## **SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITAN CITIES**

## **TEAM ID:PNT2022TMID08158**

## AIM:

- "SMART WASTE MANAGEMENT FOR METROPOLITAN CITIES" for efficient bin management and environmental cleanliness
- The corporation of a specific neighbourhood inside a big metropolis develops an app and it can determine whether the trash cans are full or not.
- This procedure uses a cloud connection and an ultrasonic sensor to determine the waste bin's level.
- The environment may be kept clean while requiring less human labour for garbage disposal.
- A city corporation will greatly benefit from this approach as it monitors the cleanliness of various city areas.
- GPS is used to determine the location, and the level of the bin is immediately recorded.

## **WEB UI:**

- We developed the app using node red.
- After the application has been built, the weight and bin level details are received.
- Also obtained the locations of the filled dumpsters.
- Node Red blocks are loaded with Python code to aid in the detecting process.
- The municipality and truck drivers have access to the cloud storage where the weight, bin level, and position of the bins are kept.