ABSTRACT

Disaster is an incident that can result in loss of property, psychological impact, and can even cause loss of life, for anyone affected. One of the most frequent natural disasters in Indonesia is fire. Fire is a disaster or event caused by a small flame or large fire, which results in property loss or loss of a person's life. This research focuses on making the Internet of Things-Based Home Fire Detection Design Tool Using Nodemcu Esp8266 and Telegram. This study aims to utilize technology to detect early indications of a fire, to reduce the risk of fire. In this study, Nodemcu ESP8266 was used to send initial information on signs of fire via Notifications on Telegram. This tool uses 3 sensors, namely a fire sensor, a dht11 temperature sensor, and an mq2 smoke sensor. When the sensor detects it, it will send a notification on Telegram. standby 3 when detecting room temperature over 45 degrees, standby 2 when detecting smoke, and standby 1 when detecting fire. The results of this prototype test are that the fire sensor can detect the flame on the candle up to 90 cm, can work well, and is according to the instructions given to the program.

Keywords: fire, Internet Of Things, Nodemcu