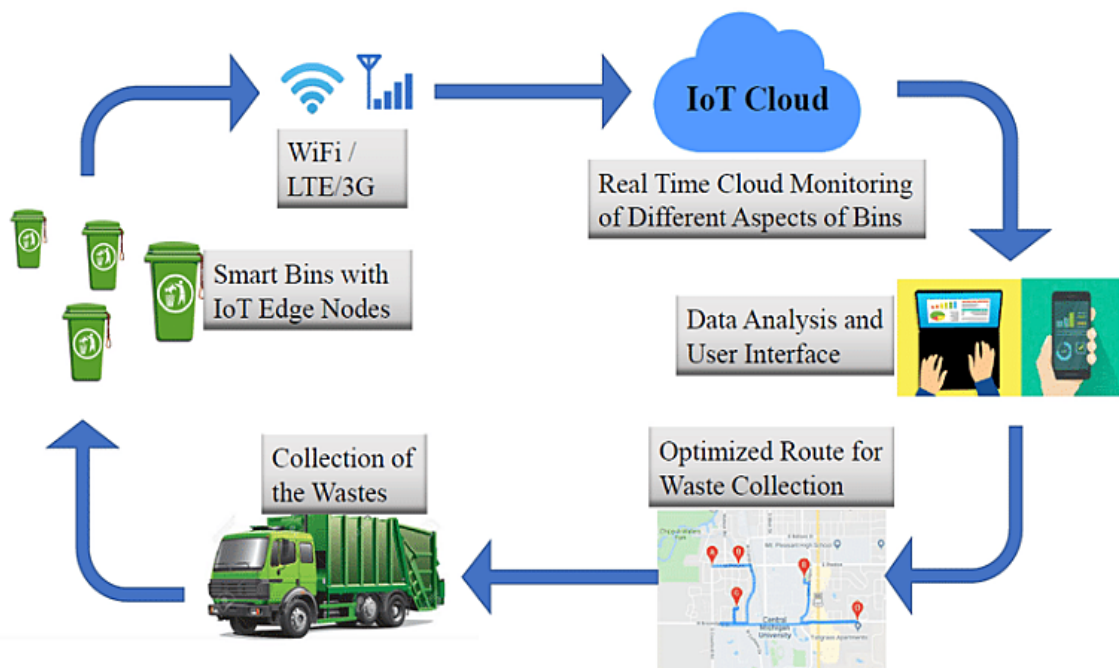
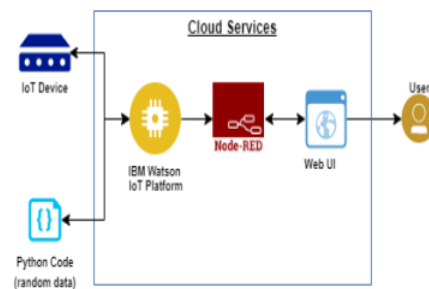


TEAM ID : PNT2022TMID14142

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	10 oct 2020
Team ID	PNT2022TMID14142
Project name	Smart Waste Management System For Metropolitan Cities
Maximum Mark	4 Marks



TEAM ID : PNT2022TMID14142

Table-1 : Components & Technologies:

S.NO	Component	Description	Technology
1	. User Interface	Web UI, Mobile App, SMS alert	MIT APP inventor
2	Application Logic-1	Data processing, data segmentation	Java / Python
3	Application Logic-2	Node-Red, sensors	IBM Watson STT service
4	Application Logic-3	Web application user interface	IBM Watson Assistant
5	Cloud Database	Database Service on Cloud	IBM Cloudant etc
6	File Storage	File storage requirements	IBM Block Storage
7	External API-1	Random data	Google maps API
8	Machine Learning Model	Optimizing route for trucks	Linear regression
9	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud	Local, Cloud Foundry, Kubernetes, etc

Table-2: Application Characteristics:

S.NO	Characteristics	Description	Technology
1	Open-Source Frameworks	Cloudant, sms alerts	Python
2	Security Implementations	Implementation of Authentication	Sensor data, beacon device scanner
3	Scalable Architecture	Micro services	Web UI, cloud, SMS
4	. Availability	Data from sensor is collected to cloud	Sensors, Beacon Scanner
5	Performance	High performance, reliable, high accuracy, secure device.	Portable device.