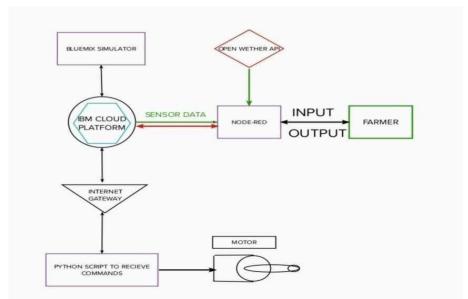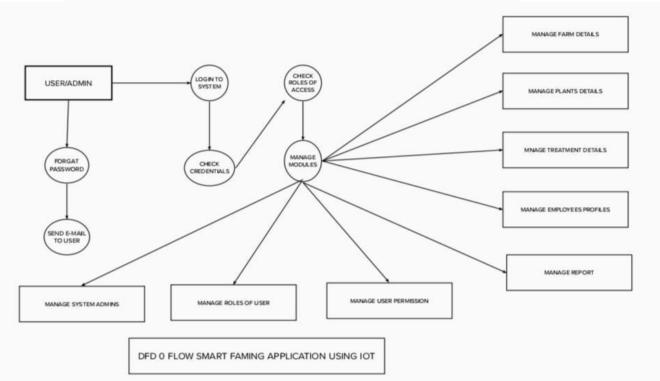## Project Design Phase - II
Data Flow Diagram & User Stories

Date	11 October 2022
Team ID	PNT2022TMID54368
Project Name	SMARTFARMER – IOT ENABLED SMART FARMING APPLICATION
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

- The various soil parameters, including temperature, moisture content, and humidity, are measured using various sensors, and the results are saved in the IBM cloud.

- Arduino UNO is utilized as a processing unit to process the data gathered from the sensors and weather API data.

- The hardware, software, and APIs are written using NODE-RED as a programming language. For communication, the MQTT protocol is used.

- A mobile application created with MIT App Inventor makes all the collected data available to the user. Depending on the sensor results, a user could choose whether or not to water a crop using an app. They can control the motor switch from a distance using the app.

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement	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, password and confirming my password.	I can access my account/ dashboard	High	Sprint-1
	Permission	USN-2	As a user, I will receive confirmation email once I have registered for the application.	I can receive confirmation email & click confirm.	High	Sprint-1

Customer (Web user)	Login	USN-3	As a user, I can log into the application by entering email & password.	I can register & access the dashboard with Login	High	Sprint-2
	Check credentials	USN-4	As a user, I can register for the application through mobile application	Temperature and Humidity details	Medium	Sprint-1
	Dashboard	USN-5	As a user can view the dashboard and this dashboard include the check roles of access and then move to the manage modules.	I can view the dashboard in this smart farming application system.	Medium	Sprint-1
Customer care Executive	MIT app	USN-6	To make the user to interact with the software.	Database to store in cloud services.	High	Sprint-1
Administrator	IOT devices	USN-7	As a user once view the manage modules this describes the manage system admins and Manage Roles of user and etc..,		Medium	Sprint-1
	Log out	USN-8	Exit	Sign out	High	Sprint-1

PROJECT PLANNING & SCHEDULING

Sprint	Functional Requirement (Epic)	User Story Number	User Story /Task	Story Points	Priority	Team Member
Sprint-2	User Interface	UNS-3	As a user, I can register for the application through Facebook	3	Low	Nithiyashree S(Member 3)
Sprint-1	Data Visualization	UNS-4	As a user, I can register for the application through GMAIL	2	Medium	Pratheeksha G (Member 4)
Sprint-3	Registration (Farmer -Web User)	USN - 1	As a user, I can log into the application by entering email and password	3	High	Ponlatha M(Member 5)
Sprint - 2	Login	USN - 2	As a registered user, I need to easily login log into my registered account via the web page in minimum time	3	High	Manjari M(Leader)
Sprint - 4	Web UI	USN - 3	As a user, I need to have a friendly user interface to easily view and access the resources	3	Medium	Mahalaxmi G (Member2)
Sprint - 1	Registration (Chemical Manufacturer - Web user)	USN - 1	As a new user, I want to first register using my organization email and create a password for the account.	2	High	Nithiyashree S(Member 3)

Sprint	Functional Requirement (Epic)	User Story Number	User Story /Task	Story Points	Priority	Team Member
Sprint-1	Registration (Farmer Mobile User)	UNS-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	Manjari M(Leader)
Sprint-1	Login	UNS-2	As a user, I will receive confirmation email once I have registered for the application	1	High	Mahalaxmi G(Member2)

Sprint - 4	Login	USN - 2	As a registered user, I need to easily log in using the registered account via the web page.	3	High	Pratheeksha N (Member 4)
Sprint - 3	Web UI	USN - 3	As a user, I need to have a userfriendly interface to easily view and access the resources.	3	Medium	Ponlatha M(Member 5)
Sprint - 1	Registration (Chemical Manufacturer - Mobile User)	USN - 1	As a user, I want to first register using my email and create a password for the account.	1	High	Manjari M(Leader)
Sprint - 1	Login	USN - 2	As a registered user, I need to easily log in to the application.	2	Low	Mahalaxmi G(Member2)