Project Design Phase-I
Solution Architecture

Date	28 September 2022
Team ID	PNT2022TMID06691
Project Name	Real-Time River Water Quality Monitoring and Control System
Maximum Marks	4 Marks

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.

- Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.

- Define features, development phases, and solution requirements.

- Provide specifications according to which the solution is defined, managed, and delivered.
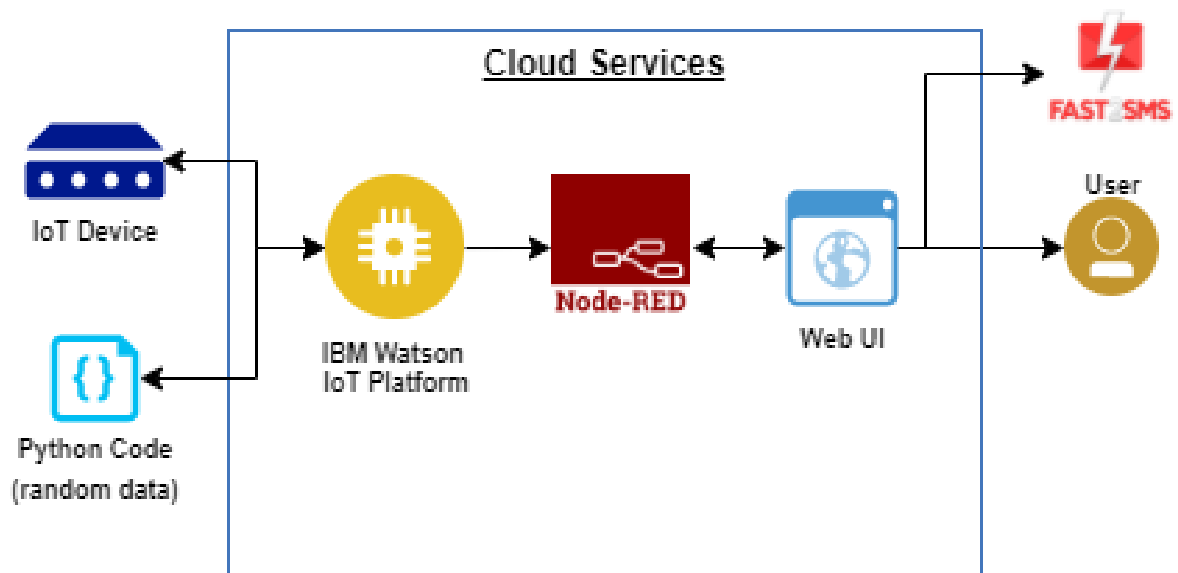
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┌─────────────────────────────────────────────────────────┐
│          Create a web Application for monitoring and      │
│          controlling the quality of river water           │
└─────────────────────────────────────────────────────────┘
                            │
                            ▼
┌─────────────────────────────────────────────────────────┐
│     It Socially help water system managers. Identify      │
│     threats to surface water earlier                      │
└─────────────────────────────────────────────────────────┘
                            │
                            ▼
┌─────────────────────────────────────────────────────────┐
│     Water pollution is a foremost global problem which    │
│     needs ongoing evaluation and adaptation of water      │
│     resource directorial                                  │
└─────────────────────────────────────────────────────────┘
                            │
                            ▼
┌─────────────────────────────────────────────────────────┐
│     Detecting the dust particles, PH level of water,      │
│     temperature to be monitored using sensor Network      │
└─────────────────────────────────────────────────────────┘
                            │
                            ▼
┌─────────────────────────────────────────────────────────┐
│     Use the real time data to track the quality of the    │
│     water and send a notification to the user about the   │
│     collected data.                                       │
└─────────────────────────────────────────────────────────┘
                            │
                            ▼
┌─────────────────────────────────────────────────────────┐
│          Upgrade the traditional method with IOT system   │
└─────────────────────────────────────────────────────────┘
                            │
                            ▼
┌─────────────────────────────────────────────────────────┐
│   Altering the authorities, if the water quality is not   │
│   good.                                                   │
│   Alarm the user to not drink that water or not to use    │
│   for other activities.                                   │
└─────────────────────────────────────────────────────────┘
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