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Smart Home Using Google Assistant

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Abstract **- The smart home movement is gaining steam and is going to be the next big thing in the field of technological brilliance. our innovative project is themed on voice activated home automation using google assistant .in this particular paper we have voice signal as the input which is the basic crux of our project .the project works on three steps. the voice signal is being cursed on as the input the first step which is then processed by a revolutionised software called google assistant , an one stop app for all needs . we have changed this ever earthly blessing according to our needs. Skilled programming is required to feed the input to the module.**

Keywords- **Google Assistant, home automation etc.**

I. INTRODUCTION

The main objective of the theme of home automation is to create ease in the operation of electrical appliances within a single command with atmost ease. Automation has started ruling the world and will continue to be such in the coming decade .So the future poses looming prospects for the future . A smart home is going to be the need of the hour and automating homes at minimal cost is going to be the next big thing in the field of technological brilliance automation of systems sipping up and growing itself into a separate domain of value . Time is the most valuable thing in this present era which actually justifies our stand of automating homes at minimal cost is a technical ingeniosity which is why we class ourselves prime of being the best in the world market.

II.ORIGINATION

The first smart homes were ideas, not actual structures. The invention of smart home concept in the early twentienth concept was an incredible achievement .Although it was never commercially sold, the ECHO IV was the first smart device. This intelligent smart device could sense temperature turn lights ON or OFF. Smart homes, or home automation, began to increase in popularity in the early 2000s. As such, different technology began to emerge. Smart homes suddenly became a more affordable option, and therefore a viable technology for consumers. Domestic technologies, home networking, and other gadgets began to appear on store shelves.

III.THE EXISTING SYSTEM

Home automation is not an envision idea .It has come into existence right from the early 1980's .The automation era begun right from the early 2000's but the earlier systems had a plethora of defects

1. The Bluetooth module

The module originated In the year 1960. The Bluetooth module has a very low proximity range . It can be operated only at a very small distance of the small range which is very small of the range of 6 to 10 inches away.

Fig. 1 Bluetooth module.

The link loss wi;ll be very great . The Bluetooth requires a Bluetooth app which can be operated only with a manual touch only and is not automatic . People with disabilities will not be able to use the automation systems. The Bluetooth module gets disconnected frequently. The data transfer speed is very less compared to other modules .

2. GSM Module

GSM is abbreviated as Global system for mobile communications It originated in 1991 in the western side of the world .Perhaps the greatest disadvantage of GSM is that multiple users share the same bandwidth. With enough users, the transmission can encounter interference. Therefore, faster technologies, such as 3G, have been developed on different types of networks than GSM, such as CDMA, in order to avoid such bandwidth limitations.GSM uses pulse based burst transmission technology and hence it interferes with certain electronics. Due to this fact airplanes, petrol bunks and hospitals prevent use of GSM based mobile or other gadgets.

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3. ZIGBEE Module

Fig. 2 ZIGBEE Module.

Zigbee Was Conceived In 1998, Standardized In 2003, And Revised In 2006. The Name Refers To The Waggle Dance Of Honey Bees After Their Return To The Beehive.The Zigbee Module Has Low Power Consumption Limits Transmission Distances To 10–100 Meters Line-Of-Sight, Depending On Power Output And Environmental Characteristics. Zigbee Is Typically Used In Low Data Rate Applications That Require Long Battery Life And Secure Networking . Zigbee Has A Very Low Data Transmission Range Of 250 Kbit/S . One Of The Most Important Disadvantages Of ZIGBEE Is That It Resonates With That Of WIFI Signals.

Fig. 3 WIFI Signal.

IV.THE PROPOSED TECHNOLOGY

Fig.4 Propose Technology.

1. Google Assistant

The Google Assistant Has Come Into Existence Only From 2017. It Is An Ever Eathly Blessing Of All Requisites . A Normal Google Assistant When Pinged With Voice Input Gets Connected To The Cloud And Starts Searching .The Searching Process Is Done In The Wikipedia And Gives Input Results . Butour Innovation Comes In The Way We Have Used GOOGLE ASSISTANT According To Our Needs . We Have Created An App Which Modifies GOOGLE ASSISTANT To Abide By Our Commands . The App Creates A Local Network Which Modifies The Cloud Storage Ability Of The Google Assistant According To Our Commands.

2.The Software Requisites

we have furnished an app according to our needs . this created app of ours is very ingenious in the way it modifies a quality software called google assistant. Instead of using an unknown app for modification of feed acceptance in iot we have used a quality requisite called google assistant and modified it according to our needs by using our own designed app. the automation of homes in real time require parallel connection of automation and manual control.

so to achieve ease of automation with bifold methods we have created an app for manual switching control the security concern in home automaton is high. so we have prop sedan theft algorithm. we provide an intellectual token to every customer and it is customer specific . so there is no possibility of interference without the consent of the customer and is entirely safe

3.Ic Manufacturing

most of integrated circuit with ic manufacture..instead of using hardware from market we have designed our own ic using fabrication techiques . the programming part is done using modelsim and fabricated using hdl &vhdl technologies.

The ic is designed by our own and executed by the most ingenious fabrication available as of now . the asic circuit design is specific to a particular circuit and ours is ver different from the market strategy . the design of automation is very important and there are 3 types of design ,soft micro hard micro and firm micro . we cruxed our work on soft micro because that is the most flexible type of fabrication and subtle changes can be made with respect to the customer requirements and is easier to program . the ic design is ready and it is work in progress

V. MONETARY AFFAIRS

The biggest enigma of the next decade and the forefront of technological brilliance is going to revolve around automation which is going to rule the world. Our project is mainly cruxes on automating home systems with minimal cost and maximum efficiency No one in the world has ever automated homes or industries on a large scale which is why this domain poses huge market opportunities. Not only are we automating homes but the most important part lies in the cost efficiency and the ease in the operation of automation systems. We are not just bluffing about the cost efficiency and we have justified it with the below

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mentioned loads and the cost requirements which as far as today is the "Best In The World Market"

Table…

Lounge	Dormi Tory	Food Galley	Lavara Tory
T.V (2p)	Ac(1)	Chimney (1)	Wasing Machine(1)
Fan (2)	Light(1)	Fridge(1)	Geyser(1)
Light(2)	Fan(1)	Light(1)	Light(1)
Nl(2)	Nl(2)	2p	
2p	2p		

8 Channel Relay

- Quantity Required – 4
- Price Of Single Relay – ₹ 299
- Cost Expenditure -₹ 1196

Ic

- Quantity Required – 4
- Price Of Single Ic - ₹ 335
- Cost Expenditure -₹ 1340

Wiring System

- Quantity Required –Negotiable
- Cost Expenditure – Around ₹300 (Customer Specific)

Total Cost Of Automation Of Entirety - ₹ 2836

VI.ADVANTAGES OF GOOGLE HOME

- With our proposed system any number of electrical parameters can be controlled with respect to different variation in loads.
- There is no problem in external circuit design with respect to automating homes and the manual side of things is completely undisturbed . We have given parallel connections to automatic and manua divisions by using unique circuit design and switching systems
- We use sensors which implies the fact that if the person is not at home the sensor sense it and the appliances are switched off
- We use image processing technique by means of which we feed the customer specificity to the system and an unknown person will not have access to the system and the automation is entirely safe

VII.CONCLUSION

Home automation is too recent and too focussed to have a conclusion. As of today we have automated homes at minimal cost as possible. We are keeping our fingers crossed to make it big on a larger scale and automate industries at nominal cost .We are planning to infuse this concept into agriculture development and remote location improvement

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