## **IJARSCT**



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 1, May 2022

## **Energy Saving in EWS Lab using IOT Automation**

Sakshay Anjankar<sup>1</sup>, Vikesh Shedesar<sup>2</sup>, Nikhil Dupare<sup>3</sup>, Vinay Sahare<sup>4</sup>, Prof. Rakesh Dakhre<sup>5</sup>

Students, Department of Electrical Engineering<sup>1,2,3,4</sup>
Guide, Department of Electrical Engineering<sup>5</sup>
Nagpur Institute of Technology, Nagpur, Maharashtra, India
Corresponding Author: sakshay4037@gmail.com

**Abstract:** An IoT based office automation system is presented in this research paper. It's important for us to know that office automation system makes use of portable devices as an interface. They can communicate with the internet, by means of a less power consuming communication protocol like the wireless fidelity, ZigBee, cloud to mention but a few. The sole aim of this research paper is to widget office appliances via website using wireless fidelity (Wi-Fi) to be the interaction procedure whereas ESP32 is the server system. Hence, office appliances like bulb, fan and socket were controlled through website easily in addition a push button can also be used to manually control the appliance. The results show that the server communicated with the Arduino hardware circuit to control the electrical appliances connected to it. This paper demonstrated how energy can be fully conserved in offices.

Keywords: ESP32 Microcontroller, Relays, IC Drivers, etc

## REFERENCES

[1]. http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=7096250&queryText=iot%20office&newsearch=true

DOI: 10.48175/IJARSCT-3582

- [2]. https://nodered.org/
- [3]. https://nodemcu.readthedocs.io/en/master/en/modules/gp io/
- [4]. https://microcontrollerslab.com/iot-based-home-automation-system-wifi/
- [5]. https://create.arduino.cc/projecthub/prabinrajupreti/iot-based-home-automation-9fac50