

Abstract

Nowadays there are many online ojek reservation, ojek can be booked by using a smartphone apps. Ojek fare determined by using mileage. In this project, writer suggest a system for measuring motorcycle mileage using hall effect sensor to count the rotation of motorcycle wheel.

The design of mileage measurement system proposed, consist of microcontroller with hall effect sensor for counting the motorcycle wheel rotation amount, and then it will be converted to actual motorcycle mileage. Then the actual motorcycle mileage will be compared with estimated mileage from google maps.

The result of mileage measurement using hall effect sensor has low accuracy, because of uneven road surface so the hall effect sensor can't detect the magnetic field optimally. For next project writer propose to add more magnet and using other wheel rotation measuring device.

Keywords : hall effect, google maps, sensor, microcontroller