

GAME OF WASTE

Introduction:

Game of waste is an android game, purpose of which is to act as a competitive game in which users conquer territories within a city by contributing towards waste management and thus gain tokens. Users with maximum tokens in the region conquer the territory!

The application involves crowdsourcing in the following way:

- Users detect illegal dump
- Properly disposing plastic waste to nearby shopkeepers
(Involves Image processing to detect if the image is of waste only and QR code for user identification)

Users with maximum tokens can see themselves as the conquerers on the map.

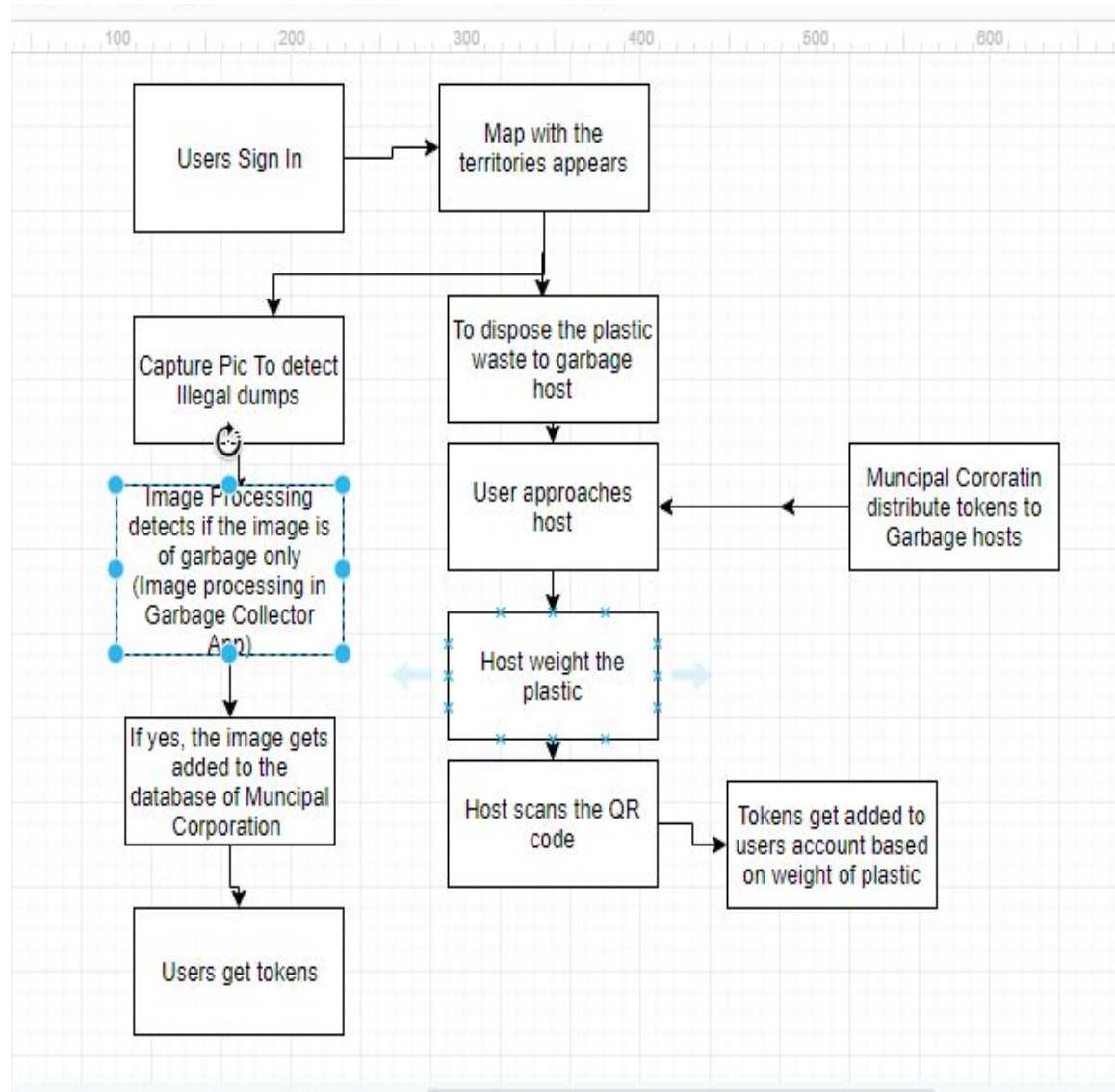
Themes used:

- **Gamification**
- **Crowd Sourcing**
- **Image Processing**
- **Principles of sharing economy**

