Abstract

Vehicle travel is a public transportation service that is widely used among the people of Indonesia because it has efficient and practical properties to use especially when traveling out of town and the price is relatively affordable compared to using private vehicles. But in the use of public transport services the estimated departures and arrivals schedule that are not as expected become a problem that still happened until now.

This is become the basic idea to support the provision of departure and arrival schedule that will be used on travel vehicles through the application titled **"Minibus Vehicle Control Application in Bandung based on IoT (Case Study at Baraya Travel)"**. This application created using Android studio as a software and Arduino UNO, Jumper Cables, Breadboard, Sim Card, modul GPS neo6mv2, modul SIM800L evb v2, modul NodeMCU ESP8266, modul RTC, antena GPS, and antena GSM as a hardware, to connected the application with the travel vehicle.

This application can control the existence and speed of travel vehicles, control the travel route, view estimated schedule of the travel vehicles, and view departure history. Using this application, users can contol the existence of the travel vehicles so that the efficiency of the departure and arrival schedule can be in accordance with the expected estimation time.

Of the 7 questions that have been submitted to application users can be calculated the results of the survey evaluation with an average value of 3.58 or equal to 3, it can be concluded that the use of Trafinder application in the form of information from each feature and design of the display on the smartphone is quite easy to understand and used by Trafinder application users.

Keywords : Vehicle, Android, IoT, Efficiency, Travel