Project Design Phase-II

Data Flow Diagram & User Stories

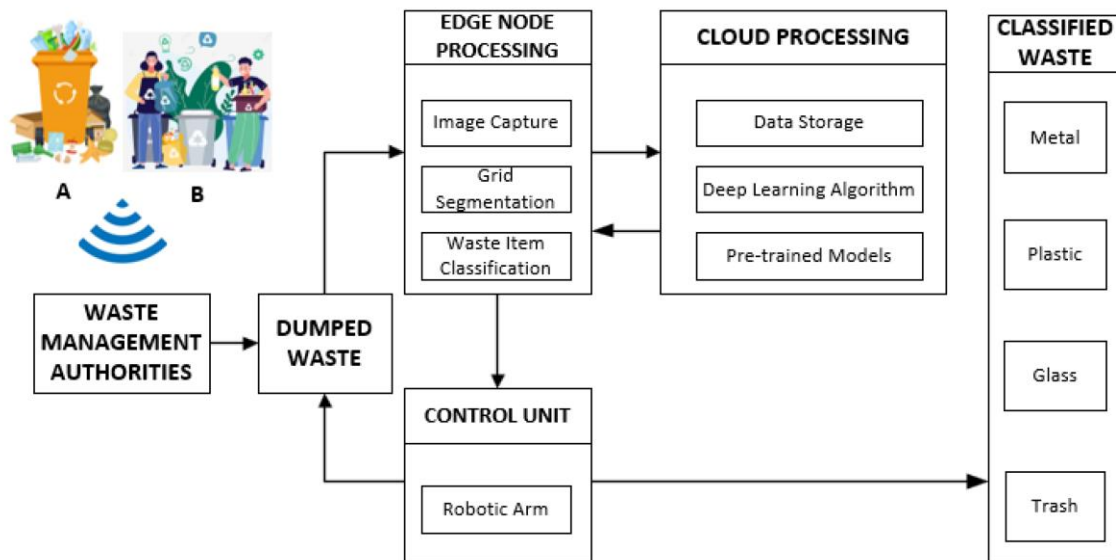| Date	25 June 2025
Team ID	LTVIP2025TMID35506
Project Name	CleanTech: Transforming Waste Management with Transfer Learning
Maximum Marks	4 Marks

Data Flow Diagrams

A Data Flow Diagram (DFD) is a visual tool that represents how data flows within a system. Below is a simplified version for CleanTech:

Level 0 DFD

- User uploads a waste image
- System processes the image via trained ML model
- Model predicts waste category
- Result is shown on screen and stored in database

Level 1 DFD
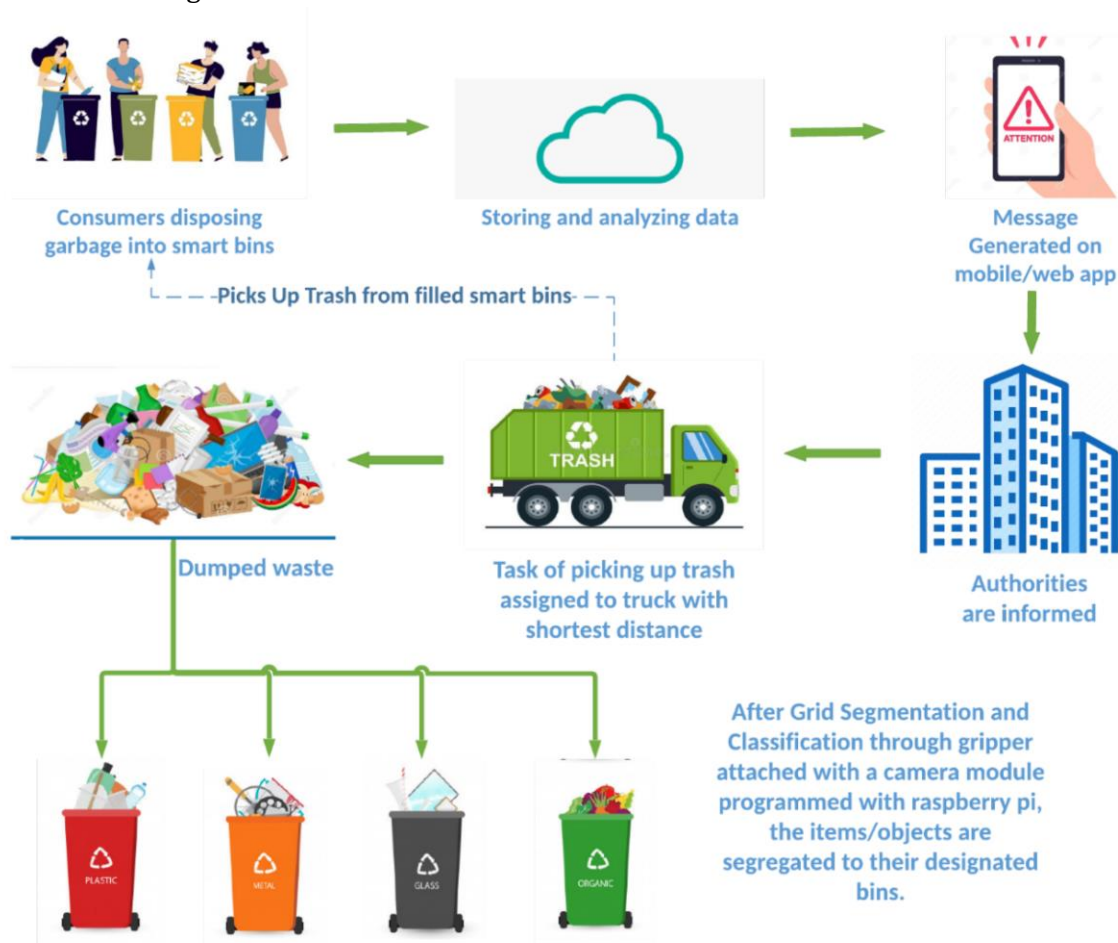
Inputs: Image, Email, Password
Processes:
  - Registration/Login
  - Image Classification
  - Feedback Submission
Outputs:

- Classification Result
- Confirmation Email
- Dashboard Data

Data Stores:
- User Info DB
- Image Archive
- Prediction Log

User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority / Release
Customer (Web)	Registration	USN-1	As a user, I can register using email and password.	User receives confirmation email and logs into dashboard	High / Sprint-1
Customer (Web)	Registration	USN-2	As a user, I can register	User signs in via Gmail	Medium / Sprint-1

			via Gmail.		
Customer (Web)	Login	USN-3	As a user, I can log into the system using my credentials.	Login successful and redirected to dashboard	High / Sprint-1
Customer (Web)	Upload Image	USN-4	As a user, I can upload waste images for classification.	Image successfully uploaded	High / Sprint-1
Customer (Web)	View Result	USN-5	As a user, I can view the category of waste predicted by the system.	Classification result with label and confidence shown	High / Sprint-1
Customer (Web)	Feedback	USN-6	As a user, I can submit feedback on the result accuracy.	Feedback stored and acknowledged	Medium / Sprint-2
Administrator	Dashboard	USN-7	As an admin, I can view user activity logs and prediction reports.	Activity log available on admin panel	High / Sprint-2