ABSTRACT

At this recent days, we need something simple, fast, and efficient. No exception in an agricultural major. Difficulty to treat and take care of the plants become one factor in the lack of green plants around the residential areas. Many of the individual or the producers has begin to create an object that is useful, efficient and appropriate to support a system of plantation in Indonesia. One example of those is the automatic plant watering device. There have been many automatic plant watering device that is growing, but is still limited.

At the end of this project created a functioning plant watering applications for control and monitoring device watering plants. In the early stages, the redesign of the system include how to work the system and designing interfaces or interface application. The development of the application was built by Android software Studio. Applications linked to the Firebase as a gateway for transmission and receiving of data.

The test results showed that the application of watering plants can be integrated with the Firebase and can control the tap manual with an average of 2.15 seconds of On delay and Off delay about 2.12 seconds, with automatic watering schedules, display data input status temperature, status, and status conditions of humidity sensor. This application consumes the data upload and download with an average 1 Kb. application can send a notification to the user if the tap is already open and closed and when the rain sensor detects weather conditions around. This indicates that he made with this application can help in doing the watering of plants without the limitations of distance.

Keyword: android, firebase.