E-Waste Management Project

Problem Statement

The rapid advancement of technology has led to a significant increase in electronic waste (e-waste). Improper disposal of e-waste leads to serious environmental and health issues. There is a need for efficient e-waste management systems to ensure responsible recycling and disposal.

Introduction

E-waste includes discarded electronic appliances such as computers, TVs, refrigerators, etc. It contains harmful components like lead, cadmium, and mercury. Effective management includes collection, recycling, and reuse of valuable materials, while minimizing environmental harm.

Learning Objectives

- Understand the environmental impact of e-waste

- Learn about e-waste recycling and disposal methods

- Develop a simple Python-based tracking system for e-waste

- Visualize e-waste data using charts

Requirements

- Python 3.x

- matplotlib for charting

- fpdf for PDF generation

- Basic understanding of data analysis

Code Summary (Python)

```python
# E-Waste Data Summary and Visualization

import matplotlib.pyplot as plt

labels = ['Large Equipment', 'Small Equipment', 'Temp Exchange', 'Screens', 'Lamps', 'IT']
sizes = [30, 25, 20, 10, 10, 5]
plt.pie(sizes, labels=labels, autopct='%1.1f%%')
plt.title("E-Waste Composition")
plt.show()
```
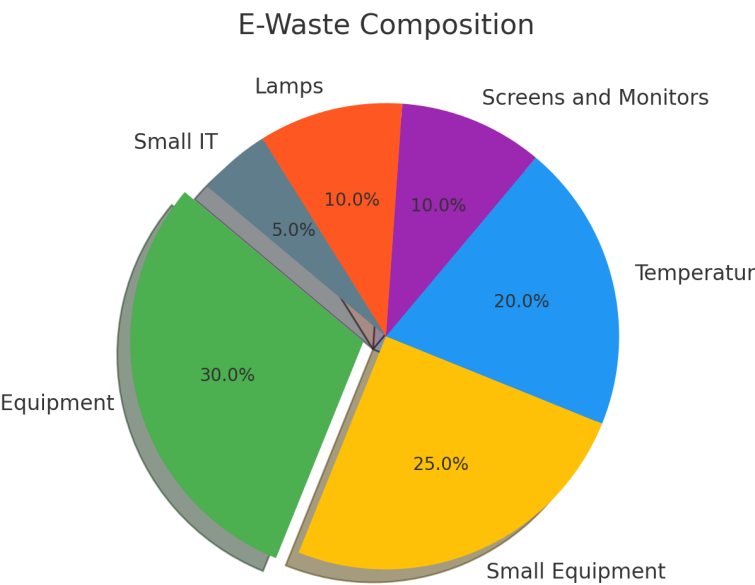
Expected Output

The output is a pie chart that visualizes the composition of various categories of e-waste.

E-Waste Composition Chart

E-Waste Composition

Conclusion

E-waste management is a growing concern and requires active participation from individuals and industries.

By using technology, we can build awareness and create systems for efficient recycling, thereby protecting

our environment and promoting sustainable practices.