

Blockchain-Based Waste Disposal and Recycling Reward System

Aishwarya Lakshmi Navami,

Alan Gafar,

Alan Siby,

Alan Thomas Shaji,

Anagha Tess B

Department of Computer Science and Engineering

,Amal Jyothi College of Engineering Kottayam

Abstract—The proposed blockchain-based application aims to incentivize users to properly dispose of waste while also promoting recycling and sustainability. The application allows users to earn points for disposing of waste in specially designed waste bins that accept products with barcodes. These points can then be exchanged for a blockchain-based token or used to purchase other products. The system also features a ranking system that allows users to compete with one another to see who can dispose of the most waste. This ranking system is designed to inspire a sense of friendly competition and encourage users to be more mindful of their waste disposal habits. The collected waste is then supplied to recycling plants for a cost. The recycling plants process the waste and sell the recycled materials, which generates revenue for the project. Additionally, juice bottles can be sold to beverage companies for recycling purposes, which further increases revenue and profitability. Overall, the proposed application has the potential to make a significant impact on waste reduction and recycling efforts. By incentivizing proper waste disposal, the application could motivate users to be more environmentally conscious and contribute to a more sustainable future.