Abstract

The act of manipulating data in the KIR process is an illegal attempt. This action is very risky for the feasibility of passenger vehicles and goods when on the highway, where if indeed the vehicle is not roadworthy but because the data is manipulated so that the vehicle is still being used it can cause accidents. One of them is the frequent occurrence of brake failure on large vehicles such as trucks and buses or overloading which results in overturned vehicles that often occur in trucks.

So, a vehicle recording system in the KIR process based on the Blockchain was create d with the aim of minimizing data manipulation by the irresponsible Blockchain which was introduced by Satosi Nakamoto in 2008 in the field of cryptocurrency. However, now the Blockchain can be implemented in various fields in finance, banking systems, supply chains and also vehicle registration.

In this final project a vehicle registration system is designed on KIR in the Bandung District Transportation Department, with Blockchain as the database and Hyperledger Fabric for this system framework. The results of this research show that the average application performance is 2.47 second, then the application program is in accordance with the KIR process, and the application is running well.

Keyword : *Blockchain,* KIR, *manipulation*