PROJECT TITLE: Real-Time River Water Quality Monitoring and Control System

TEAM ID: PNT2022TMID05726

TECHNICAL ARCHITECTURE:

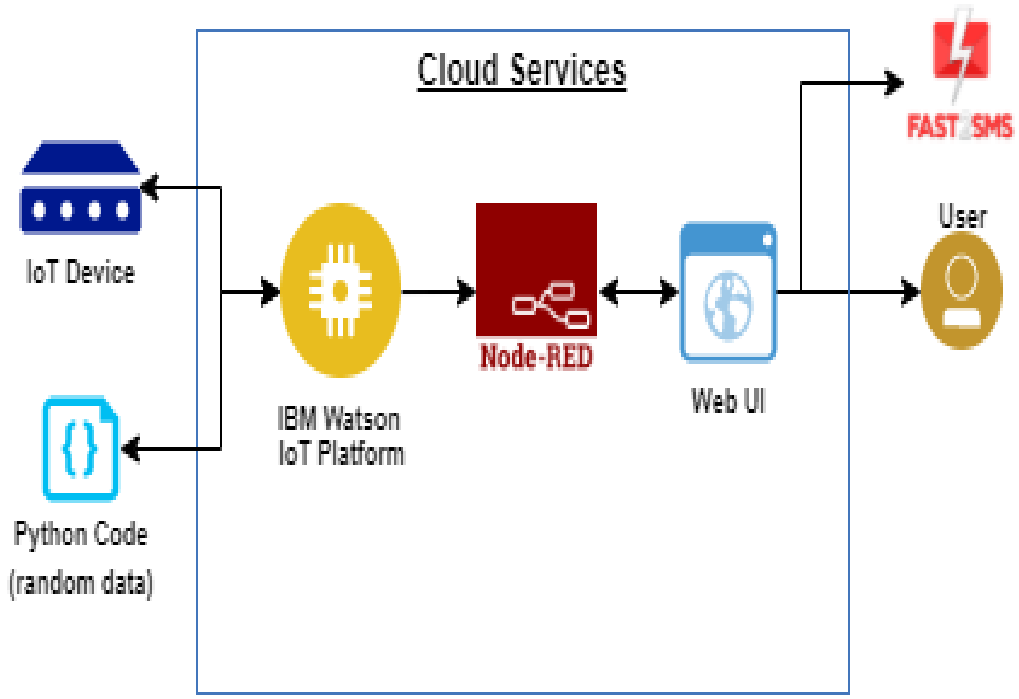

Table-1: Components & Technologies

S. No	Component	Description	Technology
1.	User Interface	How user interacts with application	HTML, CSS, Bootstrapping
2.	Application Logic-1	Logic for a process in the application	JAVA/PYTHON
3.	Application Logic-2	Logic for a process in the application	IBM WATSON STT services
4.	Application Logic-3	Logic for a process in the application	BM WATSON Assistant
5.	Database	Data Type, Configurations etc	MySQL,
6.	Cloud Database	Database Service on Cloud	IBM cloud
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc
9.	External API-2	Purpose of External API used in the application	Aadhar API, etc
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics

S.No	Characteristics	Description	Technology
1.	PH level monitoring	The PH level of river water can be monitored via placing sensors in rivers	PH-sensor
2.	Temperature monitoring	The temperature of river water can be monitored	Temperature sensor
3.	Pollution monitoring	The clarity and purity of river water can be monitored	Conductive sensor
4.	Soil level monitoring	The amount of soil mixed in river water can be measured	Turbidity sensor