The Internet of Things (IoT) is a computing concept that describes a future where every day physical objects will be connected to the Internet and be able to identify themselves to other devices. In the future, every device is more likely to be connected to the web directly with the users expecting it to be responsive to their needs.[1]

In this project, three modules are created which is used to monitor various environmental parameters and update it real time data to a server. The parameters measured include ambient temperature and humidity of the room, noise levels, the number of people entering and leaving the room and toxic gas detector. In case a flammable gas is detected, an alarm is triggered and an email is sent to the user’s account.

Arduino is used to integrate and program the hardware components with ESP8266 being the WiFi component which connects to the host webpage. The server side is created on an IoT platform, Ubidots.
References


Index Terms

Computer Science          Embedded Systems

Keywords

Keywords are your own designated keywords which can be used for easy location of the manuscript using any search engines.