

## ABSTRACT

Basic needs are fundamental to human is food needs. In an effort to meet these needs required good management. Smart kitchen system with the concept of the Internet of Things (IOT), designed using raspberry pi is equipped with sensors. This smart kitchen system can help people in protecting and managing food supplies efficiently. Connected to the Internet network, the system can be remotely monitored using android smartphone. The system is divided into 3 parts ordering devices, security devices and application systems.

Ordering devices main functions to detect the availability of goods on kitchen appliances, and can make a reservation to a nearby store when the availability of goods will soon run out. Its main function security devices to detect hazards that occur in the kitchen, such as the detection of gas leaks and detect the occurrence of fires. Application system serves as the user interface for displaying the data from the device reservation and a security device on the smart kitchen system. In addition the application also includes a store system that can be connected to the system smart kitchen. The research focused on the application of the system. Applications using the formula haversine to locate the nearest store at the time of ordering.

Based on the results of testing that has been done, the functionality of the application can be run either with a success rate of 100% using a blackbox testing method. The application can also send notifications or alarm with an average delay of 2.1 seconds, and the rate of delivery failure notification 2.94117647%.

Keyword : internet of things, raspberry pi, android, smart kitchen