

Basic Details of the Team and Problem Statement

Ministry/Organization Name/Student Innovation:

Student Innovation

PS Code:

SIH1487

Problem Statement Title:

Waste Management

Team Name:

Zeta

Team Leader Name:

Linju Rajan

Institute Code (AISHE):

C-37046

Institute Name:

Hindusthan Institute of Technology

Theme Name:

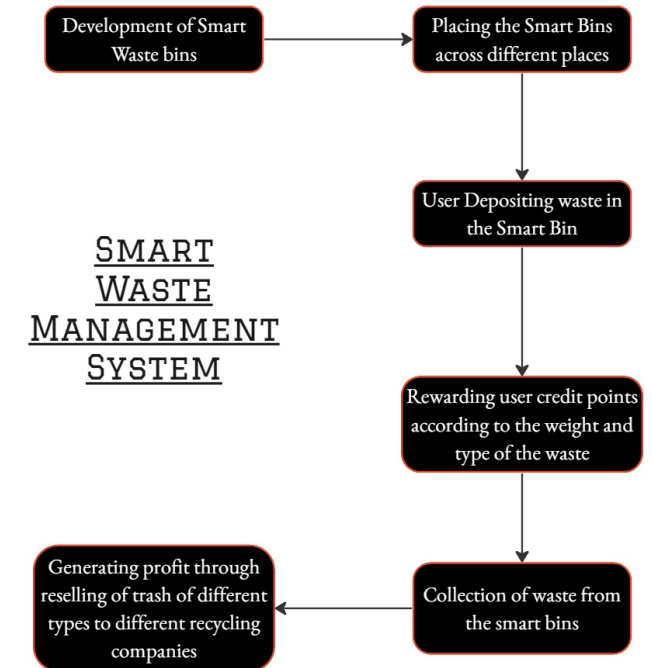
Smart Waste Management System

Idea/Approach Details

Solution/Prototype:

- ❑ Development of smart bins.
- ❑ Smart Bins uses its sensors to detect the capacity of the bins and notifies the collectors when it is full.
- ❑ Collectors collect the trash from the bins and send it for recycling purposes.
- ❑ Smart Waste Management system also rewards people according to the type of the trash collected from them, by doing this we aim to attract more people to Smart Bins and keep the cities and places clean.
- ❑ Rewarding system is connected with IoT, user can check his credit points through the mobile app and redeem it for various purposes.

2



miro

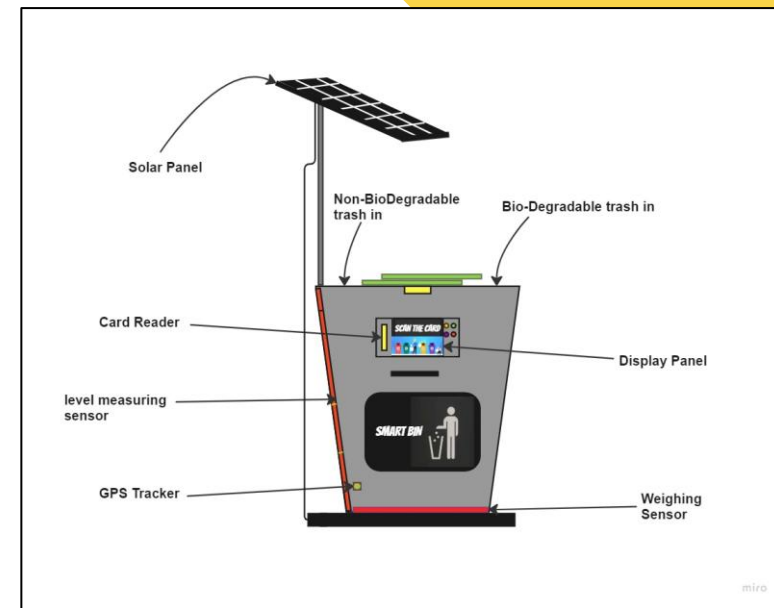
Technology stack:

- ❑ Internet of Things (IoT)
- ❑ Radio-frequency identification (RFID)
- ❑ GPS Tracking
- ❑ Machine Learning
- ❑ Software
- ❑ Cloud Computing

Idea/Approach Details

Use Cases:

- ☐ Reducing pollution
- ☐ Illegal dumping could be eliminated
- ☐ Real-time monitoring of waste levels
- ☐ Automatic notifications
- ☐ Waste data analytics



Dependencies:

- ☐ Public engagement
- ☐ Availabilty of robust and widespread network
- ☐ Reliable sensor
- ☐ User interface and communication channel
- ☐ Transport facilities
- ☐ Rely on companies

Team Member Details

Team Leader Name: Linju Rajan

Branch: B.E.

Stream: CSE

Year III

Team Member 1 Name: Abijith K

Branch: B.E.

Stream CSE

Year III

Team Member 2 Name : Adil Abdul Nassar

Branch B.E.:

Stream CSE

Year III

Team Member 3 Name: Abijith CP

Branch B.E.

Stream CSE

Year III

Team Member 4 Name: Karthik Sujith

Branch B.E.

Stream CSE

Year III

Team Member 5 Name: Abhilash S

Branch B.E.

Stream CSE:

Year III

Team Mentor 1 Name: K.Murugan

Category Academic

Expertise Knowledge Database

Domain Experience 10 years

Team Mentor 2 Name: Saranya.S

Category Academic:

Expertise Data Science,Image processing

Domain Experience 5 years

Important Pointers

Please ensure below pointers are met while

- Kindly keep the maximum slides limit to 4 pages
- All the topics should be utilized for description of your idea
- Try to avoid paragraphs and post your idea in points
- Keep your explanation precisely and easy to understand
- Idea should be unique and novel. If it has a business potential more weightage will be given.
- Apart from this PPT abstract of your idea will be asked separately while submitting
- You need to save the file in PDF and upload the same on portal. No PPT, Word Doc or any other format will be supported
- You can delete this slide (Important Pointers) when you upload the details of your idea on SIH portal.