Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID15973
Project Name	Smart Waste Management System
Maximum Marks	4 Marks

Technical Architecture:

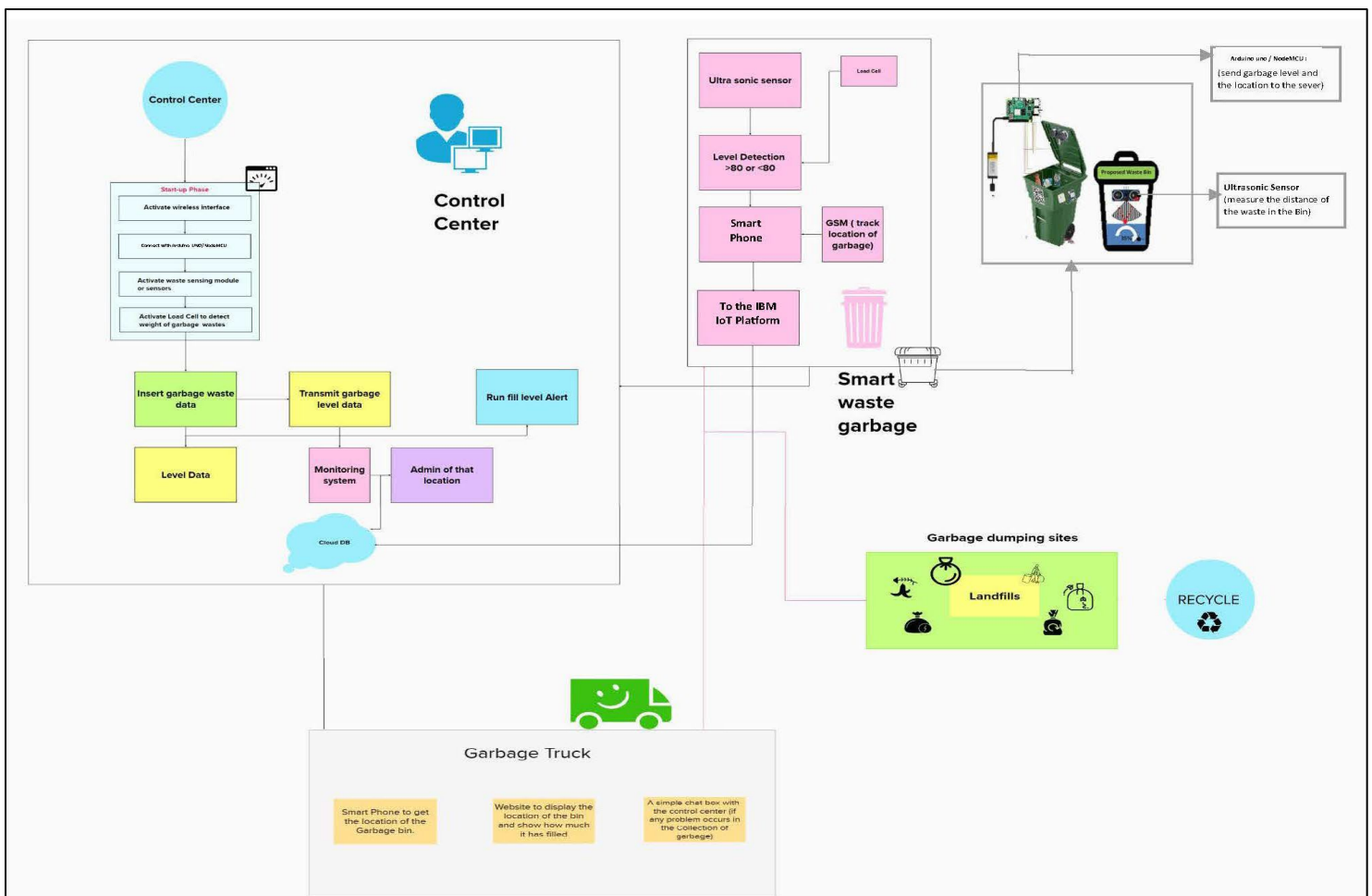The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI	HTML, CSS, JavaScript / Node-RED.
2.	Application Logic-1	The bin waste data's are collected using sensors via Wokwi	C/C++
3.	Application Logic-2	The collected data's are monitored using IOT	IBM Watson service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Application Logic-4	To view the location	Worldmap in Node-RED
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Server Configuration	Local, Cloud Foundry,

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Node-Red
2.	Security Implementations	Account are login using mail	Gmail,IBM
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Not sure
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Not sure
5.	Performance	Design consideration for the performance of the application etc.	IOT