## **OUR PROPOSAL**

Team Name: hacklikeagirl

Theme selected: Waste Management, Smart Cities

<u>Idea</u>: 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 house tax/ 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.