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

Date	19 October 2022
Team ID	PNT2022TMID40434
Project Name	Real-time river water quality monitoring and control system
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

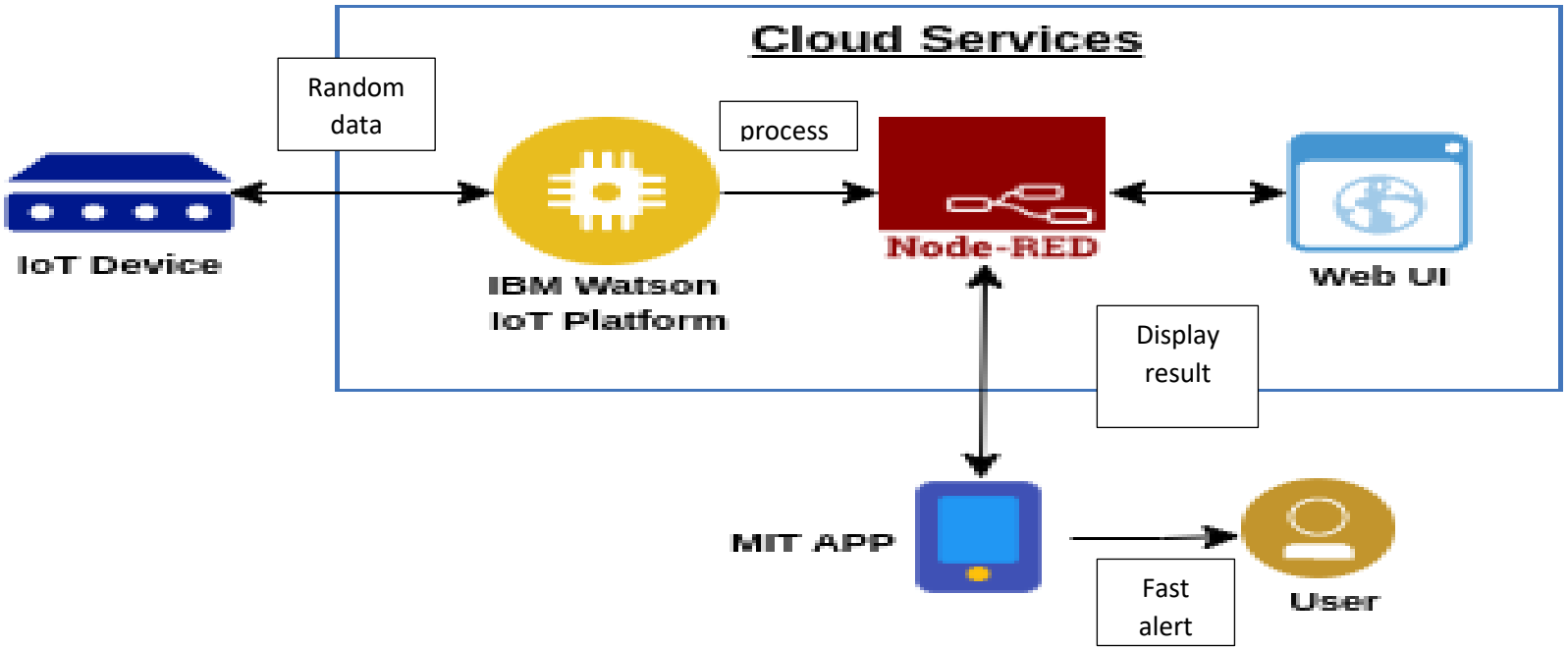

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI, Mobile App	IBM Watson, Node-RED,MIT APP
2.	Application Logic-1	For a process in the application generate random data	Python , IBM Watson
3.	Database	Data Type, Configurations etc.	MySQLetc.
4.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
5.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
6.	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	open-source frameworks used for the project	Node-RED,MIT APP
2.	Security Implementations	Strong firewall used to protect user password and data	MIT APP , WEB UI
3.	Scalable Architecture	It should work without negative issue and maintain website traffic	Node-RED(WEB UI,MIT APP)
4.	Availability	It should be available for the user whenever they need	Node-RED(WEB UI,MIT APP)
5.	Performance	The request should be accept in a few second and allow user to use	Node-RED(WEB UI,MIT APP)