

Description:

TrashTalker is a web-based application designed to promote responsible waste disposal by educating and engaging users through a socially-driven and rewarding platform. Improper waste management is a significant environmental issue, contributing to pollution and environmental harm. This application seeks to address that problem by providing users with an application that helps to motivate and educate users, helping them be more sustainable.

Requirements:**• Functional Requirements**

- User account creation with federated identity service
- Point based reward system
- Leaderboard with user scores
- User account page displaying score etc.
- Search bar for waste items
- Image upload and integration with image detection model
- Info pages for common waste categories
- Reward redeeming system
- Reward users for consistent logins
- Classification Game system for image detection and point distribution
- User info stored in cloud database

• Non-Functional Requirements

- System should be responsive and fast
- ML model should deliver classification results quickly
- User interface should be modern and easy to navigate
- Code should be designed in a way that is maintainable and modular
- Database should be remotely hosted (3rd party cloud provider)