Project Design Phase-I
Solution Architecture
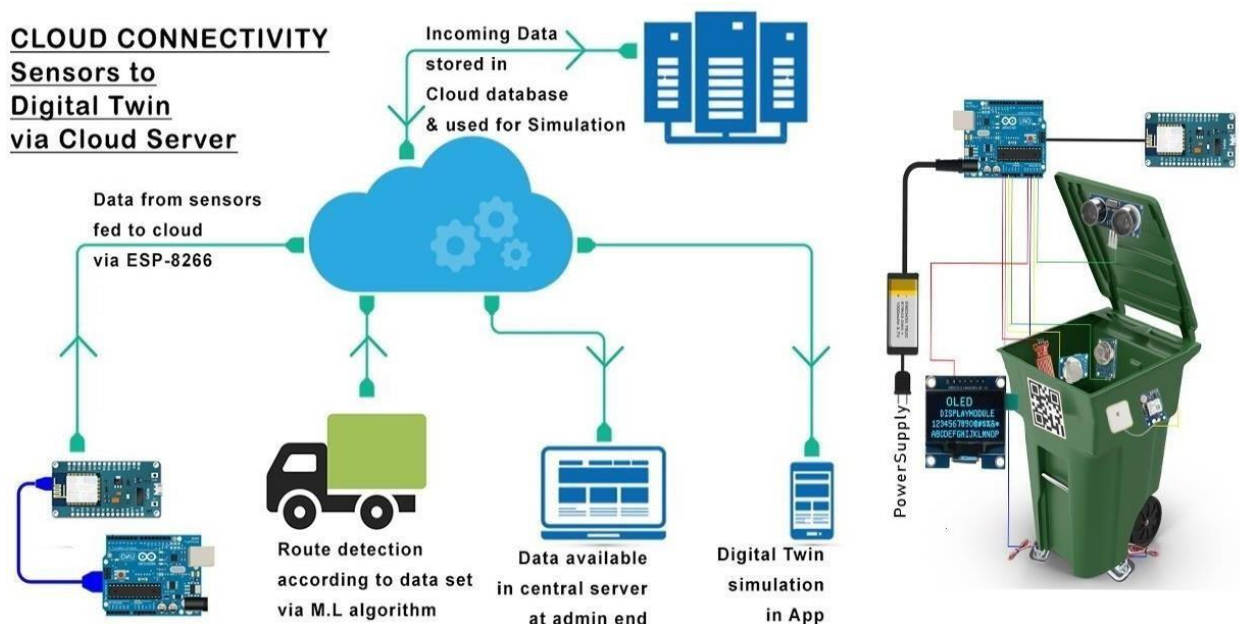
Date	04/10/2022
Team ID	PNT2022TMID26658
Project Name	Project- Smart waste management system for metropolitan cities.
Maximum Marks	4 Marks

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions.

Our solutions are,

- To establish a smart and efficient waste management system with necessary architecture.
- That architecture includes GPS service, clout service and collection of data from various locations in the city.
- This architecture bridges gap between a creator and a problem structure.
- Here you can see Arduino boards with codes to particularize the information and various sensors have been used to monitor bin activity.
- We can have twin simulation in both app and web server.

Solution Architecture Diagram:

OVERALL ARCHITECTURE:

Infrastructure with access to energy sources and long range data communication

Garbage Cans (with low cost passive sensors)

Garbage Cans (with active sensors)

Garbage Trucks (as data collectors)

Cloud platform that supports sensing as a service

City Council

Recycling Plant

Manufacturing Plant

Health and Safety Authorities