

E-Waste Collection Dashboard

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Problem Statement

Cities are seeing a rise in electronic waste, but lack centralized tracking of collection and disposal, making planning and awareness difficult.

Research Question

How can we create a dashboard to monitor e-waste collection by type, quantity, and region?

Summary

This project logs e-waste collection data and visualizes trends in collection frequency, material types, and regional participation to support green efforts.

Description

- Collect data on device type, weight, and collection center
- Group and display by material type (plastic, metal, battery)
- Monthly trends of e-waste volume
- Pie chart for device categories
- Export final report for municipality use

Functional Components

- Input form or dataset of e-waste entries
- Weight and type-based classification
- Visualization of total e-waste per type
- Region-wise reporting
- Downloadable dashboard

Sample Dataset

Device	Weight (kg)	Type	Region
Mobile	0.2	Battery	North
Old Laptop	2.5	Metal	South

Expected Output

- Total E-Waste: 500 kg this month
- Highest category: Metal (60%)
- Top collecting region: South Zone

Dashboard Features

- Upload and manage dataset
- Auto-clean and classify data
- KPIs: Total waste, Top Material, Top Region
- Charts: Monthly trend, Pie chart, Bar chart
- Export cleaned dataset

Conclusion

The E-Waste Collection Dashboard helps track and analyze electronic waste efficiently. It highlights top categories and regions, enabling better planning and awareness.

Future Scope

- Add real-time IoT based data collection
- National level integration
- Automatic PDF/Excel report generation
- Interactive map visualization

Screenshot

Output Image



