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

Team ID	PNT2022TMID36144
Project Name	Project - Smart Farmer – IOT Enabled Smart Farming Application

Technical Architecture:

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

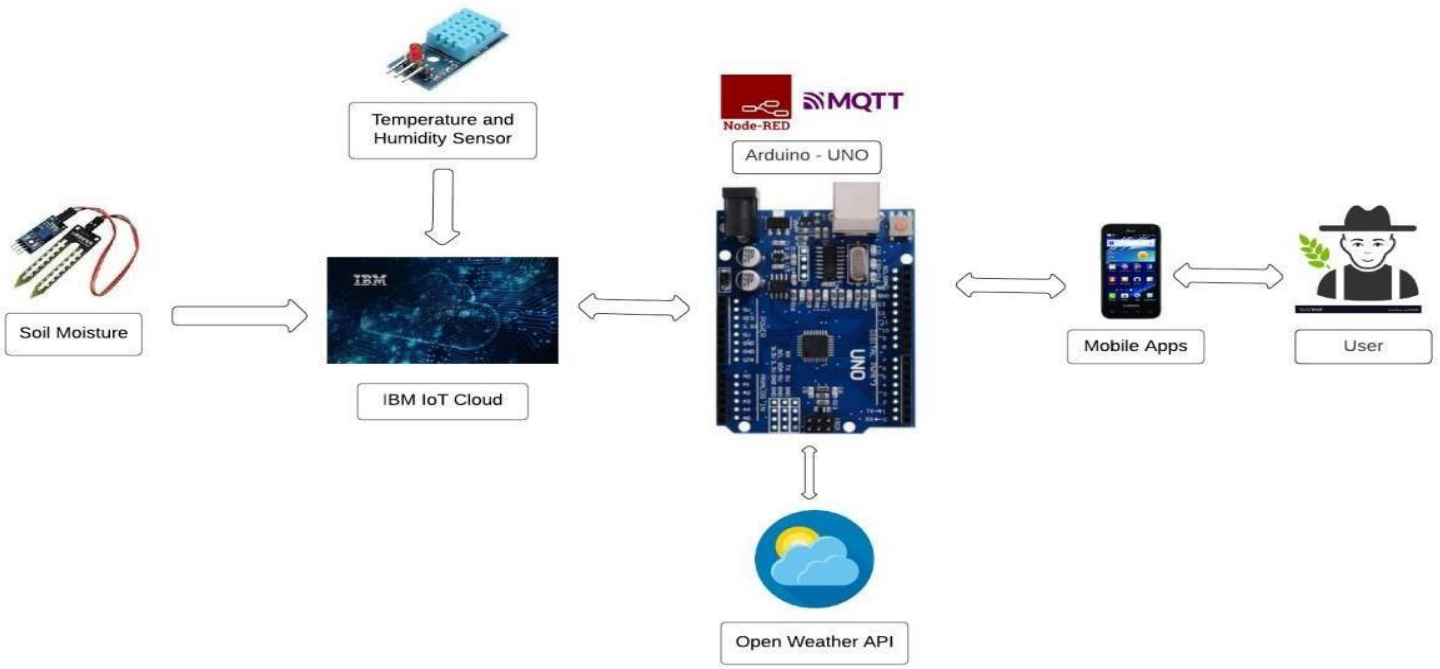

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	Mobile app
2.	Application Logic-1	Logic for a process in the application	Node red/ Arduino UNO/ IBM Watson/ Mobile app
3.	Application Logic-2	Logic for a process in the application	Node red/ Arduino UNO/ IBM Watson/ Mobile app
4.	Application Logic-3	Logic for a process in the application	Node red/ Arduino UNO/ IBM Watson/ Mobile app
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM Cloud
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	Temperature sensor	Monitors the temperature of the crop	Data collect from Arduino /node red
9.	Humidity sensor	Monitors the humidity	Data collect from Arduino /node red
10.	Soil moisture sensor (Tensiometers)	Monitors the soil temperature	Data collect from Arduino /node red
11.	Weather sensor	Monitors the weather	Data collect from Arduino /node red

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	MIT app Node red	Software
2.	Security Implementations	Drone technology, pesticide monitoring ,Mineral identification in soil	Hardware
3.	User Application	Make use of MIT app creation	Software