V S B ENGINEERING COLLEGE, KARUR

Department of Electronics and Communication Engineering

IBM NALAIYA THIRAN

DATA FLOW DIAGRAM

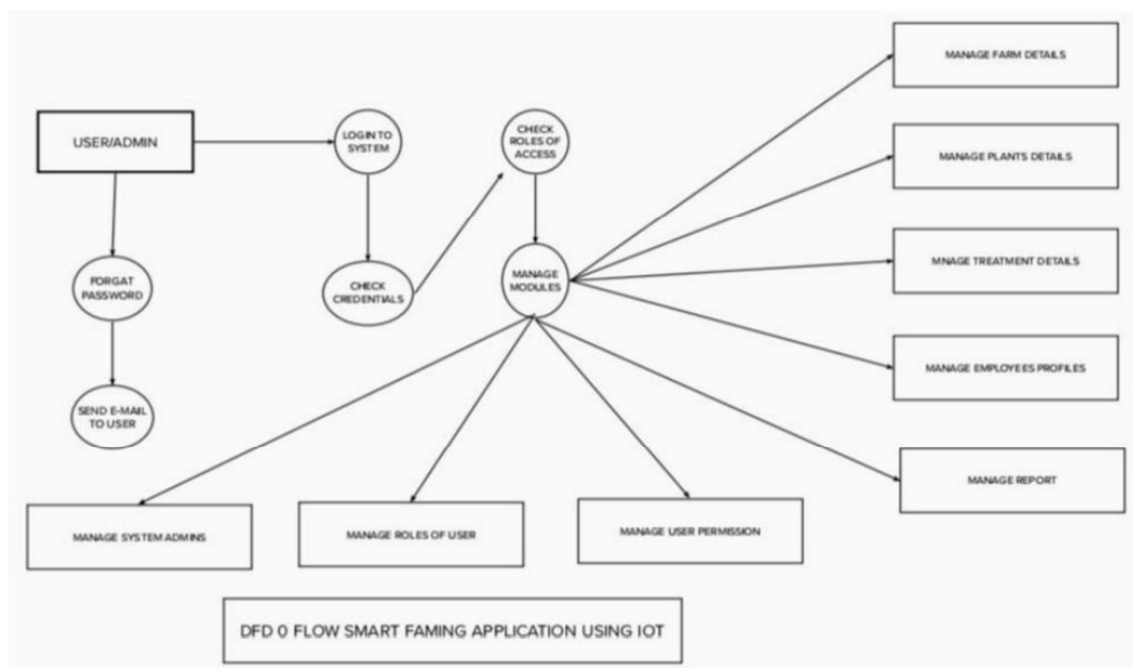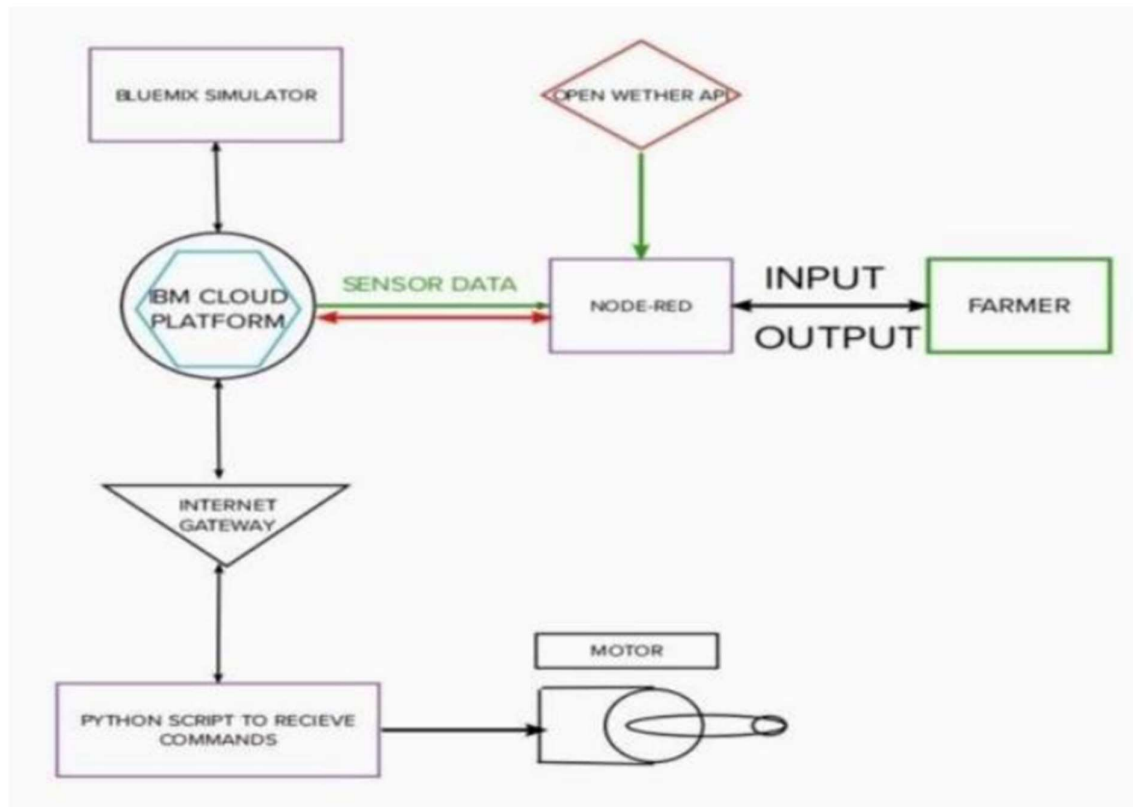|		
TITLE	**:**	Smart Farmer – IoT Enabled Smart Farming Application
DOMAIN NAME	**:**	Internet of Things
LEADER NAME	**:**	Balaji B
TEAM MEMBER NAME	**:**	Dhivaker B
		GokulRaj P
		Kamal Raj S
MENTOR NAME	**:**	Janani S

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.

DFD 0 FLOW SMART FAMING APPLICATION USING IOT

1. The different soil parameters temperature, soil moistures and then humidity are sensed using different sensors and obtained value is stored in the Ibm cloud.

2. Arduino UNO is used as a processing Unit that process the data obtained from the sensors and whether data from the weather API.

3. NODE-RED is used as a programming tool to write the hardware, software and APIs. The MQTT protocol is followed for the communication.

4. All the collected data are provided to the user through a mobile application that was developed using the MIT app inventor. The user could make a decision through an app, weather to water the crop or not depending upon the sensor values. By using the app they can remotely operate to the motor switch.

User Stories

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

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, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
Customer (Web user)	Dashboard	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
	Registration	USN-3	As a user, I can register for the application through Facebook		Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail		Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application by entering email & password		High	Sprint-1
	Dashboard					
Customer (Web user)						
Customer	Help	USN-1	As a user, if I have	I will receive	Medium	Sprint-3

Care Executive			any queries or issues , I can reach out to the Support team	a reply from the support team that my message is accepted and later my queries or issues will be resolved		
Administrator	Management	USN-1	As a user, I need the resource management team to use quality products at the 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