

E - W A S T E
C O L L E C T I O N A N D
RECYCLING TRACKING SYSTEM

PL/SQL Capstone Project – Phase I
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Introduction

My project is about building a system that helps track e-waste collection and recycling. This includes old phones, laptops, batteries, screens, and other electronics that people throw away. The goal is to create a clean database and PL/SQL logic that helps collectors and recycling centers track how much e-waste is collected, where it goes, and how it is processed



earth.org





More people are throwing away phones, batteries, and computers without safe disposal.

- E-waste is dangerous because it releases toxic chemicals into the soil and air.
- Many collectors don't track what they collect or where it goes.
- There is no simple system to record, monitor, or report e-waste activities.

Growing Electronic Waste in Kigali



Our community needs a cleaner, safer, and smarter way to handle e-waste

The Context & Target Users



Vision

recycling centers can use the system to see how much waste is coming, the types of items, and when they arrive.

Environmental organizations can use this data to create awareness campaigns, while government agencies can use the information to plan policies.

Who Will Use the System?

- Street collectors
- Recycling centers
- Environmental NGOs
- Government agencies
- Citizens (indirectly)



| Our Services

What the System Will Do

What the System Will Do

- Record collected e-waste
- Track movement from collector to recycler
- Show monthly waste totals
- Reduce lost or missing data
- Provide useful insights

PL/SQL will be used to automate important actions such as:

- validating entries
- calculating monthly totals
- sending alerts for unusual waste amounts
- generating summaries automatically

This makes the system smarter and more reliable than manual writing

How Analytics Will Improve Decision-Making

- Identify high-waste locations
 - Track common waste types
 - Measure recycling performance
 - Improve planning
 - Support environmental campaigns

All this data will help in planning awareness campaigns, government actions, and future recycling strategies. This turns the system into not just a record-keeper, but a tool for smarter decision-making



Thank You

FOR YOUR ATTENTION



Sources

- earth.org
- chat GPT
- Pinterest