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

Date	27 October 2022
Team ID	PNT2022TMID52158
Project Name	Smart Farmer - IOT Enabled Smart Farming Application
Maximum Marks	4 Marks

Technical Architecture:
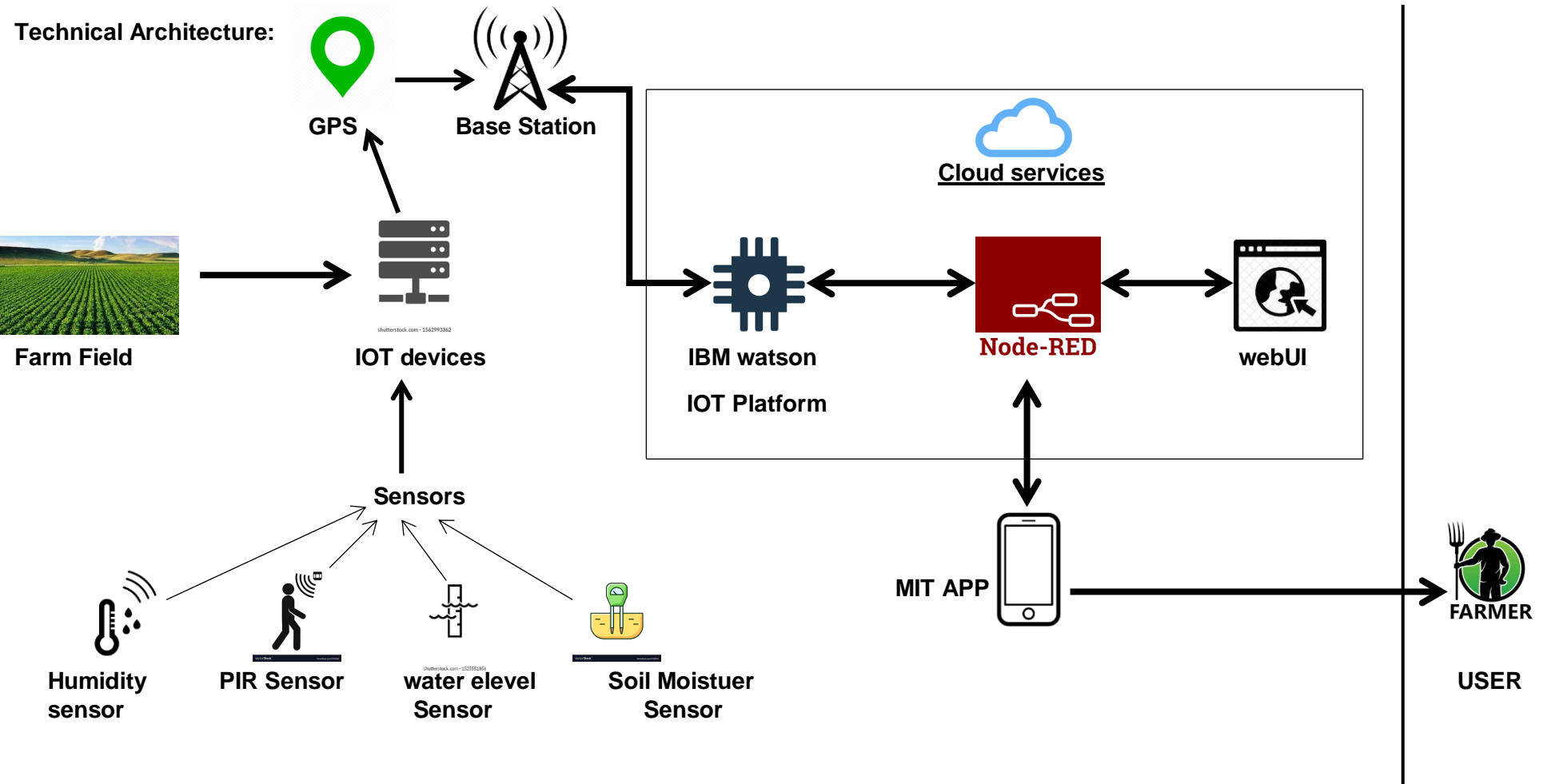
Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI, Mobile App.	HTML, CSS, JavaScript
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 STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL
6.	Cloud Database	Database Service on Cloud to store data and retrieve data	IBM DB2, IBM Cloudant
7.	File Storage	File storage requirements	IBM Block Storage
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	Infrastructure (Server / Cloud)	Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Provide Permission to Use the source code	IBM cloud
2.	Security Implementations	Sends the alert to the farmers what condition is the field in	UI
3.	Scalable Architecture	Scalability in smart farming is the adaptability of a system to increase the capacity	IBM Watson Platform
4.	Availability	Monitoring crops, surveying, and mapping the fields, and providing data to farmers for rational	Real Time GPS, cloud server

S.No	Characteristics	Description	Technology
		farm management plans to save both time and money.	
5.	Performance	Collected data's send to the cloud, The Farmers worked with collected data	IOT