Project Design Phase-II
Data Flow Diagram & User Stories

Date	19 October 2022
Team ID	PNT2022TMID12941
Project Name	Project – Realtime River Water Quality Monitoring and Control System
Maximum Marks	4 Marks

Data flow diagram:
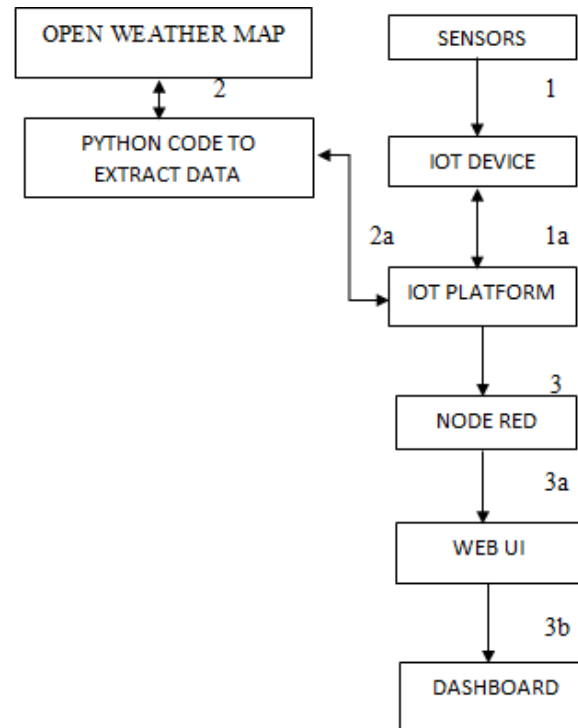
1. The traffic data from array of sensors are collected and given to IOT device.
   1a. The sensor data is processed and given to IBM Watson platform.
2. The weather information is obtained from open weather map.
   2a. The required weather data is extracted using python code.
3. The IOT Watson platform will process the data collected and give the signs or message to be displayed.
   3a. Node Red will interface the IOT platform data to Web UI.
   3b. Wed design to display signs or message is designed in Web Ui and the output is displayed in dashboard.

User stories:

User type	Functional requirement	User story number	User story	Acceptance criteria	Priority	Release
Customer (traffic department)	Data collection	USN-1	The user collect data from array of sensors.	Sensor data integrated with the module.	High	Sprint 1
	Data processing	USN-2	The data collected is retrieved for processing.	The processed data will be passed from IOT Watson platform.	High	Sprint 1
	Website registration	USN-3	The user has to register an account in weather forecast website to get weather data.	New user account created for each branch.	High	Sprint 2
	Data collection	USN-4	The weather data is extracted from the website using python code.	The weather data integrated with the module.	High	Sprint 2
	Data processing	USN-5	The data collected is retrieved for processing.	The processed data will be passed from IOT Watson platform.	High	Sprint 2
Customer(traveller, driver)	Data display	USN-6	Based on processed data, output signs or message will be displayed.	The user can see the signs or alert message in dashboard	High	Sprint 3