DECENTRALIZED FIREARM TRACKING SYSTEM
GTA

Gamlath Ralalage Ruchila Maditha Gamlath

A dissertation submitted in partial fulfilment of the requirement for
Bachelor of Science (Honours) degree in Computer Science

Department of Computing

Informatics Institute of Technology, Sri Lanka
in collaboration with
University of Westminster, UK

2020

Abstract

Firearm usage have been rising in an epidemic manner. With this high rate of firearm ownership, it's getting challenging day by day to keep track of the sold firearms and to manage the transactions between dealers and purchasers. When an investigation is filed to track a firearm, with the existing firearm tracking systems, it will be challenging. So, what options can we take to avoid this problem? In this research we will talk about how Blockchain can be utilized to bring a solution to this problem. This aim of this project is to build a system which will help with firearm tracking and to build a digital firearm ownership certificate for the legal firearm dealers and to the firearm purchasers.

This proposed solution will help in build a system which will satisfy all these needs with the help of Hyperledger Fabric. Using Hyperledger Fabric smart contracts to follow up with firearm transaction and to build an immutable unchanging firearm record system which will then be a very credible information system for the necessary authorities in backtracking firearms to the date it was added to the system.