

## ABSTRACT

The use of a mini fan that is often used by the public today that serves to cool the air around the current user is sometimes troublesome, this is because the user must continue to hold the fan to get the maximum benefit from the fan, therefore a fan is needed integrated with the Internet of Things (Iot) system that can work more efficiently and is easy to use in daily life because of its smaller size so that it can be controlled via an android application which is a smart fan. A smart fan is a mini fann that can control the temperature around the user, this tool can be connected with the android smart fan application. The android smart fan application functions to control the fan, display temperature and self assessment and display a status that can change from normal to dehydrated, this status change to dehydration when the temperature around the user is exceed normal temperature. If the status changes to dehydration, users can see information about dehydration and its symptoms because if the ambient temperature exceeds the normal temperature, it can cause dehydration. Smart fan devices use sensors, and relays that act as inputs, smart fans also use the Arduino module as a control center and the Bluetooth module as a data sender and as a liaison with Android applications. Test results enter the test data in the form of Likert scale results.

**Keyword :** Android, Arduino, Dehydration, DHT22, IoT, Fan, Bluetooth Module