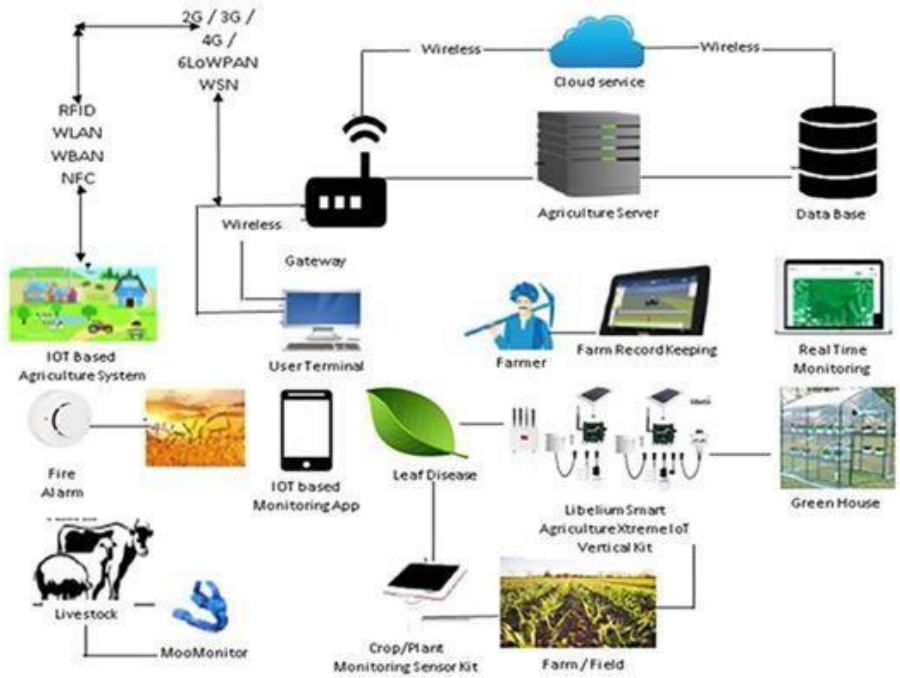
Project Design Phase-II
Technology Stack (Architecture & Stack)

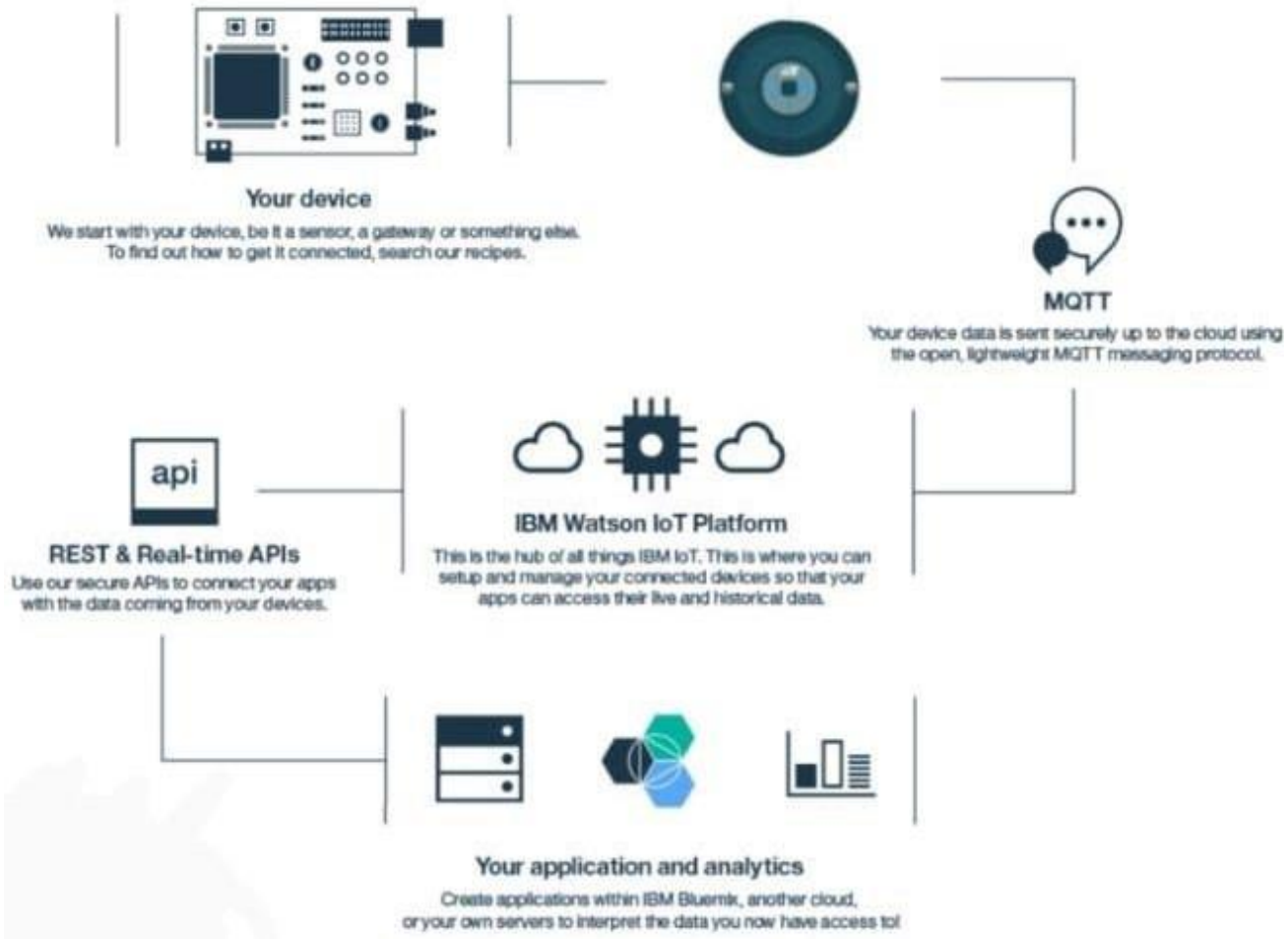
Date	26 October 2022
Team ID	PNT2022TMID31166
Project Name	Smart Farmer- IoT Enabled Smart Farming Application
Maximum Marks	4 Marks

