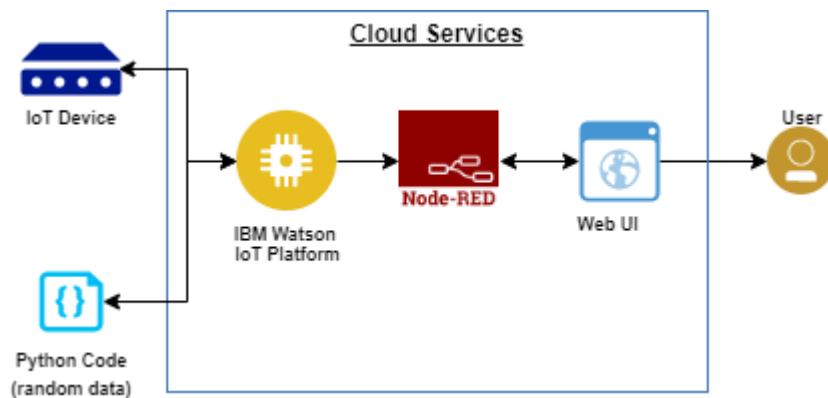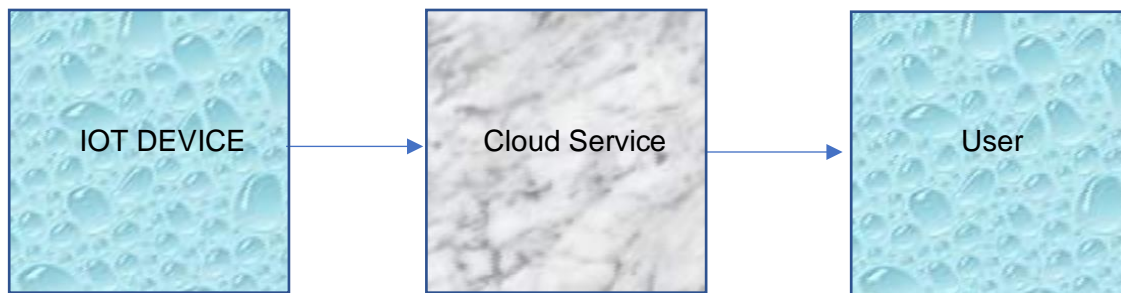# SOLUTION ARCHITECTURE

Design:

- Garbage level detection in bins.
- Getting the weight of the garbage in the bin.
- Alerts the authorized person to empty the bin whenever the bins are full.
- Garbage level of the bins can be monitored through a web App.
- We can view the location of every bin in the web application by sending GPS location from the device.
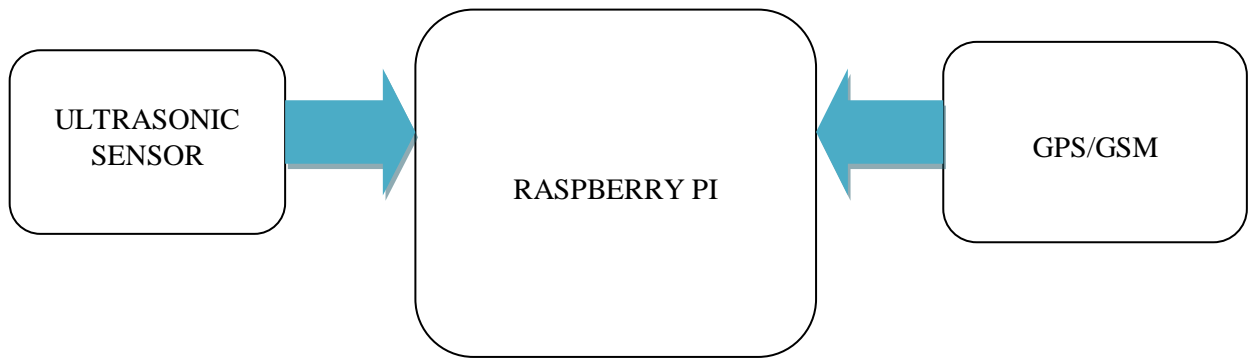
Software and system required:

- Python IDLE
- 4GB processor and OS-Windows/Linux/MAC

Block diagram:

IOT Device

ULTRASONIC SENSOR → RASPBERRY PI ← GPS/GSM

Cloud service:

IBM Watson → Node red ← Web UI

Geofence → Node red ← Cloud DB