### SRI ESHWAR OF ENGINEERING COIMBATORE

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

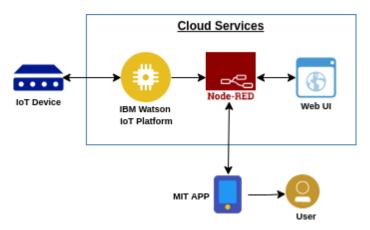
#### **TEAM MEMBERS:**

SUBAHAN.K[LEAD] HASSAIN.K.M SAI KUMAR.G NIKHIL.K

#### **Data Flow Diagrams:**

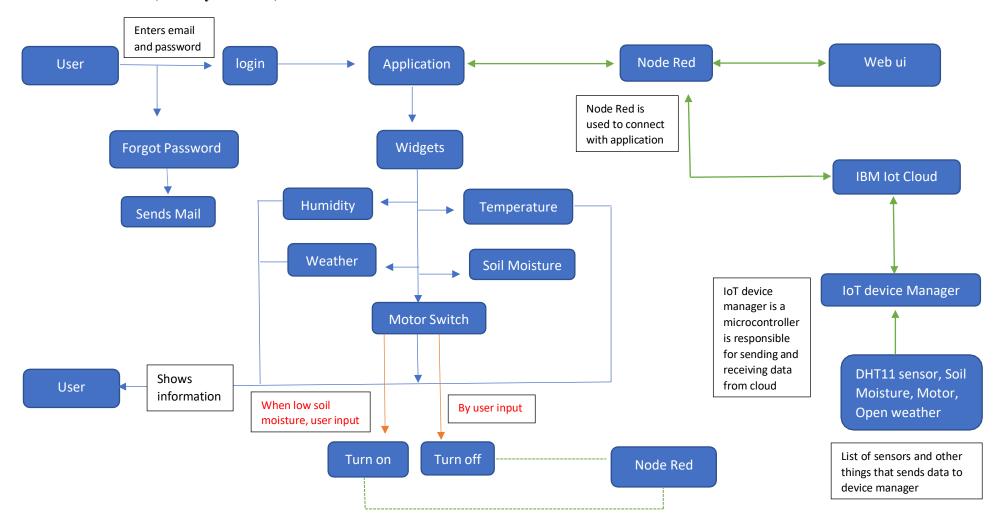
A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the rightamount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

## **Example:** (Simplified)



- Different parameters such as temperature, humidity, soil moisture is sensed using the sensors.
- Open weather API is used for collecting the weather information.
- Above data are processed with the help of microcontroller which is connected to internet.
- The processed data is updated to cloud for further process
- The IBM Watson IoT Platform is connected with node red services which is connected to the application.
- In application, user can see the parameters/data that obtained from sensors and APIs.
- With the help of application user can interact with IoT devices to perform some functions such turning ON & OFF motor.
- Web UI is also used for visualization of data.

### **Detailed DFD Level 0 (Industry Standard)**



Sends commands to node red and node red sends the commands to IoT device manager

# **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
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	Medium	Sprint-1
		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Sprint-1
		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	USN-6	As a user I want to see everything in single widget		Medium	Sprint-2
		USN-7	As a user I want an organized widgets section		High	Sprint-2
		USN-8	As a user I want a graphical/pictorial representation		Low	Sprint-2
Customer (Web User)	Dashboard	USN-9	As a user I want a graphical representation ofdata for better understanding		High	Sprint-2
		USN-10	As a user I want to see a dashboard where Ican customize myself	Dashboard with customization	Low	Sprint-2
Customer (Mobile and Web)	IoT Device Setup	USN-10	Have to use a least sensor and get better output		High	Sprint-2
		USN-11	As a user, I need a low cost IoT devices for farming		High	Sprint-2

Γ		USN-12	As a user, I need multiple sensors for	High	Sprint-2
			various data		

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer Care Executive	User Problems	USN-13	As a user, I don't how to use the application	Manual guide will be there	Medium	Sprint-3
		USN-14	As a user, I need my application to work on most of the mobiles		High	Sprint-3
		USN-15	As a user, I am facing issue in the application	Query form will be there	High	Sprint-3
Administrator	Query Clarification	USN-16	As an admin, I give solutions to their queries		High	Sprint-3
	Particular Access	USN-17	As an admin, I give access only to authorized person		High	Sprint-3
	Connection with Io devices	USN-18	As an admin, I ensure the correct working of the devices. If any problem arises it will be shared to user		Medium	Sprint-4
Customer (Mobile user)	Application	USN-19	As a user, I need to control my devices	Commands for devices	High	Sprint-4
		USN-20	As a user, I need an event for better productivity		Low	Sprint-4
		USN-21	As a user, I need a more info about plants inside an application		Medium	Sprint-4