

## **Abstract**

Green house is a construction building has a function to avoid and manipulate environmental condition in order to create environmental condition which is aimed in cultivation plants. Temperature, Humidity, and Soil Moisture is an environmental condition which guard to Green House. But unfortunately, the environmental condition is not observed and controlled proper. Accordingly, it needed an automation system (internet of things) that could control automatically also could be monitored the Green House without limitation of distance during smartphone connected to internet.

In this study the authors have developed an android application that make the user easier to control and monitor the temperature, humidity, and Soil Moisture that already exist on Green House. This application connect to the internet using firebase realtime database and authentication until controlling and monitoring system be used everywhere without limited distance.

From the result of the research that has been done, this application can be controlling and monitoring the temperature, humidity, and soil moisture Also, show the data on a graph form. This application could help in a process of controlling and monitoring green house condition manually and otomatically.

**Keyword: Green House, control applications**