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VOICE CONTROL HOME AUTOMATION

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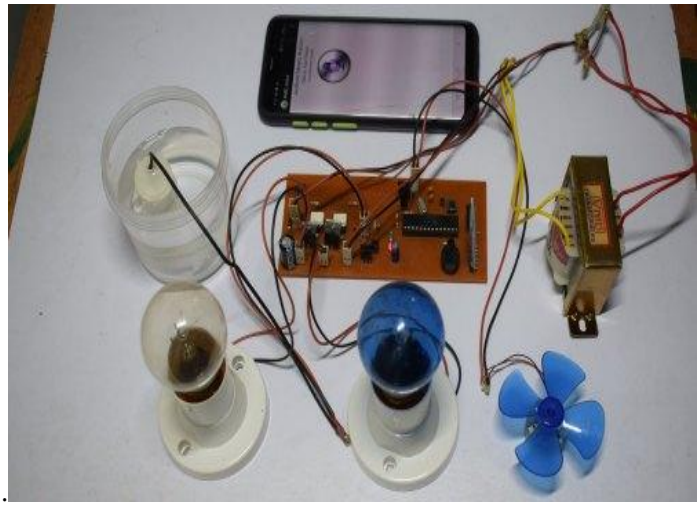
ABSTRACT

Home robotization is the most common way of causing the home machines to work on the voice order or the development. For the momentum research work the voice-controlled home robotization is thought of. In the flow research work the principal objective is to foster a voice-controlled home computerization framework. The machines like light, fan and entryway have been considered for causing them to work on voice order wifi module is considered alongside servo engine, toy engine, light and fan. At long last, Arduino IDE is utilized arrange the entirety of the gadgets and to portray the code to the WIFI module to allow the machines to run from a cell phone through.

Amazon Alexa or simply Alexa is a voice assistant technology that works on the internet. It is a type of smart speaker which is capable of doing various things like interaction with humans, music playback, streaming broadcast, providing real-time weather, traffic, and controlling various third-party devices. It fully works on voice technology. To interact with Alexa it has wake work " Alexa Wake ". Voice commands are given to the Alexa its process over the cloud and give proper results. Alexa basically takes the required slots and intents from user command for proper functioning. It has also a very good feature to communicate with third-party software. We as a whole are living in the age of the web. These days the web has turned into a significant piece of life. We are associated with the web constantly 24x7. It is a creation of both top of the line science and current innovation .From the hour of its introduction to the world, it has gone different huge changes and has become more easy to use and intelligent. Use of web is spread the whole way across the globe from sending messages, instructing, on the web exchange, clinical area, gaming, tech areas, and so on. Conversing with one of the most well known uses of the web in the current age is AI voice Assistance Technology which deals with basic voice orders.

1. INTRODUCTION

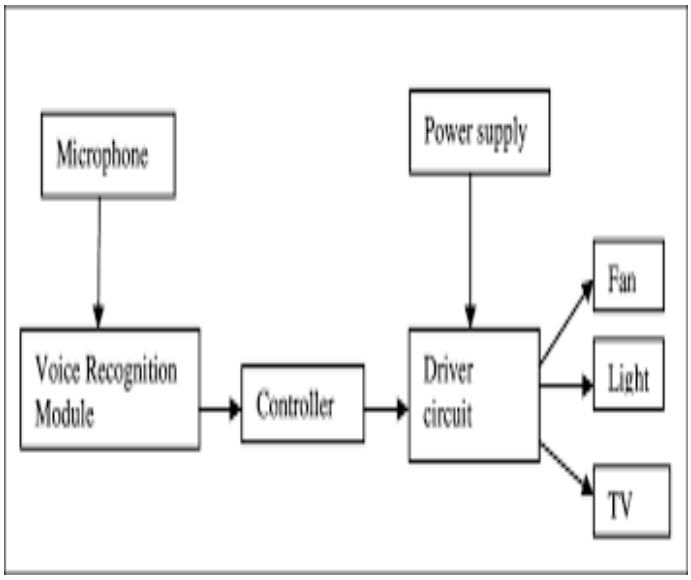
The working of this undertaking is exceptionally straightforward and can be utilized by anybody. Alexa, Sinric, Nodemcu, are totally associated with one another over the web. Alexa takes the voice input through the mic. The information order is handled with the planned ability on the cloud and contingent upon the calculation, required data was shipped off sinric. At whatever point any sign is gotten from process that sign with the code and make a suitable move as far as making the regulator sticks high or low which results in ON and OFF of the gadgets. This entire framework can likewise be controlled with an android application and furthermore with manual switches when there is no admittance to web. This framework has been tried with the two kinds of alexa and we come by 100 percent results.



