

Team Name: Digital Mavericks

PS No: KVH20

PS Title: **Indigenous technological cryptocurrency investigation tool with multi-blockchain platform support.**

Abstract

A cryptocurrency is a form of digital or virtual money that is encrypted. Blockchain technology, a distributed ledger enforced by a dispersed network of computers, is the foundation of many cryptocurrencies decentralized networks. The only way to identify a transaction on a blockchain is using a public key, which is a series of alphanumeric characters. This implies that while other people can view your transactions and your holdings, they are unable to determine who you really are in the real world.

There are more than 22,000 cryptocurrencies in existence representing one of the biggest unregulated markets across the globe. Citizens use cryptocurrencies to evade from tax payments. As per 2022 data, it is estimated that there are 115 Million Crypto Currency users in India. This number represents 15% of the Indian Population aged 18 to 60. The investigation of cryptocurrencies has emerged as a very big challenge for law enforcement agencies across the world. Thus, our goal is to create a system that will recognise legitimate cryptocurrencies and monitor them for illegal activity.

The proposed system is an analysis tool providing trusted, accurate and up-to-date data. The application provides the investigator the facility to enter an alphanumeric string and the system validates the cryptocurrency and extract base58 encoded strings for other cryptocurrencies from a given digital image. The system will keep track of API requests and store the results of these queries using Web3. To inspect the cryptocurrency, we make API calls to the explorer APIs Blockcypher, Monero, and Etherscan.io. This assists the user gain insights about the behaviour and patterns of individuals and entities on the blockchain network. The tool uses the wallet addresses associated with a specific transaction and identifies if any cryptocurrency exchange is involved. The system will have an ML model which will be used for detecting malicious wallet addresses. The project supports mobile and web app making it versatile and cross-functional

that supports interoperability. This is how the proposed system will be developed.