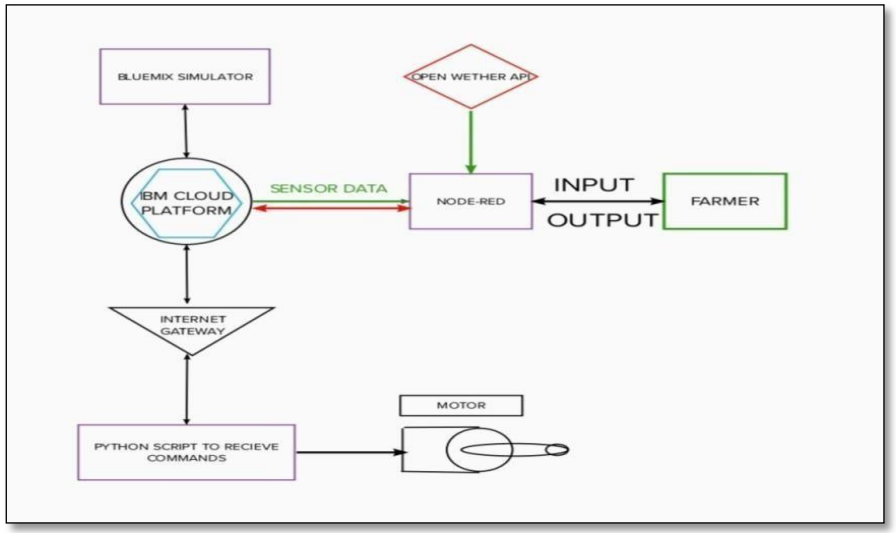
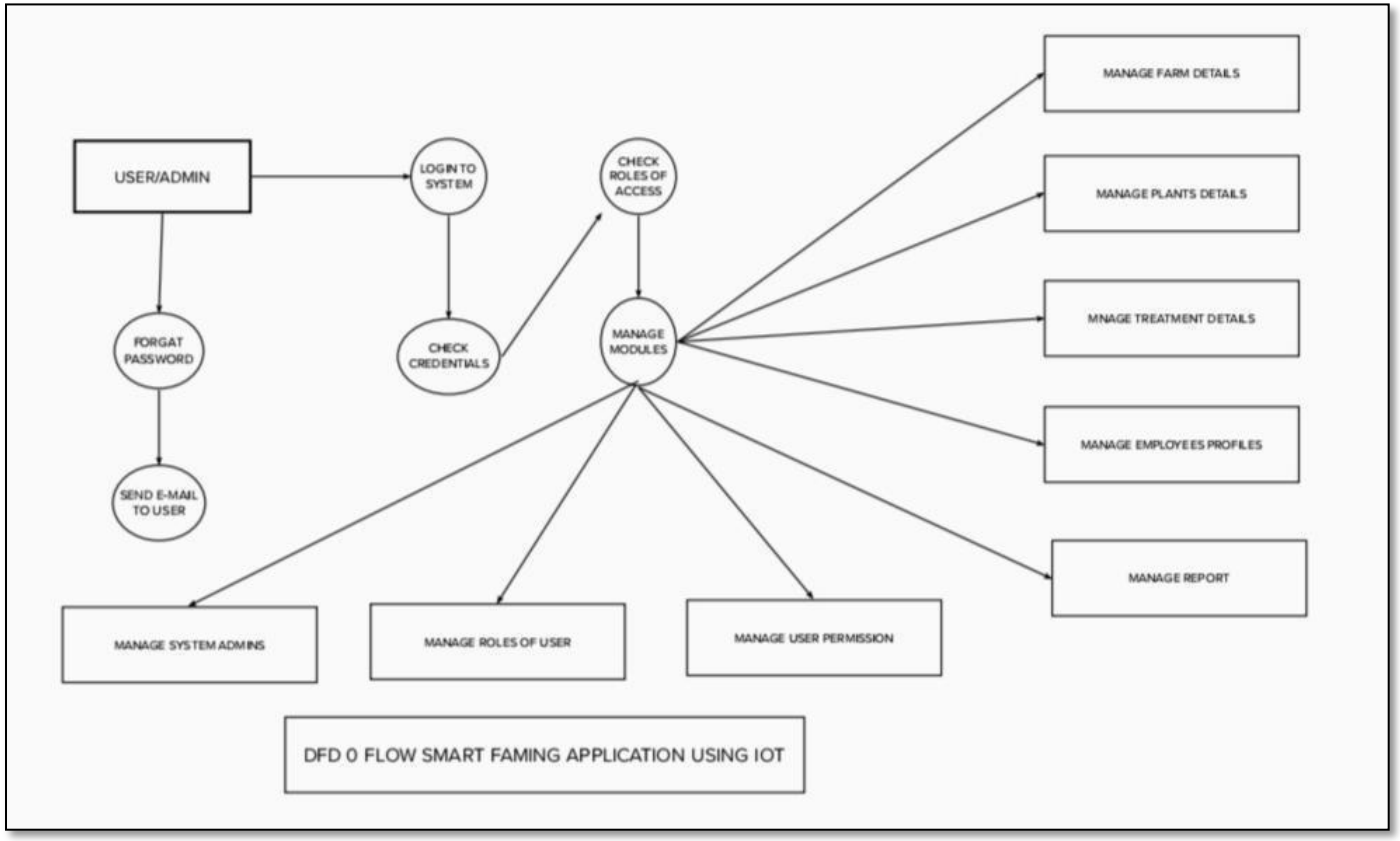
Project Design Phase-II
Data Flow Diagram & User Stories

Date	16 October 2022
Team ID	PNT2022TMID24432
Project Name	IOT BASED SMART CROP PROTECTION FOR FARMER
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data flow diagram (DFD) is a common visual representation of how information moves through a system. A clean and understandable DFD can graphically represent the appropriate quantity of the system need. It displays how information enters and exits the system, what modifies the data, and where information is kept.





- Using various sensors, the various soil parameters, including temperature, moisture content and humidity are measured. The results are then stored in the IBM cloud.
- The Arduino UNO is utilised as a processing unit to process the data from the sensors and weather API.
- To write the hardware, software, and APIs. NODE-RED is employed as a programming tool. In order to communicate, 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, the user might decide whether or not to irrigate the crop using an app. They can control the motor switch remotely by utilising the app.

User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	1	Can register for the application by entering my email, password, and confirming my password.	Can access my account / dashboard	High	Sprint-1
		2	Will receive confirmation email once I have registered for the application	Receive confirmation email & click confirm	High	Sprint-1
		3	Can register for the application through Facebook	Can register & access the dashboard with Facebook Login	Low	Sprint-2
		4	Can Register for the application through Gmail		Medium	Sprint-1
	Login	5	Can Log into the application by entering email & password		High	Sprint-1
	Dashboard					
Customer (Web user)						
Customer Care Executive						
Administrator						