DESIGN OF A MICROGREEN PLANT WATERING SYSTEM USING THE CONCEPT OF THE INTERNET OF THINGS BASED ON ANDROID

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ABSTRACT

Microgreens are vegetable plants, spice plants or other plants that are consumed when they are very young, namely during the cotyledons. Plants are fully developed or when true leaves have not yet appeared (plant height 5 -10 cm). Microgreen is a vegetable that was just popularized in 1997. Microgreen is believed to contain a higher source of vitamins, minerals, beta-carotene than the vegetables themselves when they are mature. The main problems that arise when microgreen plants are grown conventionally include temperature, humidity, and lighting depending on the environment which does not always match the needs of the migrogreen. This causes less than optimal growth. To solve this problem, a Microgreen Plant Watering System was created using the Android-Based Internet Of Things Concept. The tools used are Arduino IDE and Android Studio and Firebase as realtime databases.

Keywords: Microgreens, Internet of things, Android