Users Of Game of waste:

1. Garbage host: One who keeps the garbage collection bin, to whom users approach and thus distribute tokens to users.
2. End user: dispose of plastic to hosts
3. Municipal Corporation: Distribute tokens to hosts and users for crowdsourcing and maintain leaderboard according to numbers of tokens collected by users

Workflow:

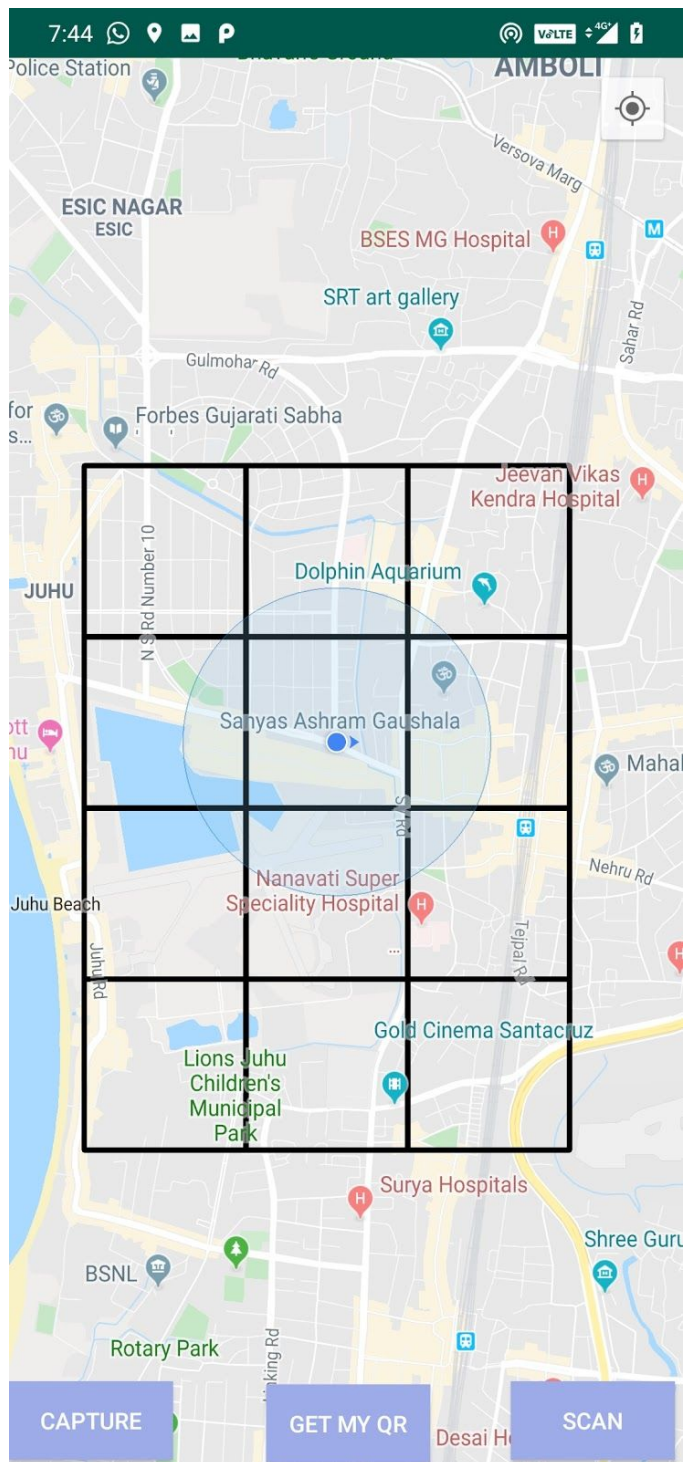


We have implemented two app

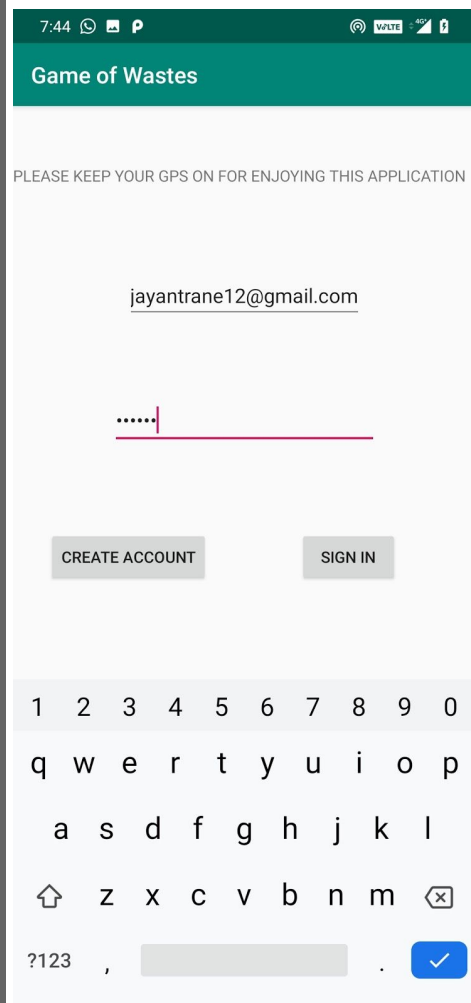
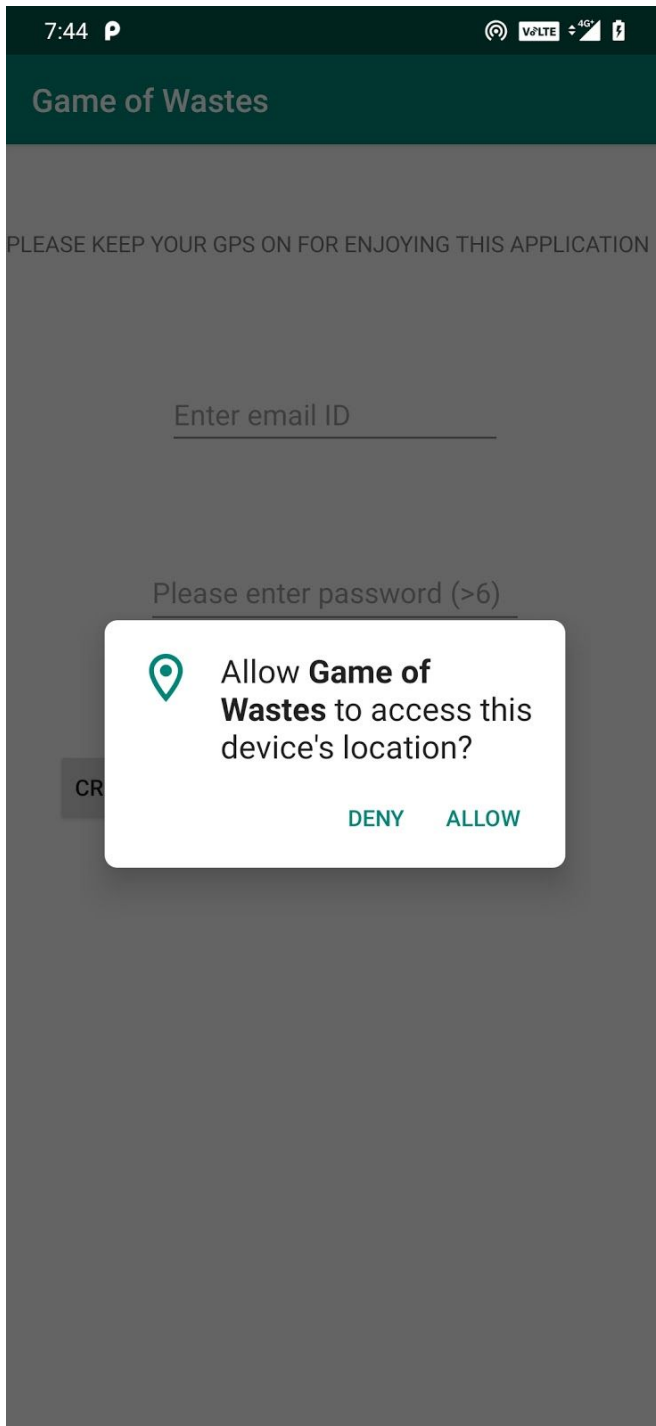
- 1.Game Of Waste:
 - ❖ Three users can sign in:
 - ❑ Garbage host
 - ❑ Users
 - ❑ Municipal Corporation(To view images uploaded by users and distribute tokens)
 - ❖ detection of illegal dumps and disposal of plastic waste properly to garbage host
 - ❖ Garbage host can verify the dump using the Garbage detector too.
- 2. Garbage Detector: Used to verify image is a garbage image or not using image processing.

The tokens can be used at different places.





Screenshot folder has been uploaded on Github







Map showing territories



7:44





Game of Wastes

You are?

