

## Project Design Phase-I Solution Architecture

Date	07 OCTOBER 2022
Team ID	PNT2022TMID14976
Project Name	Project -Smart Waste Management System for Metropolitan Cities
Maximum Marks	4 Marks

### Solution Architecture:

- At each location, two garbage bins (for wet and dry garbage) are placed which contain sensors to indicate level of garbage in the bin. Microcontroller and circuitry is used to send the garbage bin status to central cloud server
- This module will receive real time status updates from all the garbage bins and continuously display it on web application and push the notifications on client side's (Municipal Corporation, Garbage collector truck drivers etc.) mobile application.
- Mobile application will show the real time status of garbage bins which will be used by garbage collection truck drivers to indicate that garbage bins are full or likely to be full.
- This module is also responsible to calculate shortest path from garbage collector truck to garbage bins. Route optimization is handled by central cloud server

### Solution Architecture Diagram:

