

ABSTRACT

In the economic field, transportation plays an important role as a means to support the movement of goods and the distribution of services. One of the popular public transportation in Indonesia is the bus. To support the comfort and safety of passengers, companies engaged in the bus sector must of course provide the best facilities and technological innovations to their bus fleet. One of the technological innovations that exist in vehicles is a remote monitoring system based on the Internet of Things (IoT). The monitoring system certainly has a number of data that need to be processed into information. Therefore, in this study, a system will be built which is tasked with managing the existing data on the bus monitoring system. The system consists of several features, namely data storage, data sender, and data receiver features. The data storage feature created has a compatibility level between recorded video data and stored data reaching 99.11%, with the estimated file size stored in one day is 73.36 GB. Then the data sender feature has a level of compatibility between the data sent and the data entering the server reaches 100%, with an average delivery delay of 1.13 seconds. And for the data receiver feature, the level of compatibility between the data received and the data sent by the server reaches 100%.

Keywords: Internet of Things (IoT), Vehicle Monitoring System, Data Management System