

ABSTRACT

Safety at home is the main thing that must be a concern. The possibility of danger must be detected as early as possible, one of which is the possibility of a fire. Fires often caused by human error and loss due to fire disasters include loss of property, business stalled, and even death. To overcome the above problems, then made a tool that can detect and monitor the condition of the house rather is a kitchen space in realtime.

In the design and implementation of fire detection system using this database realtime using fuzzy logic. The parameter displayed is the temperature, the presence of smoke, flame detectors and hazardous gas levels in the kitchen that can be viewed in real time through the web interface using the technology of the Internet of Things.

The Fire Detection System that has been made can make it easier for the general public to know the fire conditions in real time. Hardware distance to hotspots gets a value of 100 cm. Error detection of fire in the flame sensor worth 0%. Error detection of temperature 1.21%. Error detection of gas 22.19%. The average delay between hardware and software is 0.58 seconds on the test results. So that the Fire Detection System can provide real time monitoring of the condition of a room.

Keywords: Fire, Realtime, Internet of Things