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

Team ID	**PNT2022TMID05975**
Project Name	**Real-Time River Water Quality Monitoring and Control System**
Maximum Marks	4 Marks

Technical Architecture:

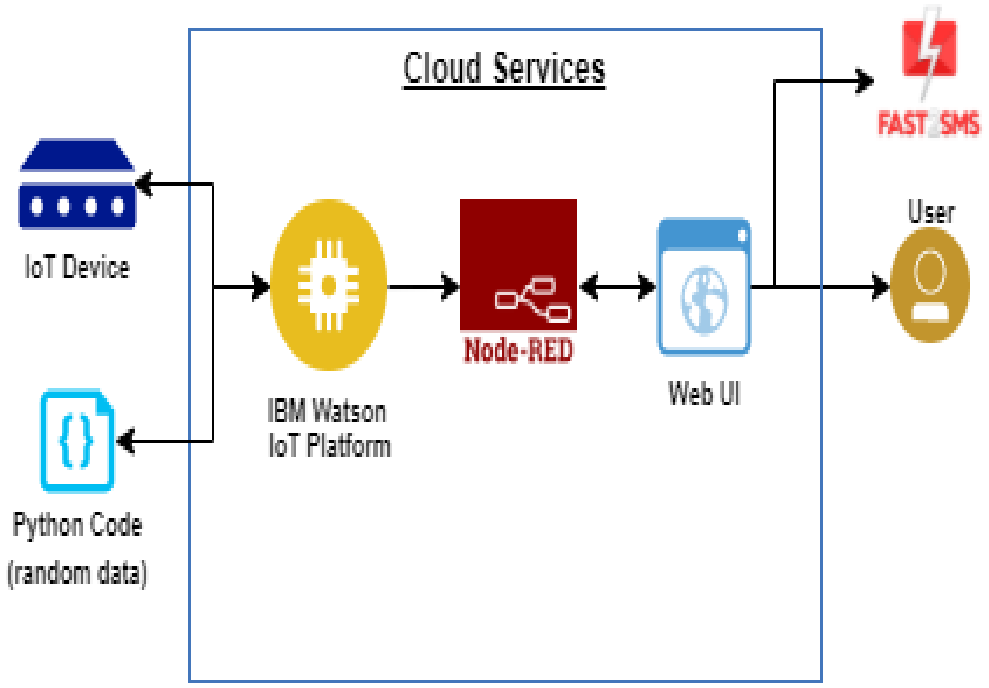

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	Mobile Application	To give the alerts to the corporation and the local authorities.	SMS service
2.	Web Application	access the data from the cloud	Web UI (using node red service)
3.	PH sensor	detect the PH value of the river water	PH level monitoring
4.	Turbidity sensor	Detect the turbidity level of the water	Turbidity level monitoring
5.	ESP32	To process the sensed data from the sensors	IBM Watson

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	User Registration	Registration through Form Registration through Gmail	mobile application
2.	Collaborate and get the sensing data	To integrate the microcontroller to get the sensed data.	IBM Watson service and device setting
3.	Creating web application	To use the web application for determine the quality of water.	Node-Red
4.	Scalability	The ability of the system is highly scalable.	Web UI