SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITAN CITIES



PNT2022TMID54350





SYNOPSIS

- INTRODUCTION
- OBJECTIVE
- PROPOSED METHODOLOGY
- ADVANTAGES
- DISADVANTAGES
- FUTURE ACHIEVEMENT
- CONCLUSION





INTRODUCTION

• To design and implement a combination of lot and Application Development based Waste Management Systems.

• The combination of loT and Application Development has plenty of applications such as home security systems, payment technologies, intruder recognition systems, etC.



Waste Management



- The hardware part comprises a sensor unit, which detects the volume of waste present in the bin, a weight-detecting garbage system, a GPS locator, and a GSM module to communicate with a mobile device.
- The software part uses Python codes and C codes.



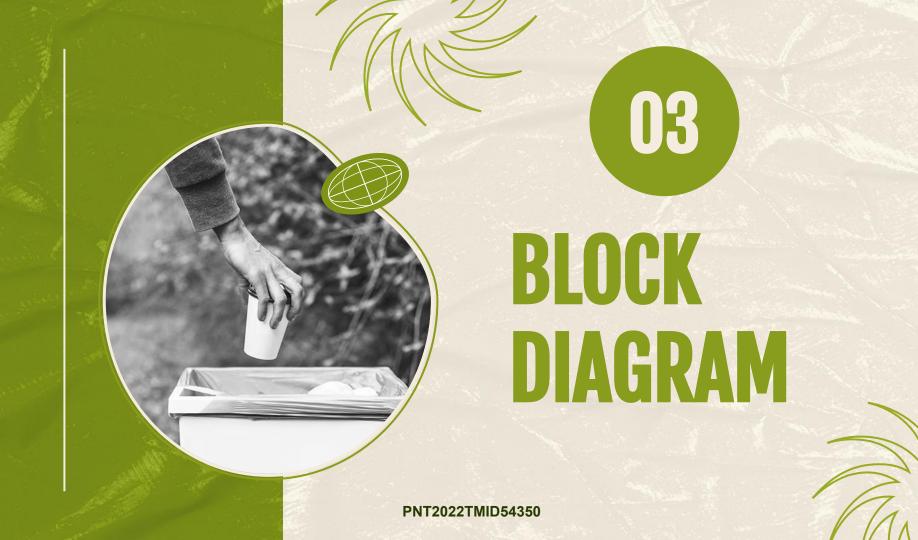


OBJECTIVE

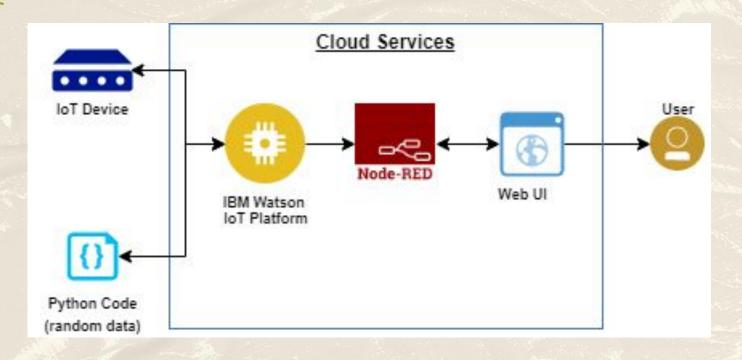
- Reduces Air, Water, and Soil pollution.
- Reduce Manual Labour
- Increases Sustainable Development.
- Reduces common health issues related to improper Waste Management technique.



PNT2022TMID54350



BLOCK DIAGRAM



PROCESS









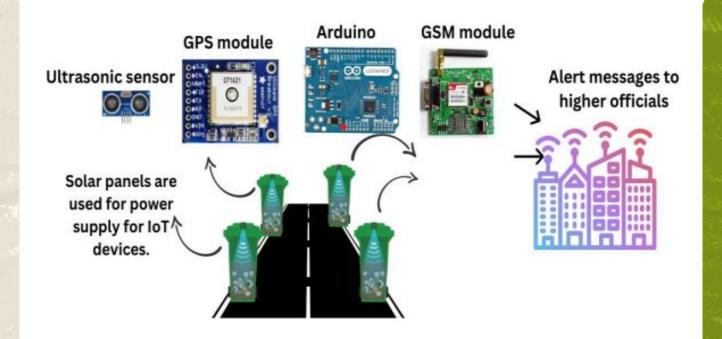
COLLECTION

SEGREGATION

MANAGEMENT

REQUIRED PROCESS

SOLUTION ARCHITECTURE



Trash bins containing these components



ADVANTAGES



DISADVANTAGES







Tough to come into the market

High Security Risk

High Initial Cost



FUTURE ADVANCEMENTS



Use of Piezoelectric Power



Improvised Administration



Parallel
Recycling and
Reusing Process



Executing in a Larger Scale

PNT2022TMID54350



Improved Sensor



Use of Renewable Energy



- This is a small step to overcome the effects of pollution - air, water, and soil.
- These are linked to many health diseases.
- A proper waste management technique is a compulsion for a better development.
- Sustainable development also play a major role in this.





"The small step made today would bring in a Giant Leap tomorrow."



PROGRESS

- ✓ PREREQUISITES ✓ PROJECT OBJECTIVES
- ✓ CREATE AND CONFIGURE IBM CLOUD SERVICES
- ✓ DEVELOP THE PYTHON SCRIPT
- ✓ DEVELOP A WEB APPLICATION USING NODE-RED SERVICE
- ✓ IDEATION PHASE ✓ PROJECT DESIGN PHASE I
- ✓ PROJECT DESIGN PHASE -II
 ✓ PROJECT PLANNING PHASE
- ✓ PROJECT DEVELOPMENT PHASE
 ✓ REPORT
 ✓ VIDEO

THANKYOU

