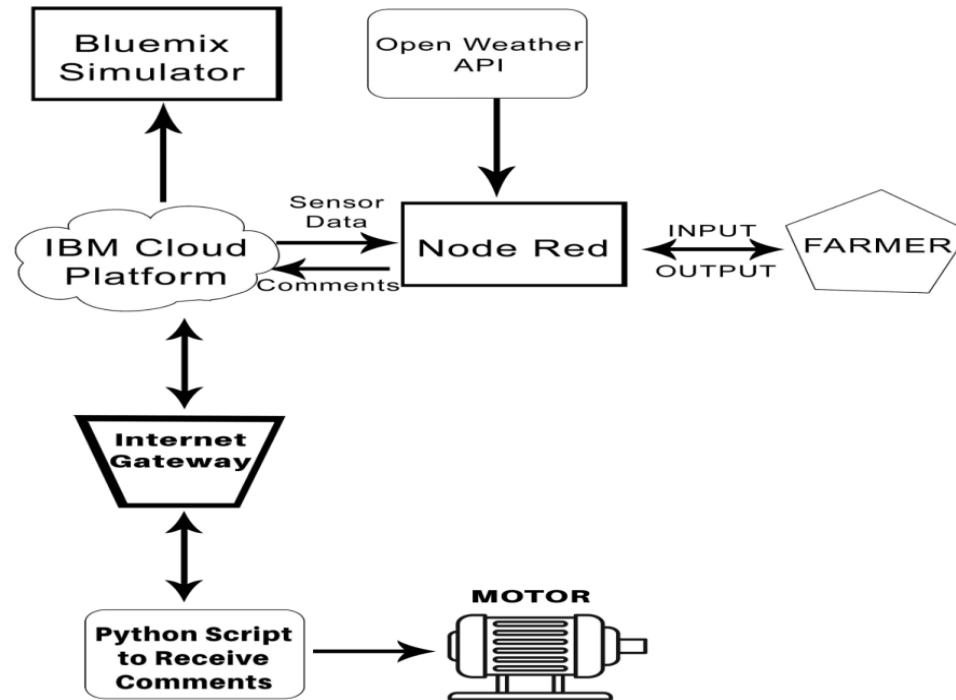


Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	30 October 2022
Team ID	PNT2022TMID02419
Project Name	Real-Time River Water Quality Monitoring and Control System
Maximum Marks	4 Marks

Technical Architecture



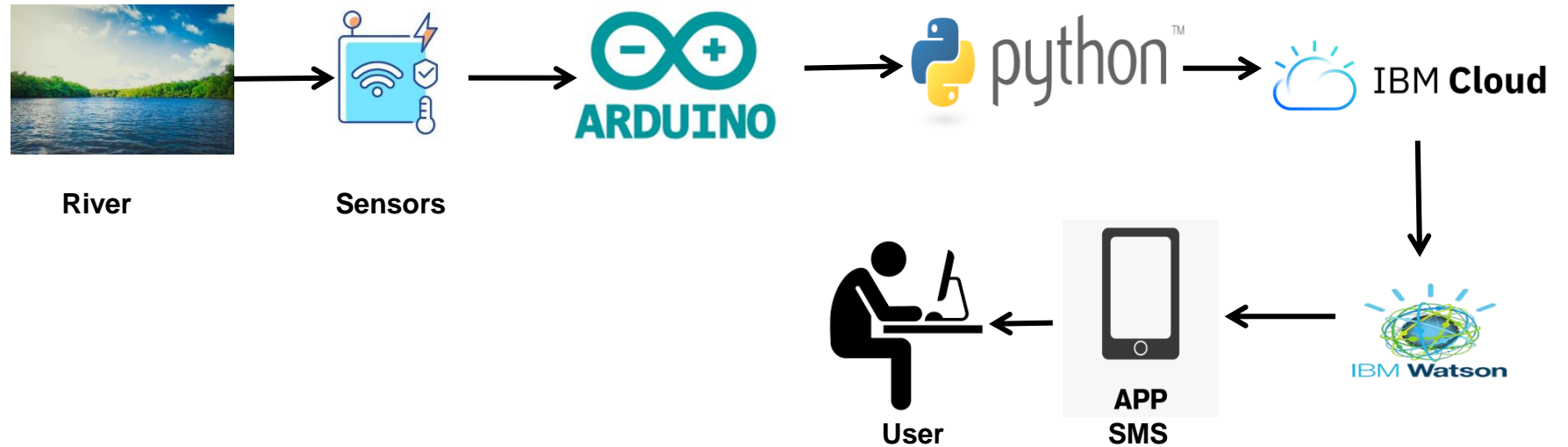


Table-1: Components & Technologies:

S. No	Component	Description	Technology
1.	Received data from sensors	The data collected form the sensor units placed in river sides	ESP32 Wi-Fi module
2.	Web interface	The collected data were displayed visually	HTML,CSS, JavaScript
3.	Database	Data type	MySQL
4.	Cloud database	Database service on cloud	IBM cloud
5.	Data storage	File storage requirements	IBM Block storage

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