

# OUR PROPOSAL

Team Name: hacklikeagirl

Theme selected: Waste Management, Smart Cities

Idea : We plan to build a reward based system for waste collection and segregation. Our idea is to install waste collection bins which will be having a camera and a RFID card reader installed for detection of the type of waste being put in and will reward the person with points if they deposit the waste in the correct bin.

Plan of action:

- The trash will be shown to the camera at the dustbin.
- Image Processing and machine learning will be used to detect the type of waste being put in the dustbin.
- A model will be trained to categorise the waste into biodegradable and non-biodegradable.
- Every person will be issued a card. The person will show his/her ID to the RFID card reader attached to the bin.
- A point will be issued only on the correct deposition of the waste, when the person will show his ID.
- The points can be converted into discounted products at the nearby grocery store.
- Also MCD can provide some relaxation on electricity bill through those points earned.

Acceptance:

- It's going to ensure a clean, green and healthy environment for everyone.
- It will be in the interest of both the shop owner and the people, as one is getting rewarded and the other's sale is increasing.
- It's going to ensure proper disposal of waste, which in other scenarios would just be littering the streets and other public places.
- It'll also create awareness amongst the people about biodegradable and non-biodegradable things.
- Government will get the segregated waste, this will save their time and labour.
- The ragpickers will be saved from the gruesome task of segregating the garbage.