ABSTRACT

Mountain climbing activities in indonesia has developed recently. Basic science in a climbing mountains is appropriately knowledge and understanding of climbing equipment, safety, and the safety of mountaineers, but in fact there are still many mountain climber who is unaware of the problem. There is often a problem that affected by hypothermia, got lost in were climbing to, to claim the life of a mountain climber.

In this research, writer design an instrument for the detection of the condition of climbers based wifi module. Tracking system instrument was used in the mikrokontroler esp 32, by means of sensors gps neo 6 m and dht11. Testing based on parameters that had already been fixed. As change the coordinates chief and member be data over distances with a gps fix neo 6 m, the accuracy of the accuracy of the data the temperature with using dht11, the head of the accuracy of the accuracy of the data coordinates the location and climbers with a gps fix neo 6 m. All of the proceeds of the data was sent to the android application.

With this device, climbers could be more anticipates things who have lost climbers own. It is because the average accuracy of these is 99.62% for measurements of the distance and 99.93% for the measurement of temperature. It is expected that user can easily on the monitoring of climbers by the presence of the android application designed.

Keywords: Internet of Things, WiFi Module, Android Application, DHT11, Global Positioning System.