

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

Date	28 October 2022
Team ID	PNT2022TMID43116
Project Name	SmartFarmer- IOT Enabled Smart Farming Application
Maximum Marks	4 Marks

Technical Architecture:

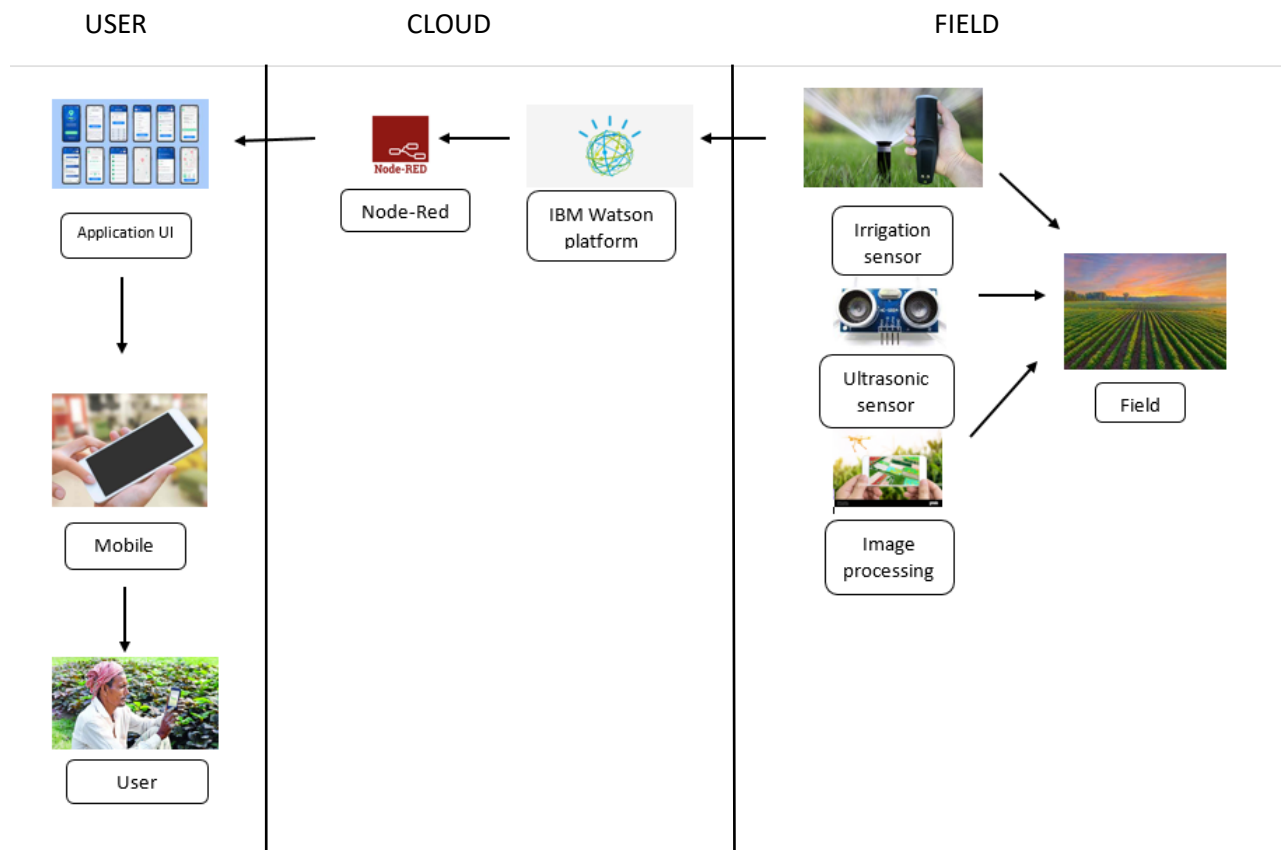


Table 1:Components and Technologies:

S.No	Component	Description	Technology
1.	User Interface	Website with live field.	HTML, CSS, JavaScript
2.	Application Logic-1	Sensor data from ultrasonic sensor.	Node-Red
3.	Application Logic-2	Grey scale image analysis and multispectral imaging.	Image Processing
4.	Application Logic-3	Humidity level from irrigation sensor	Node-Red

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask	Python
2.	Scalable Architecture	3– tier, Micro-services	User Interface
3.	Availability	Use of load balancers, distributed servers	IBM cloud
4.	Performance	100 request per second	IBM cloud Watson