ABSTRACT

Nowadays online ojek is quite success by having many customer, using smartphone app, customer can order a service of an online ojek. Ojek fare determined by the distance between the start point to the destination point using certain route (based on Google Maps Apps) and multiplied by particular number (for each kilometer cost). On the progress though, not every ojek driver use the route that has been generated by the Google Maps Apps, hence causing the difference between the planned route's mileage and the real distance traveled during one session may it be more or less. By building a system that capable of keeping the distance traveled in check, this problem could be prevented. The mileage measurement system consist of microcontroller connected to GPS module with a low frequency sampling. The result of this system will be compared with Google Maps Apps which is currently being used by the online ojek system to compare the accuracy. The result of this research shows that the measurement using GPS module is more accurate than application currently used by online ojek. The result of the test on 5 – 200 meters shows that the GPS module is more accurate, while on 200 – 5000 meters Google Maps is more accurate and lastly on 9000 – 10000 meters the GPS module is more accurate.

Keywords : GPS Module, Microcontroller, Google Maps