6COSC023W – Final Project Report

Blockchain based vehicle registration system (Improved proposed solution for the existing DMT system)

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Abstract

Registering a vehicle in Sri Lanka is a must with any kind of vehicle bought by a user. There is a process through which registrations are carried out and handed over but it has been clear over the past years that there are loopholes within the existing system.

Problem identified in the domain is the continuous occurrence of multiple fraudulent activities with regards to the legitimacy of the ownership of vehicles. Due presence of a digital system with features that are malfunctioning, the authentic details of real registration too cannot be generated. As there are multiple manual procedures involved and improper management of digital means, there is high chance within he system for it to be mis used.

Existing literature and the results of the survey has been used to figure out the background data and this project focuses on analysing the multiple issues present in the current system for different stakeholders inclusive of owners of vehicles and along with other local authorities.

The aim of the project is to build a system to verify the registration details of vehicles and thereby minimize the fraudulent activities that take place. This will enhance the effectiveness of the vehicle registration process for vehicle owners and furthermore create an atmosphere where details of the vehicles required could be retrieved conveniently.

Legit-Ride; a block-chain based solution will increase the efficiency of the procedures and minimize many issues that are currently present with the current system. With the various outcomes and evaluations that were obtained, it is evident that this solution will be in effect to make the current Vehicle registration process much more convenient and useful.