Technical Architecture:

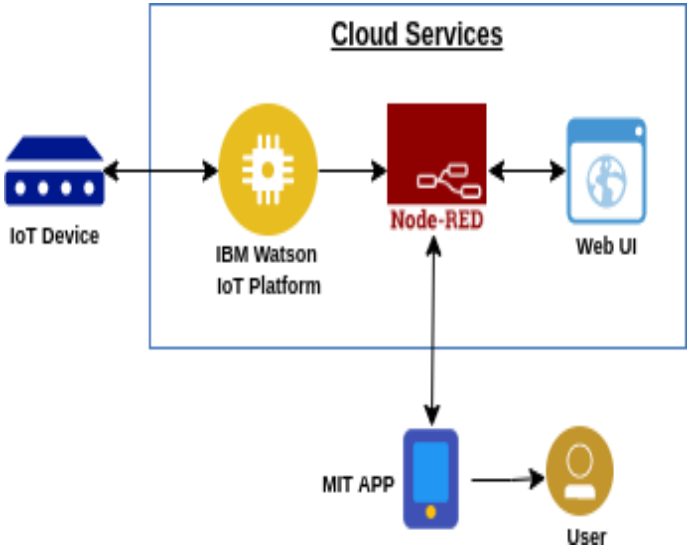
The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2



Real Time Kinetic Workflow Technical Architecture



IBM Network Workflow



Simulative Profile Workflow Architecture

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User Interaction by means of Application software	MIT app
2.	Application Logic-1 - Circuit Design	To provide the functional outflow	Node red
3.	Application Logic-2 - Data Accessibility	Data transfer and Usage	IBM Watson
4.	Database	Physically varying environmental parameters	MySQL
5.	Cloud Database	Database Service on Cloud	IBM cloud.

6.	Temperature sensor	Monitors the temperature of the crop	DS18B20
7.	Humidity sensor	Monitors the humidity	DHT11
8.	Soil moisture sensor (Tensiometers)	Monitors the soil temperature	FC28
9.	Weather sensor	Monitors the weather	F611

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	MIT app,Node-Red	Software
2.	Scalable Architecture	Measurement of physically varying environmental conditions	Hardware-Sensor nodes and Wifi Modules