

ABSTRACT

Vaccine is substances or compounds that function to form immunity against a disease. Vaccination aims to make a person's immune system able to recognize and quickly fight bacteria or viruses that cause infection. However, the quality of vaccines can decrease to the point of spoilage when stored and distributed at inappropriate temperatures. Sinovac vaccine distribution and storage temperature must be maintained between 2° - 8° Celsius to maintain quality, so in this case it is believed that the vaccine storage and distribution process is an important factor to maintain the quality of the vaccine in order to maintain its quality. By utilizing Internet Of Things technology, it can overcome existing problems by creating a vaccine distribution monitoring system that uses a temperature sensor as a temperature detector and GPS as a vaccine distribution location detector. The overall system implementation was carried out for approximately 6 hours by producing a thermometer standard deviation of 5.2033 ± 3.0277 , a DHT22 standard deviation of 5.153 ± 3.067 , a temperature correction of 0.05. Meanwhile, in GPS testing, the average difference is 15.5333 meters.

Keywords: Vaccine, WiFi, Blynk, Firebase, DHT22, GPSNeo6MV2.