps(1,2).

#### 5. RESULTS AND DISCUSSION

Prompt Google Assistant by pressing and holding the home button knob on our Android gadget. If we are using iOS, launch the Google Assistant application. Snap the blue menu alternative at the connection's top rightward. Open up the three-dot option and choose settings prior to clicking the Home control option under services.

#### 6. CONCLUSION

In this estimate, voice instruct are given to the Google auxillary. The voice instruct for Google assistant have been added through IFTTT forum and the Blynk account is also attached to it. In this home automation, user has given order to the Google assistant. The commands stated through the Google assistant are sort out and then sent to the microcontroller and it regulate the relays. The gadget associate to the specific relay turned ON or OFF as per the users appeal to the Google Assistant. The microcontroller

exploited its Node MCU (ESP8266) and the communication in the middle of the microcontroller and the application is demonstrate via Wi-Fi (Internet). There has been massive extension in the home automation sector, and many well-respected companies make use of their chance to work with IFTTT to deliver a sophisticated way to link families to their homes. Enduser are focus to fixed their home environment in today's uncertain world, and the new Home automation favour gives them the peace of mind that they need to preserve their family's well-being. This structure is about wireless home automation using Android mobile boosting us to contrivance such a tremendous system in our home at a very sensible price.

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