

Project Design Phase 2

Technology Stack (Architecture & Stack)

Team ID	PNT2022TMID19466
Maximum marks	4 Marks

Technical Architecture:

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

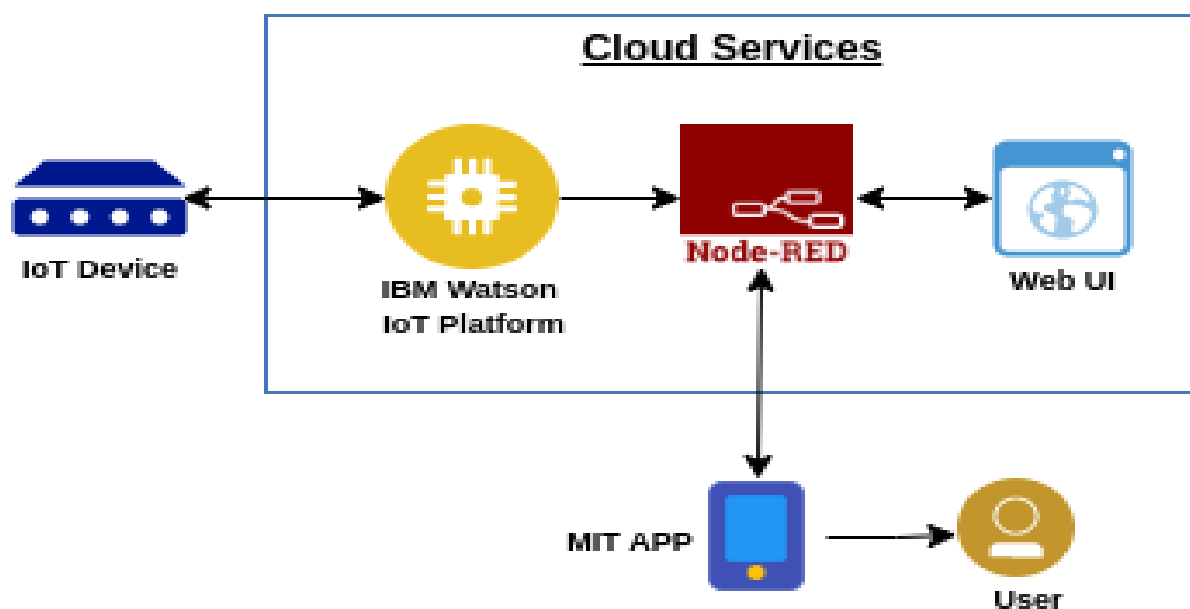


Table 1: Components and Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g., Web UI, mobile App, chatbot etc.	MIT App
2.	Application Logic 1	Logic for a process in the application.	Node Red/IBM Watson/MIT App
3.	Application Logic 2	Logic for a process in the application.	Node Red/IBM Watson/MIT App
4.	Application Logic 3	Logic for a process in the application.	Node Red/IBM Watson/MIT App
5.	Database	Data Type, Configuration.	MySQL, NoSQL,etc
6.	Cloud Database	Database Service on Cloud	IBM Cloud
7.	Temperature Sensor	Monitors the temperature of the crop.	
8.	Humidity Sensor	Monitors the humidity.	
9.	Soil moisture Sensor	Monitors soil temperature.	
10.	Weather Sensor	Monitors the weather	
11.	NDIR CO2 Sensor	Monitors the CO2 level.	
12.	Solar Panel	Renewable source of energy.	
13.	RTC Module	Data and time configuration.	
14.	Relay	To get soil moisture data.	

Table 2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open Source Framework	Software based	MIT App, Node Red.
2.	Scalable Architecture	Hardware based where pesticide is monitored and soil minerals are identified.	Drone Technology.