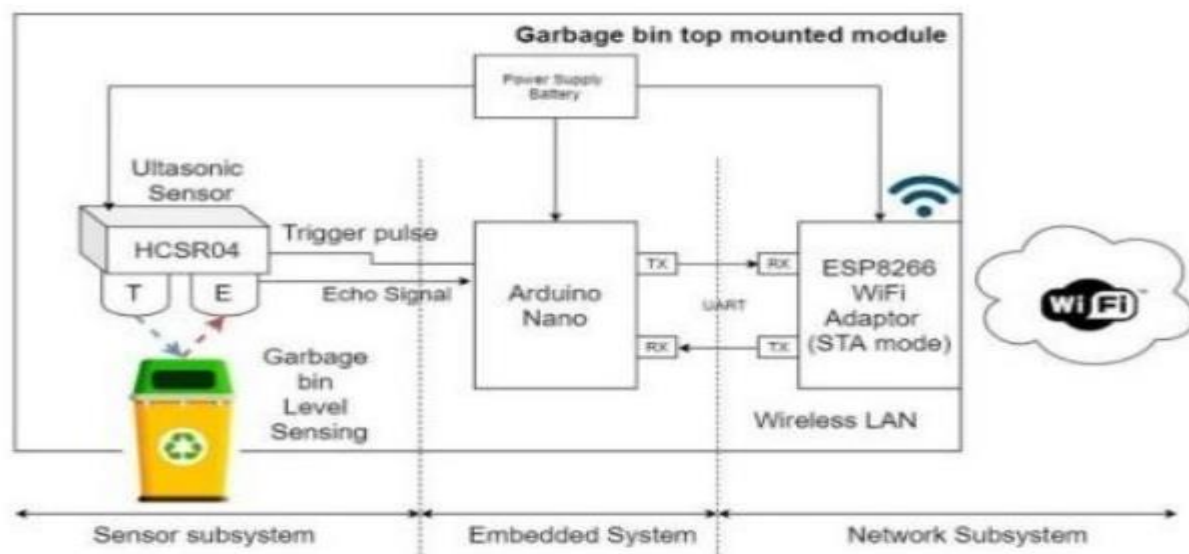


## Project Design Phase-II Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID30256
Project Name	Smart waste management for metropolitan cities
Maximum Marks	4 Marks



**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	Ultrasonic sensor	To detect the height of the waste materials in bins.	-
2.	Arduino uno	To implement the code.	Python
3.	NodeMCU	To connect objects and let data transfer	Wifi protocol
4.	IoT platform	To collect and display data	IBM Watson Assistant
5.	Database	Collected bin data	MySQL
7.	File Storage	File storage requirements	Local Filesystem

**Table-2: Application Characteristics:**

S.No	Characteristics	Description
1.	Open-Source Frameworks	IBM watson
2.	Security Implementations	High security
3.	Scalable Architecture	Highly scalable and cost efficient
4.	Availability	Available for 24x7
5.	Performance	Good performance

