BLOCKCHAIN PROJECT ABSTRACT

1. GreenToken – A Blockchain-Based E-Waste Recycling & Reward System:

GreenToken is a blockchain based E-Waste recyclying & Reward System.It encourages the appropriate disposal of electronic gadgets.Depending upon the kind of device, they get rewarded with eco-tokens. Using Solidity smart contracts, users submit information about recycled equipment, which can be stored on the Ethereum Sepolia or Hoodi testnet.

To creating contrcats can use Hardhat and secure authentication can do with JWT.By avoiding fraud, allowing public verification of recycling activities, and proportionally automating token distribution, blockchain assures transparency, immutability, and trust. GreenToken is a sustainable, verifiable, and safe way to encourage environmentally responsible recycling practices.

2.Blockchain-Based Warranty Management System

This project aims to develop a decentralized warranty management system using blockchain technology. Reducing false claims, doing away with a paper-based warranties, and building trust among consumers, producers, and service providers are the objectives.

This method uses a smart contract to generate and store a digital warranty record on the blockchain each time a product is sold. Essential data including the product ID, purchase date, warranty length, and customer details are all included in the record. The buyer receives a generated QR code that they can use at any time to check the status of their warranty.

The technology is transparent and tamperproof since it manages warranty expiration automatically. Service centres may verify claims by scanning the QR code and examining the blockchain ledger, and users can access their warranty details through a web or mobile interface.By using blockchain, the project ensures immutability, trustless verification, and efficient warranty tracking, providing a simple yet powerful solution for both consumers and retailers.

3.Evidence Protection System Using Blockchain Technology

In criminal investigations and legal proceedings, the integrity and authenticity of evidence are critical.Unauthorised access, manipulation, and a lack of transparency in the chain of custody are just a few of the weaknesses that affect traditional methods for handling digital or physical evidence. In order to address these problems, this project suggests creating an evidence protection system with blockchain technology, utilising the immutability, transparency, and decentralised trust that are built into blockchain technology.

The system allows law enforcement officers and legal entities to upload, store, track, and verify evidence on a secure blockchain network. Each piece of digital evidence is hashed and stored on a decentralized storage system.This technology uses decentralised storage and Ethereum smart contracts to prevent evidence tampering, ensure responsibility, and build trust in the legal system. The project provides a future-proof solution for digital forensics and law enforcement