2. BLOCK DIAGRAM

An IoT and android based Smart Home framework with power consumed measurements involving the android application for permitting clients to control and screen home machines continuously over the web. The whole equipment is associated with the Arduino board and the product part with Wamp server as a connection point provided this framework with the simplicity of working the shrewd home gadgets utilizing an Android application and observing them by showing the power use chart to keep the framework from short out and control disappointment. IoT-based home computerization framework utilizing Arduino with transfers coordinated on it for controlling home

machines from a distant area. It has a few plans with respect to the house security like it has a camera module for giving home security by catching photographs and video of the home and advising them to the proprietor. Likewise, different sensors are utilized for observing the ongoing status through IoT and a smoke alarm is utilized for assurance from fire dangers making this framework more got and reasonable.



3. CONCLUSIONS

In this paper, a model of a Smart Home Automation System was introduced. The framework can be effortlessly controlled through voice, android applications as well as through manual switches. Dissimilar to most very good quality home mechanization frameworks, our proposed model is financially savvy and extremely advantageous to utilize. We have significantly centered around advancing the traditional home robotization frameworks accessible on the lookout and fostered a more straightforward design which is simpler to control subsequently simplifying human existence. The proposed model hangs out in the accompanying perspectives: It is costeffective and more advantageous to use as it occupies lesser room. It guarantees security through machine and lighting control.

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5. REFERENCES

[1] S.Nadgaundi, G. Hiremath, A. Sakpal, P. Chaudhari, " IoT Based Advanced Home Automation," International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056 Volume: 07 Issue: 03 | Mar 2020

[2] S. Somani, P. Solunke, S. Oke, P. Medhi and P. P. Laturkar, "IoT Based Smart Security and Home Automation," 2018 Fourth International Conference on Computing Communication Control and Automation (ICCUBEA), 2018, pp. 1-4, doi: 10.1109/ICCUBEA.2018.8697610.

[3] S. Ahmed , Suryakanth S, Subraminiam , Surya S and Mr.Murali M , " Home Automation," International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056 Volume: 08 Issue: 04 | Apr 2021

[4] S. Srikanth, S. saddamhussain and P. S. prasad, "Home Anti-Theft powered by Alexa," 2019 International Conference on Vision Towards Emerging Trends in Communication and Networking (ViTECoN), 2019, pp. 1-6, doi: 10.1109/ViTECoN.2019.8899464.

[5] M. Asadullah and K. Ullah, "Smart home automation system using Bluetooth technology," 2017 International Conference on Innovations in Electrical Engineering and Computational Technologies (ICIEECT), 2017, pp. 1-6, doi: 10.1109/ICIEECT.2017.7916544.

[6] Hamsa Rekha S, Seema B , Sheetal ,"Voice Controlled Home Automation," International Research Journal Of Engineering And Technology (Irjet) , E-Issn: 2395-0056 Volume: 07 Issue: 12 | Dec 2020

[7] R. More, N. Mhatre, A. Maurya," Energy Efficient Smart Home Automation," International Research Journal Of Engineering And Technology (Irjet) , E-Issn: 2395-0056 Volume: 08 Issue: 04 | Apr 2021

[8] T. Chaurasia and P. K. Jain, "Enhanced Smart Home Automation System based on Internet of Things," 2019 Third International conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), 2019, pp. 709-713, doi: 10.1109/I-SMAC47947.2019.9032685.

[9] A. Rai, K. Bhagat, K. Mane, Prof. S. Sharma," Smart Home With Power Consumed Statistics Using Android Application," International Research Journal Of Engineering And Technology (Irjet) , E-Issn: 2395-0056 Volume: 07 Issue: 03 | Mar 2020

[10] Mrs. S. Suryawanshi, M. Sheppard, S. Mendhe, M. Jamale," Simulation of home automation using Arduino," International Research Journal Of Engineering And Technology (Irjet) , E-Issn: 2395-0056 Volume: 08 Issue: 04 | Apr 2021

[11] I. Krishna and K. Lavanya, "Intelligent Home Automation System using BitVoicer," 2017 11th International Conference on Intelligent Systems and Control (ISCO), 2017, pp. 14-20, doi: 10.1109/ISCO.2017.7855973.

[12] K. Agarwal, A. Agarwal and G. Misra, "Review and Performance Analysis on Wireless Smart Home and Home Automation using IoT," 2019 Third International conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), 2019, pp. 629-633, doi: 10.1109/I-SMAC47947.2019.9032629.

[13] D. Chowdhry, R. Paranjape and P. Laforge, "Smart home automation system for intrusion detection," 2015 IEEE 14th Canadian Workshop on Information Theory (CWIT), 2015, pp. 75-78, doi: 10.1109/CWIT.2015.7255156.