☐ Shopkeeper

☒ Customer

jayant

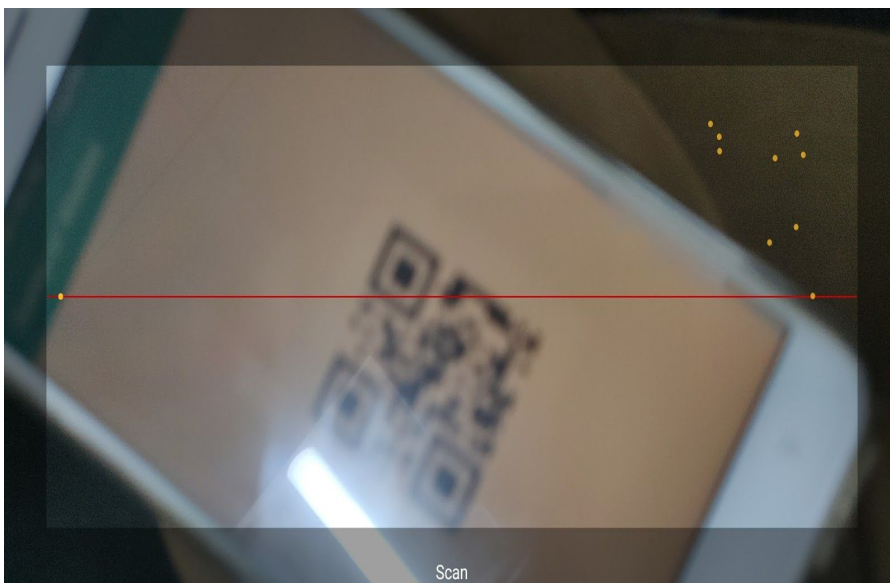
Location

GET MY LOCATION

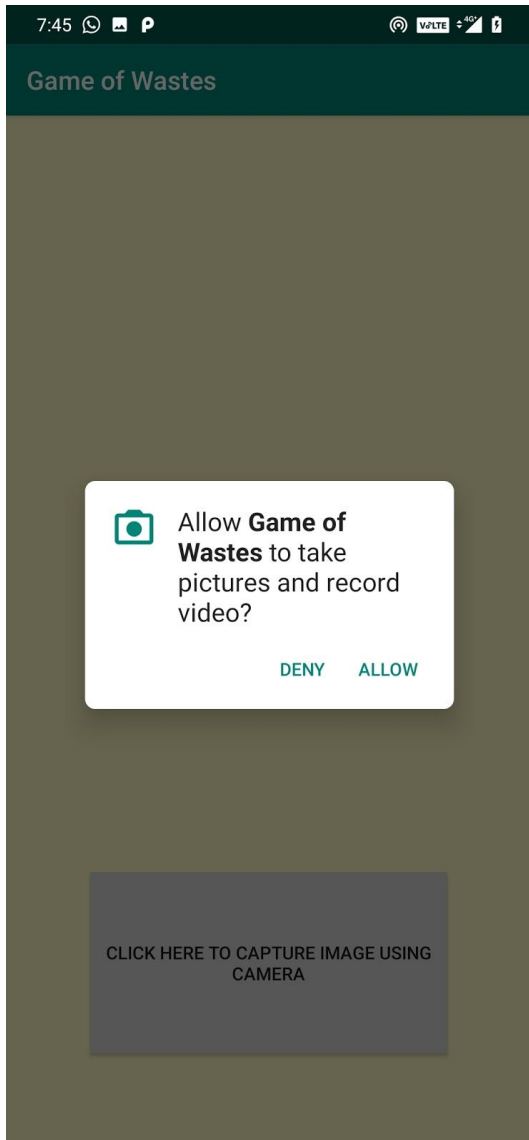
25, Nehru Nagar, Airport Area, Vile Parle West, Mumbai,
Maharashtra 400056, IndiaMumbai

SUBMIT

Sign IN



QR Code



Take pictures to scan for image processing

Garbage Collector App:



Unique Selling Points:

- Involves gamification and thus waste management implicitly
- Plastic waste can be reduced to a high extent
- Plastic management has been focused
- QR code has been used for user identification
- The map has been used to show the territories
- Image processing has been used to detect illegal dumps, problem for which a lot of applications do not focus on

Future Scope :

- A global leaderboard can be maintained for all the users
- The tokens can be exchanged for various other commodities
- The apps can be merged to provide a single platform
- **Blockchain can be used to maintain the supply management of tokens improving transparency**
- **The kings of the territory would be plotted on the map thus improving ui.**