

NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY



(An Autonomous Institution)

DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

SMART SENSING FOR HOME AUTOMATION

Name: Laxmi Dorjee USN:1NT17MCA73

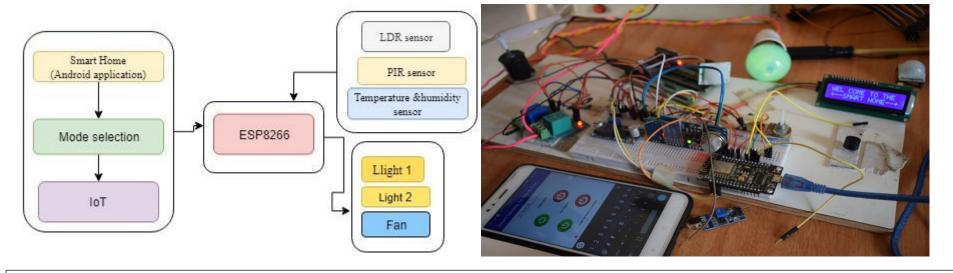
Under the guidance of:
Ms. Sowmya H.N,
Asst. Prof.,
Dept. of MCA

OBJECTIVE:

- The goal of this project is to control the home appliances remotely with successfully and proficiently.
- Building a sharp home contraption that can be used to control home apparatuses through the mobile application.
- The owner should control the base home appliances from any other a part of the globe.
- To acquire data parameters including real-time weather monitoring, light intensity control, fan speedup control, motion and magnetic switch condition using respective sensors.

INTRODUCTION:

In this project, we present a Home Automation System using android application with extra security utilizing ESP8266 microcontroller, with IP network through nearby Wi-Fi and Bluetooth for getting to and controlling gadgets by the approved client remotely. The proposed framework is server autonomous and utilizes the Internet of things to control human wanted appliances beginning from mechanical machines to purchaser products. The client can likewise utilize diverse gadgets for controlling by the assistance of the internet browser, keen Phone. To show the adequacy and achievability of this framework, in this project, we present a home computerization framework utilizing various sensors and ESP8266 (Nodemcu) as a network module. It causes the client to control different home appliances for example; light, fan, and further more screen the room temperature and moistness. The client gets the notice in their enlisted advanced mobile phones if there are any Gas spillage and other brown haze displays in the room and can take choice dependent on the criticism of sensors remotely. We have tried our system through a directed examination of different natural conditions.



CONCLUSION:

In our proposed model a high percentage of accuracy has been achieved though implementation. This system is capable controlling the home appliances based on user's desired mode. All the modes works with a good accuracy which was found during implementation. Users only need to select modes from their smart phones and our system will do the rest of controlling the appliances. This proposed project is highly reliable. So it can be said that this system has higher accuracy with great efficiency.

FUTURE ENHANCEMENT:

This system has huge opportunities to upgrade in future. As mentioned earlier this is the first generation of home automation. It could be upgraded to second generation by storing and analyzing data on the cloud servers. Than using machine learning algorithms, we do not even have to choose modes from smart phones. Rather it might be able to switch modes with its own artificial intelligent

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- •Tam Van Nguyen, Dong Gun Lee, Y—Ubiquitous Access to Home Appliance Control System using Infrared Ray and Power Line Communication, ICI 2007, 3rd IEEE/IFIP International Conference in Central Asia, Tashkent, Uzbekistan, vol 1, pp1-4,26-28 Sept.2007.