

## **ABSTRACT**

It is common knowledge that in the Telkom University campus area smoking is an activity that is not permitted. However, this regulation is still ineffective because of the large number of students who smoke in the toilet. This causes problems for the campus to keep the campus area smoke free. Problems that arise include the number of students who smoke in hiding in the bathroom or on the rooftop of the campus building.

A system that is able to overcome this problem is needed. One way to deal with these problems is to create an information system for the detection of shop smoke in the Building of the Faculty of Applied Sciences Telkom University. Information system for smoke detection in Telkom University's Faculty of Applied Sciences Building is a system that can monitor the toilet that has smoke through a smoke detector then the data is displayed on the Android platform application.

This application is tested to be able to know in real-time through the Firebase database for smoke detection status on the toilets of each floor in the Faculty of Applied Sciences Building and helps users to monitor continuously through the History feature and prevent violations in the Faculty of Applied Sciences Building in the future. This application can function optimally with a maximum mask delay of 1 second and little data usage 1Kb.

*Keywords: Android, Information System, Firebase*