Date	08 November 2022
Team ID	PNT2022TMID36645
Project Name	Project - IoT Based Smart farming
Maximum Marks	4 Marks

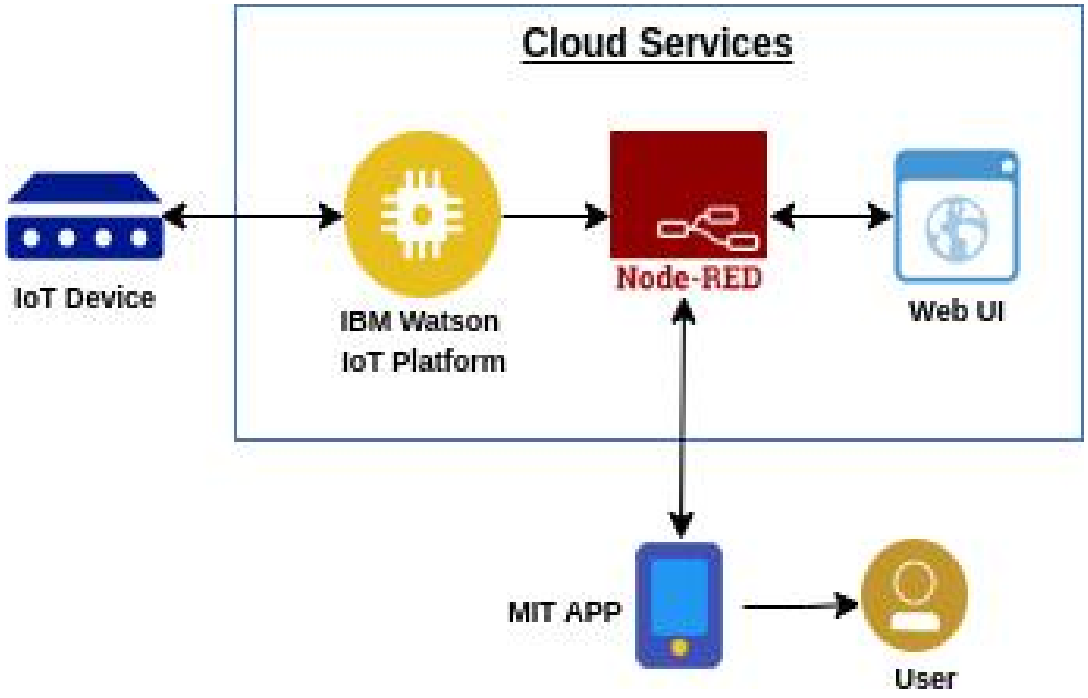

Table-1 : Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson/node red
4.	Application Logic-3	Logic for a process in the application	IBM Watson/node red
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM Cloudant.
7.	Temperature sensor	Monitor the temperature	LM35,SHT15
8.	Humidity sensor	Monitor the humidity	DHT11
9.	Soil moisture sensor	Measure the amount of water in the soil	10-HS, SY-HS-220
10.	Information management	The process of collecting, storing, managing, and maintaining information in all its forms.	MySQL Database, management logic
11.	Big Data analytics	Extracting, cleaning, transforming, modeling and visualization of data with an intention to uncover meaningful and useful information that can help in deriving conclusion and take decisions.	Mahoot, IoT platforms
12.	Data processing	Classification of data so as to decrease the size of redundant information.	Classification algorithms
13.	Data mining	Systematic and sequential process of identifying hidden patterns and information in a large dataset.	Hadoop, Apache Spark Framework

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Clarify ,Node- red	Software
2.	Security Implementations	Sensitive and private data must be protected from their protection until the decision-making and storage stages.	Encryption process
3.	Scalable Architecture	Scalability is a major concern for IOT platform it has been shown that different architectural choices of IOT platform affect system capability and that automatic real time decision making is feasible in an environment composed of dozens of thousand.	Software
4.	Availability	Automatic adjustment of farming equipment made possible by linking information like crops/weather and temperature , humidity etc.	Software
5.	Performance	The ideas of implementing integrated sensors with sensing soil and environmental or ambient parameters in framing will be more efficient for overall monitoring .	Software