Project Design Phase-II
Data Flow Diagram & User Stories

Date	17 October 2022
Team ID	PNT2022TMID35924
Project Name	Project – Smart Farmer - IoT Enabled Smart Farming Application
Maximum Marks	4 Marks

Data Flow Diagrams:
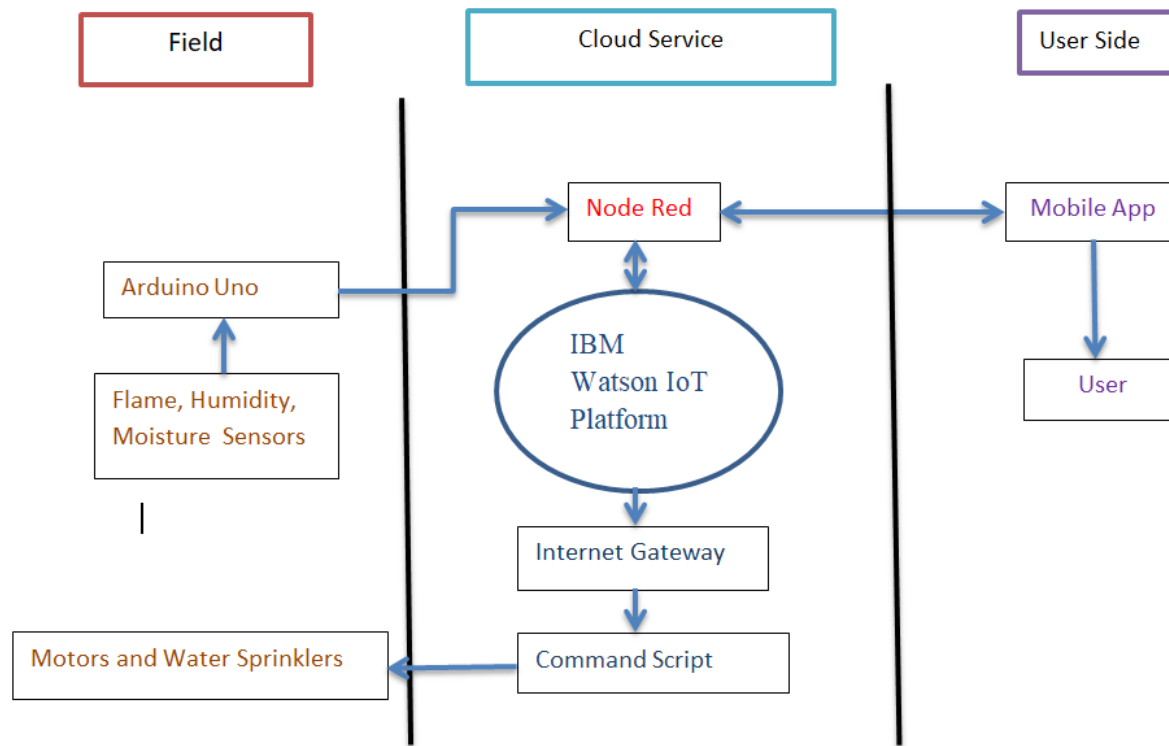
- Flame, Nutrients, Moisture Sensors are placed in the field and connected to the Arduino Uno.
- The Arduino Uno is connected to the IBM Cloud Platform through the Node Red Web GUI.
- The field conditions can be checked regularly from the Mobile app which is connected through the same Node Red.
- The soil moisture sensor monitors various climatic conditions. The moisture output readings at different weather conditions is taken and updated.
- The flame detector works by detecting the UV radiation at the point of ignition.The sensor would become aware of it and produce a series of the pulses that are converted by detector electronics into an alarm output.
- NPK sensor is based on reflectance spectroscopy, which detects the level of energy absorbed or reflected by soil particles.
- All these information are collected regularly.
- Any changes or accidents are notified through the mobile app.
- Immediate action is also taken through the IBM cloud Platform.

User Stories:

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email,mobile number, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive OTP.	I can authenticate my account by submitting the OTP.	High	Sprint-1
		USN-3	As a user, I can register for the application through Gmail.	I can enter my account by clicking the confirm option received in mail.	Medium	Sprint-1
		USN-4	As a user, I can opt for different	I will receive payment	High	Sprint-1

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
			subscription plans available in the app and make payment for that.	receipt.		
	Login	USN-5	As a user, I can log into the application by entering email/mobile number & password.		High	Sprint-1
		USN-6	As a user, if I forget my password I will receive an auto-generated password through my email.	I will receive my new password through email.	High	Sprint-1
	Dashboard	USN-7	As a user, I can enter into dashboard by using navigation panel.	I can access the dashboard by using the navigation panel.	High	Sprint-1
Customer (Web user)	Registration	USN-1	As a user, I can register for the application by entering my email, mobile number, password, and confirming my password.	I can access my account / dashboard	High	Sprint-2
		USN-2	As a user, I will receive an email to confirm my registration.	I can authenticate my account by confirming through the mail sent.	High	Sprint-2
		USN-3	As a user, I can register for the application through Gmail	I can enter my account by clicking the confirm option.	Medium	Sprint-2
		USN-4	As a user, I can opt for different subscription plans available in the website and make payment for that.	I will receive payment receipt.	High	Sprint-2
	Login	USN-5	As a user, I can log into the application by entering email & password		High	Sprint-2
		USN-6	As a user, if I forget my password I will receive an auto-generated password through my email.	I will receive my new password through email.	High	Sprint-2
	Dashboard	USN-7	As a user, I can enter into dashboard by using navigation panel.	I can access the dashboard by using the	High	Sprint-2

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
				navigation panel.		
Customer Care Executive	Help	USN-1	As a user, if I have any queries or issues, I can reach out to the Support Team.	I will receive a reply from the Support Team that my message is accepted and later my queries or issues will be resolved.	Medium	Sprint-3
		USN-2	As a user, I can give my feedback.	I can get an upgraded version or better service.	High	Sprint-3
Administrator	Management	USN-1	As a user, I need the resource management team to use quality products at a reasonable price.	I get a Warranty Card and details about the product.	Medium	Sprint-4
		USN-2	As a user, if I didn't receive a quality product, I want a refund.	I can receive a free service or a change of product.	Medium	Sprint-4