

## **ABSTRACT**

The physical condition of the drug storage room is something that must be maintained to ensure the quality of the drugs stored in the room. The temperature and humidity of the room must be in accordance with the recommendations given by the manufacturer, storage of drugs that are not in accordance with the recommendations can cause the quality of the drug to decrease and the expiration time of the drug to change. As a result, the drug is not effective and can even be dangerous to consume.

A device for monitoring and controlling the temperature and humidity of the drug storage room with the Internet of Things (IoT) system has been designed and created that can monitor and control the temperature of the drug storage room continuously through a web. This tool is also equipped with a Passive Infra Red (PIR) sensor and a buzzer to detect and give an alarm if someone enters the medicine room. The results of the design and realization show that the temperature in the room can be kept stable at the target temperature (20°C to 25°C) and the security of the room can be controlled because the system will send a notification on the website and turn on an alarm (buzzer) when someone enters/exits from the room.